



ISRRT
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SOCIETY OF
RADIOGRAPHERS
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news & views

AUGUST 2017
from around the world

The Official Publication of the ISRRT



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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.

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programs, courses or new radiological texts.

For further details or to advertise your program or new
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Dr Fozy Peer
ISRRT President

President's message

Warm greetings to the global ISRRT family. As you will see in this issue of the ISRRT *News & Views* from Around the World, the team that you have voted into office as the ISRRT Board of Management has been busy attending to calls from around the world. I would like to sincerely thank each one of the Board members for giving off their time to voluntarily undertake duties and activities on behalf of the ISRRT.

The ISRRT is once again giving one radiographer the opportunity to become the ISRRT Dose-Wise Radiographer of the Year. We are encouraging best practice and in recognition of dose-conscious radiographers and to support radiation dose management awareness, the ISRRT has again joined hands with Philips to encourage radiographers from around the world to apply. The selected Radiographer-of-the-Year will be invited to present their findings to the Radiology Advisory Board hosted by Philips at RSNA 2017.

Many thanks to the Canadian Association of Medical Radiation Technologists (CAMRT), for inviting both Dimitris Katsifarakis and myself to attend the 2017 CAMRT-OAMRS Annual General Conference held in April 2017 in Ottawa. Unfortunately I was unable to attend due to prior commitments. The ISRRT was ably represented by Dimitris at this prestigious meeting.

The Taiwan Society of Radiological Technologists (TWSRT) marked its 50th annual meeting in March. There were 70 international guests from 13 different countries, and more than 2,000 attendees who celebrated this event with them. I had to decline their invitation as I was attending another meeting. The ISRRT was officially represented by the Vice President of Asia-Australasia, Dr Napapong Pongnapang and Dimitris Katsifarakis as CEO Support Services. There were other ISRRT Board members also present at TWSRT meeting.

I participated as guest speaker at the 4th Kuwait Diagnostic Imaging Course entitled 'Risk Management in Radiography' in March 2017. The course was held under the patronage of the Kuwait Ministry of Health (MoH) and the Kuwait Radiology Council. I had meetings with senior members from the MoH and the Radiology Council to enlighten them on the value of a professional society for Radiographers and the importance of belonging to the ISRRT.

I accepted an invitation from the Executive Dean of Health Sciences at the Higher Colleges of Technology (HCT) in Dubai to provide the key note address at their inaugural Radiology Symposium – 'An Academic, Clinical Alliance', on 26 April 2017. The HCT offers Medical Imaging Science as one of the 8 Health Science programs. The symposium was attended by medical imaging professionals from across the UAE. Meetings were arranged with Deans and Vice Deans from the 17 HCT campuses, hospital managers, members from the Ministry of Health and Radiologists together with senior radiographers to promote the formation of a professional society of radiographers in Dubai, so that they could join the ISRRT. The Dean of the campus where the symposium was hosted arranged to register all their medical imaging final year students as Associate Members of the ISRRT until they can attain professional society membership.

The ISRRT was invited by the Director-General of the World Health Organization (WHO) to attend the Seventieth World Health Assembly (WHA) in May 2017 in Geneva as non-State actors in official relations with the WHO. We were privileged to attend the 140th session of the Health Assembly. During the WHA meeting, we met with senior officials from the WHO, including Dr Adrianna Velasquez, who handed over the recently published document on cancer management devices, to which the ISRRT had contributed.

While in Geneva, we met with Dr David Hunter, a senior statistician from the International



ISRRT President meets with Dr Nofa Al Shemmari, Head Clinical Radiology Council at Ministry of Health in Kuwait.

President's message continued



ISRRT Advisor Dr S. Yule, ISRRT CEO Support Services Mr D. Katsifarakis, ISRRT President Dr F Peer and International Labour Office (ILO) Officer Dr David Hunter in Geneva.

Labour Organisation (ILO), who assured us that the information received by the ILO on the International Standard Classification of Occupations (ISCO) classification for radiographers/radiological technologists was comprehensive to be considered for classification at level 3. The ILO General Assembly will meet in October 2018 where a decision will be made regarding changes to the ISCO classification.

Members of the Board are currently working on the 'needs assessment tool' related to basic training and radiographic qualifications currently available in the ISRRT member countries as requested by the IAEA.

Another task team on the ISRRT Board is working with the IAEA on a publication related to radiation protection and patient safety.

We have recently been asked by the International Association of Forensic Radiographers (IAFR) to collaborate with them on an international publication on 'Guidelines for best practice: Imaging for Age Estimation in the Living'. The guidelines are currently being reviewed and will be professionally formatted by the ISRRT. Once complete these guidelines should assist radiographers who are faced with providing imaging for skeletal age estimation especially in medico-legal situations.

A new publication; 'WHO list of priority medical devices for cancer management' to which members of the ISRRT team made valuable contributions was launched at 3rd WHO Global Forum on Medical Devices held in Geneva early in May 2017. The ISRRT was represented at this Global Forum and valuable presentations related to medical imaging equipment were delivered.

The ICRP Publications Scientific Secretariat has thanked the ISRRT for submitting comments on the ICRP document "Occupational Radiological Protection in Interventional Procedures". The comments will be available on the ICRP website, and will be considered in further development of the report.

An article entitled "ISRRT Council members adopts three policy statements at the Seoul Korea World Congress which contribute to radiation protection in medicine" was published in the ISRQSA News of July 2017.

Following a meeting with and after several written requests to the European Society of Radiologists (ESR), I am pleased to advise they have agreed to provide a FREE booth to the ISRRT at the 2018 ECR meeting in Vienna. The ESR Executive Council has also decided to



Fozy Peer and Adrianna Velasquez, WHO.

install for the first time, an exclusive support program for radiographers at ECR 2018 in view of continued professional development.

Radiographers who (a) have completed their training no longer than 5 years ago, (b) are active ESR members and (c) have submitted a poster abstract to ECR 2018 are eligible to apply for the "Shape your Skills" program, which will offer 500 selected radiographers free registration to ECR 2018 including 2 free hotel nights. Check for more information on the ESR website.

World Radiography Day (WRD, will once again be celebrated internationally by Radiographers/Radiological Technologists in November. The theme adopted for 2017 by the ISRRT is "We Care About Your Safety". The ISRRT invited member countries to design the WRD poster that could be used internationally to promote this theme – we look forward to the final entries!

As part of the CEO succession plan, the ISRRT Board, opted to include the services of an administrative services provider to assist the newly appointed CEO Support Services. The ISRRT hence signed a Memorandum of Agreement (MoA) with the College of Radiographers in the UK. Unfortunately although there was merit in the idea, after reviewing the system approximately six months later, it was decided that the agreement was not working as envisaged, mainly due to the physical distance between the Administrator (UK) and the CEO Support Services (Greece) and the fact that possibly some services listed had been over estimated in the MoA. The MoA was amicably terminated in July 2017.

It is with regret and sadness that I have to advise you on the untimely death of a radiographer colleague of the ISRRT, Mr Dimitris Koumarios. Our deepest condolences to his family. Mr Koumarios had just signed a contract with the ISRRT for the setting up of a new website for the ISRRT. Unfortunately the ISRRT will have to renegotiate a contract for the website with an alternate vendor and this could prolong the process.

Please remember to support the ISRRT 20th World Congress April 12-15, 2018 at the Hyatt Regency Hotel in Port-of-Spain, Trinidad and Tobago. More info on: www.isrrt2018.org.tt. We thank the ASRT for their valuable support of this congress. They will also accredit the scientific program for continuing professional development points for ASRT members. We look forward to your attendance.

May love and peace prevail in which ever part of the world you are in.

Best wishes. ■

Dr Fozy Peer
President, ISRRT



Dimitris Katsifarakis
ISRRRT CEO Support Services

CEO Support Services report

The second issue of the 2017 *News & Views* is extensive of reports of the activities that have been embarked on by the ISRRRT.

Our international organisation has played an important role in the imaging and therapy area of health care services for 60 years.

The radiographers, radiological technologists, radiation therapists, ultra-sonographers, mammographers – to name a few of the major sub specialisations of the radiography profession – strive tirelessly every day by combining their knowledge with the available resources and technology to produce and deliver quality services to patients.

We all know that professional knowledge is a very delicate substance: It should be maintained, discussed and renewed, updated, and certainly disseminated to others. Exactly, this is one of the major missions of the ISRRRT. To support imaging and therapy professionals in order to be up-to-date and to facilitate for knowledge dispersal throughout the world.

Moreover, ISRRRT is present in the international fora, speaks on behalf of the radiographers/rad. technologists in decision making meetings which aim to shape the imaging and therapy policies in the Healthcare sector of the forthcoming years.

I ought to highlight the important activities of the immediate preceding period i.e. March to June 2017 in which I had the honour to represent the ISRRRT as part of my role.

1. The IAEA meeting on Accidental and Unintended exposures, Vienna, 6-8 March 2017

Over 50 national representatives and every major Radiology Societies were participated. The aim of the meeting was to identify the weak areas of performance contributing to unintended and accidental exposures to patients. The message that ISRRRT delivered was that radiographers/radiological technologists are in the forefront of preventing accidental and unintended exposures by using their knowledge, experience and active behavior as patients' advocators throughout their imaging or therapeutic journey. I also stressed the need of multi-professional collaboration on prevention of the unintended and accidental exposures. A minority of speakers used examples of some errors pinpointing the radiography profession, I argued and emphasised that the blame game does not help solve the problem and that departments which recognise roles of every profession and their related responsibilities benefit from providing the best results to their patients and maintain accidental and unintended exposure to a minimum. Following my statement, speakers thereafter re-phrased their wording, and revised their approach towards the radiography profession employing a more professional manner.

2. ECR 2017

I had the opportunity to participate at the ECR-EFRS-ISRRRT Board Directors meeting to discuss the further collaboration of the ISRRRT with the ECR. During the meeting, I stressed that the



Fozy Peer and Dimitris Katsifarakis, WHO, Geneva.

CEO Support Services continued



Sandy Yule, Adriana Velasquez, WHO, Fozy Peer and Dimitris Katsifarakis.

ISRRT started actively participating at the ECR since 1992, by organising radiography sessions for radiographers: (providing moderators, speakers and having its own radiography scientific subcommittee). The ISRRT is highly respected by radiography societies internationally and can certainly promote the radiographers/radiological technologists participation at the ECR each year. This contribution (along with the EFRS) will provide a supplementary opportunity for a global forum of Imaging and therapy professionals to discuss issues which aim to Patient’s welfare. The result of the meeting was successful and today, the ECR-EFRS-ISRRT have a closer collaboration in this forum. At this point I must express my sincere thanks to the EFRS’ President – and my very good friend and colleague – Mr Hakon Hjemly for his kindest support to the ISRRT, prior and during the meeting.

3. WHO

Since the ISRRT is privileged to be a Non-Governmental Organization (NGO) of the WHO, it is a high priority responsibility not only to maintain it as a legacy but moreover to cultivate it, by regular communication and close collaboration with certain Divisions of the WHO. I was part of the group under the ISRRT President Dr Peer who participated in activities during the WHO Health Assembly held in Geneva. A number of important meetings took place, the dominant being that with Mrs Adriana Velazquez Berumen, MSc. Senior Advisor on Medical Devices, Health Systems and Innovation Cluster, WHO. Mrs Velazquez offered a complimentary copy of the WHO list of priority medical devices for cancer management, in which the ISRRT through the Director and the Coordinators of the Professional Practice, had actively contributed to. The WHO Division is very keen to publish the findings of the Survey of the ISRRT on the requirements on qualification and the Professional status of the radiography Profession, in the WHO website in an effort to promote the high level of education as a requirement for Patient’s Quality and safety services during their journey through the imaging and/or therapeutic services globally.

4. ISRRT acts as an advocator of the Radiography profession.

It is high in its priorities to raise the classification of the Radiography Profession from level 3 to level 2, in the International Standard Classification of Occupations (ISCO-8). The correct classification is important because each country has to set up their national classifications which are often closely related to the ISCO grouping. An incorrect classification in ISCO can have major consequences for the radiographers/rad. Technologists at a national level. For this aim, a survey had been developed 3 years ago. The results of that survey have been sent to the International Labour Office (ILO). The ISRRT President had the opportunity to meet with the officer of the Department of Statistics, ILO while in Geneva for the WHO Assembly. During that friendly and informative meeting, the ISRRT delegation received the information that the survey was comprehensive, and to the point. However, the disappointing part of the meeting was that the process for changing the ISCO -08 is very slow, and the results for our profession Classifications cannot be expected in a period not less than 5 years from now. ISRRT obviously monitors the situation.

In activities other than the normal daily office work as CEO of Support Services I accepted the invitation to attend the 50th Anniversary Conference of the Taiwan Society (TWSRT) and the 75th Anniversary Conference of the CAMRT and the UKRC Conference.

I really enjoyed their hospitality but most importantly the excellent organisation of their events particularly the professional and scientific content.

With genuine regards. ■

Dimitris Katsifarakis



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Stewart Whitley
Treasurer

Treasurer's report

This is a short report to record that the official accounts for 2016 are in the process of being compiled by our official accountants Wormald & Partners based in Bristol, UK and they are expected to be available soon after which they will be presented to the England and Wales Charity Commission.

2017 will see workshops approved by the ISRRT Board being held in the Côte d'Ivoire, Africa; Jakarta, Indonesia; Dominican Republic in conjunction with PAHO/ASRT and Managua, Nicaragua in conjunction with RADAID.

Representatives of the ISRRT BOARD have attended important meetings of the IAEA and WHO which included; IAEA technical meeting on Accidental and Unintended Medical Exposures, March 2017 in Vienna; HERCA meeting on CT Optimization March 2017 in Vienna and the 3rd WHO Global Forum on Medical Devices, 10-12 May 2017, Geneva (see separate report in this issue).

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

Such meetings provide the platform for the radiographer/radiological technologist's input into policy making at the global level and making our voice heard.

All of these activities are funded from the resources gathered through membership fees from Member countries, associate membership as well as our Corporate partnerships and income generated from the ISRRT investments. These resources plus additional associate membership fees from Australia and Canada, where all members have been converted to associate membership, make this representation at the world stage possible.

At the time of writing we are engaging in the process of establishing the budget for 2018. The process will start in April 1st with Board members presenting their ideas for workshops to the Finance committee, via the Director of Education. The process will be finalised by November 1st 2017.

Regarding PayPal, I am pleased to further report that Associated 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. That said now is the opportunity to join as an Associate Member! See notice on paying by PayPal on page 21 in this issue of *News & Views*.

Corporate partnerships are very important as these give us a voice in the Medical Imaging and Oncology community as well as valuable financial support. At the UKRCO



Dimitris and Stewart meeting at the Bracco booth.

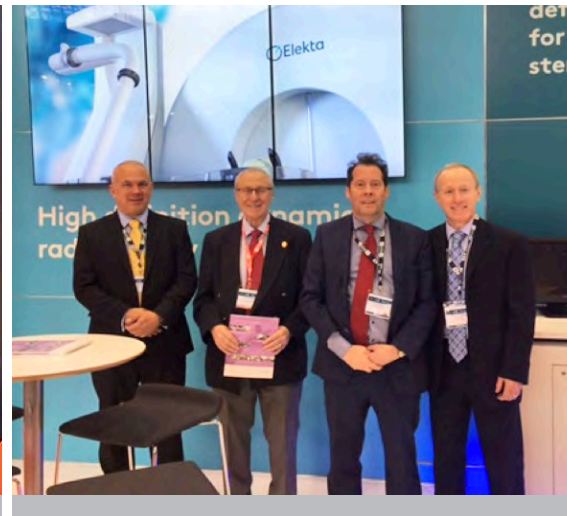


Gurbet booth at UKRCO.

Treasurer's report continued



Rothband booth.



Elekta booth.



Philips booth.

Congress in Manchester June 2017 Dimitris and I were able to thank a number of our partners.

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

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.isrrt.org

or contact the ISRRT CEO:

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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.
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October 4-5, 2017

*Kuala Lumpur
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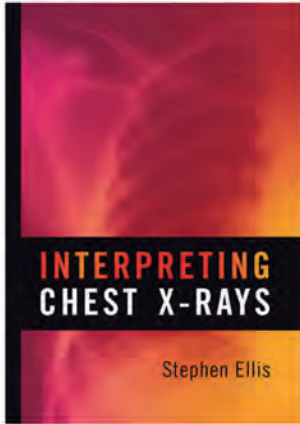
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NZIMRT Annual Conference
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September 24-26

ASRT Radiation Therapy Conference
San Diego, California

November 29-December 1

103rd RSNA
Chicago, USA

November 3-5

South Africa 2017 Imaging Congress
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www.rssa-sorsa2017imaging.co.za

November 10-12

“Breaking the Silos: Innovation, Intervention, Integration”
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Bridgetown, Barbados

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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





Group of youths trained in basic first aid and CBLS training in Mukuni Village.

Twinning program between Sheffield and Livingstone

Livingstone, Zambia

March 2017

Report by

Brigitte Kaviani, Assistant Operations Director, Sheffield Teaching Hospitals

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

The Twinning Program is a program set up between the Radiology Departments of Sheffield Teaching Hospitals, UK and Livingstone Central Hospital, Zambia

AT THE beginning of March 2017 I visited Livingstone in Southern Zambia for a partial holiday and partial fact finding trip. The aim was to initially explore the possibility of piloting the delivery of basic first aid and Basic Life support (BLS) training at the Community Mukuni Village clinic just outside Livingstone and to also visit Livingstone Central Hospital. We were guests of Queen Mukuni who listened to my training plan and invited us for a tour of the village and main hospital in Livingstone. The clinic has limited equipment and their needs are great. The baby thermometers we took were well received. My colleague has post trip sent blood pressure machines and glucose meter test kits to the clinic. We set up 4 BLS and basic first aid training sessions in the community for 45 health workers, tourist guides, taxi drivers and youths. Livingstone does not have any ambulances so those first on the scene of an accident or anyone suffering from cardiac arrest need to act quickly to save lives.

As part of the tour of Livingstone Central Hospital by Dr Kunda Mutesu-Kapembwa, Consultant Paediatrician & Neonatologist we met the senior medical superintendent of the hospital and we visited the

maternity and paediatric units as well as the new Special Care Unit. Dr Kunda requested the assistance of setting up an adult and Neonatal clinical skills unit to train all staff within the hospital in Neonatal and basic life support. This project will be completed by end of August as equipment donated for setting up of the clinical skills unit will arrive in July 2017.

Visiting the radiology department was the highlight of my tour. We were met by Mr Sydney Mulamfui, Radiology manager who gave us a tour of his department and introduced us to his staff. I was pleasantly surprised to find that they had similar challenges that we have in the UK with lack of qualified Radiographers and sonographers. Unlike my trips to Kenya and Syria where Radiologists were available, there is only one contracted Chinese Radiologist in Livingstone who only reported CT scans.

I visited the radiology department again during my trip and spent quality time with Mr Sydney Mulamfui, Mr Paul Makondo the Ultrasound manager, Mr Bruce Muleya CT manager and Mr Misheck Chilemba Sinkala, plain film radiography manager. I was able to

discuss their needs and how registering our departments with the World Radiography Education Trust Foundation (WRETF) is the first step to take. The twinning of our departments were registered on March 20, 2017.

The main needs of the department are anatomical markers. These are like 'gold' and they only had one set of markers in the whole department. They also needed radiography and radiology text books as these are unavailable in Zambia due their cost. They described books as 'diamonds' due to their rarity. The radiology manager Sydney reported on most examinations which was self-taught. Bench books were required to assist in this.

On return to the UK, I contacted the 230 radiographers we employ in Sheffield as well as local radiology departments to discuss my findings and requested donations of second hand anatomical markers and text books. Within three weeks of visiting Livingstone a box of anatomical markers arrived in their Radiology department. Shipping any medical equipment is risky as there is the likelihood that these are stopped at customs on arrival in Zambia and therefore never arrive at their final destination. Over 70+ Radiography textbooks left Sheffield on the 5th May. These were sent by air via a courier and travelled to Germany, Dubai, Lusaka with finally arriving in Livingstone. After many delays at the customs office and the use of three different courier companies and many phone calls the books arrived in Livingstone on the 4th June. A further delivery of 100+ books are due to arrive at the end of June, this time going at the back of a pick-up van which is being shipped from the UK via Namibia to Livingstone.

Further markers continue to be donated and I was thrilled to receive some from Emily Slater from my xray markers, info@myxraymarkers.co.uk

In August 2017 I return to Livingstone and will on this occasion visit 11 other regional small Radiology departments within the catchment area under the management of Mr Mulamfu. I will also be setting up and delivering BLS training within the main hospital for key trainers and Radiographers. In November I will travel once again this time with a Radiographer and Physiotherapist who will deliver Radiography and Physiotherapy training in the main hospital as well as teach BLS to teachers and students in Mukuni Village.

This is an on-going project of many strands. Anyone wishing to donate any anatomical markers (clip or individual) should contact me Brigitte.Kaviani@sth.nhs.uk as we need to equip 15 hospitals in total. ■

Brigitte Kaviani

ON March 2 this year we were visited by Queen Mukuni, Dr Kunda Mutesu-Kapembwa and Ms Brigitte Kaviani. This was not the first visit of my department from someone from outside Zambia wishing to look at ways of assisting us. So I did not initially put much hope that help would be forthcoming from this individual who shared our profession. Within hours of the visit I emailed Ms Kaviani a list of our needs which consisted of radiography and radiology textbooks, anatomical markers, viewing boxes and uniforms. I was pleasantly surprised when I received a reply straight away with a request to visit the department again that same week. This gave me the opportunity to introduce her to our radiographers and various managers and discuss the assistance that would be possible. Within a few weeks of the visit a box of anatomical markers arrived in the department. I was able to distribute these to our 19 Radiographers in Livingstone. I manage 15 other smaller radiology imaging centres department in the district within a large region with approximately a 2 million adult population. In all, the small hospitals within my catchment area there is need of markers, textbooks and other educational material. The radiography profession has many challenges in Zambia. The radiographers main training centre is in Lusaka at Evelyn Hone College and Apex University. Radiographers are either trained to Diploma or Degree level. Others who are fortunate enough go on to study at Masters level in countries outside Zambia e.g. Uganda, South Africa or Zimbabwe.

Radiography and radiology textbooks are desperately required. Reporting of all images is completed by myself and other radiographers with no formal training with one radiologist from China.

We currently have one general radiography room, one mammography unit, several ultrasound machines and a 32 slice CT scanner. We are hoping to receive an MRI scanner in the near future. Equipment is usually bought by the government and through donations from co-operating partners. But our biggest challenge is not having any service agreements so we have machines which are out of action for a period of time awaiting an engineer to arrive.

I manage 19 Radiographers in Livingstone as well as 78 radiographers in the southern region. I am in charge of the southern province of Zambia for imaging which consists of co-ordinating the 15 imaging centres.

I would like to thank Brigitte Kaviani for all her hard work and sharing our vision of improving the education of our radiographers in Zambia. We have already seen a massive improvement with the anatomical makers and textbooks received. I would also like to thank all the radiographers in the UK who have donated to us. Please be assured everything will be put to good use. ■

Mr Sydney Mulamfu



Markers sent to Livingstone.



Basic first aid and CPR training in Mukuni Village.



70+ books arrive at the radiology department in Livingstone.



3rd WHO Global Forum on medical devices

Geneva, Switzerland

May 2017

Report by [Stewart Whitley](#), ISRRT Treasurer

THE 3rd WHO Global Forum on Medical Devices was held in Geneva, Switzerland, in May this year. The meeting discussed the achievements that have been made in the field since the last forum was held in 2013 and provided an action plan to address challenges faced in low and middle income countries towards universal health coverage. Also discussed were the outcomes of the implementation of the World Health Assembly resolution on medical devices and the EMP strategy for 2030.

The ISRRT was represented at the conference with Treasurer Stewart Whitley presenting three workshop papers in conjunction with other organisations: the role of the ISRRT in the WHO's 'Implementation of International Basic Safety Standards (BSS) for the use of radiological medical imaging devices'; radiographer aspects in the International Society of Radiology's 'Medical Imaging Equipment: Global Plan For Improvement' and equipment procurement and specifications for RAD-AID's 'Health Information Systems And Healthcare Technology Management' paper. Stewart also presented at a plenary session titled 'Human Resources for Medical Devices' on the topic 'The role of radiographers and radiologists to support radiation safety and quality'.

The Forum also saw the launch of the new publication WHO list of priority medical devices for cancer management which is the outcome of a project developed by the WHO in response to the need for a model

reference list of basic and priority medical devices required for cancer management. The ISRRT's Director of Professional Practice Donna Newman was a contributing expert. The publication is available for free download from the WHO's website.

ISRRT Treasure Stewart Whitley said:

"This was a unique and humbling experience to rub shoulders with delegates from around the world and to learn how important that proper access to appropriate medical devices purchased at low costs can transform lives of patients in countries which are under severe economic stress." ■

Pictured above left to right:

IAEA Mr Rajiv Prasad, WHO Dr Maria del Rosario Perez, IOPM Professor Magdalena Stoeva, RAD-AID Dr Miriam Mikhail, ISRRT Stewart Whitley and US Department of Energy Kristina Hatcher.



ACCRT Delegates with drawings that have their country name written in Chinese during the opening ceremony.

Joint event a huge success in Hong Kong

Hong Kong Science Park Hong Kong

June 23-25, 2017

The 21st Asia-Australasia Conference of Radiological Technologists (AACRT) in conjunction with 5th Asian Radiotherapy Symposium (ARS) and 3rd Hong Kong Radiographers and Radiation Therapists Conference (HKRRTC) was held in Hong Kong Science Park, June 23-25, 2017.

Hong Kong College of Radiographers and Radiation Therapists (HKCRRT), Hong Kong Radiographers' Association (HKRA) and Hong Kong Association of Radiation Therapists (HKART) jointly organised this event.

We were glad to have over 170 overseas delegates that make our conference a big success. We have total 400+ participants, 40+ poster and 100+ oral presentations. Something we tried the first time in this conference was Live Ultrasound Demo, Real-time polling, Radiation Therapy Symposium, Radiation Protection Symposium and many more.

A picture is worth a thousand word, I would like to show you some photos taken that explain the conference. ■



Top: AACRT Ultrasound workshop with live demo projection.
 Above middle: ACCRT overseas delegates receive souvenirs.
 Above: AACRT 2017 Operating Committee include Ms Stella Ho, Mr Edward Chan, Mr Dragon Liu & Mr Edward Wong.
 Left: ACCRT Chinese Calligraphy show and Charity Bidding at the Gala Dinner.



Paolo Giarolo, Diego Catania AITRI's Founder, Simone Panci, Stefano Durante AITRI's President, Davide Maccagni.

AITRI “Optimization as professional duty”

Milan, Italy
May 2017

Report by Mr Diego Catania

The AITRI Annual Meeting, organised by the Italian Association of Interventional Radiographers, has become a recurring event each year for the past 17 years for the Italian professional. The city chosen to host the event for this year in May was Milan, Italy.

“Optimization as professional duty” was the main theme and there were five sessions, with 18 presentations overall, which focused on optimization of “cutting edge” procedures in radiology, cardiology and neurology interventional imaging, to include patient safety and risk management consideration. Approximately 180 attended the meeting.

The event started with the introduction of the new AITRI Scientific Committee and its membership by the AITRI President, Stefano Durante, who explained the aims of the committee regarding its the scientific contribution to international congresses and scientific journals through the work of AITRI members. Of note particular recognition was given to Luciano Soldini for his dedication to the profession and who was awarded the prestigious AITRI Golden Brooch which was presented by Stefano Durante and Diego Catania, AITRI's CEO and Founder. Luciano Soldini and Davide Maccagni, are radiographers who had worked in the name of AITRI in the writing of the Italian Superior Health Institute guidelines.

An interesting international session for interventional radiographers followed, during which four radiographers from different countries, provided an engaging contribution to the

proceedings. The special guest of this session, was the EFRS Vice-President, Dr Jonathan McNulty who delivered the presentation “Pivotal role in patient care for radiographers” and then created



Diego Catania, AITRI's Founder, presenting Luciano Soldini the prestigious AITRI Golden Brooch.



International session, from left: Roberta Gerasia, AITRI's Scientific Committee member, Diego Catania, AITRI's Founder and special guest Jonathan McNulty, the EFRS Vice-President.

the opportunity of discussion focused on the new frontier of radiographer's roles in the angio-suite, which initiated much debate.

Passion and emotions featured this day especially when a session gave voice to the thesis of young radiographers recently graduated from the Vascular, Interventional and Neuro-interventional Radiology Masters Degree Program, Bologna University, Italy. A further session followed which involved the best poster award; the recipient was "Danilo Teodi", the winners were colleagues from Rieti, a city of the centre of Italy that was affected by a terrible earthquake only last year. This same group, driven by the Board President of Rieti Radiographers, Francesco Di Basilio, organised an important event after the earthquake, in Rieti. The theme of this event was "Technical progress and new procedures in interventional radiology", which involved many different health professionals within the program activities and an amazing round table in video conferencing with colleagues from excellence hospitals in Italy. A great example of passion beyond the difficulties.

Finally, AITRI announced that the next Annual Meeting location will be Palermo, Sicily, in May 2018. And, as always, it will be a synthesis between art, culture, technology and science.

We are waiting for you! ■



Winners of the Poster Award from Rieti with "Danilo Teodi".



ISRRT is changing to payments via PayPal

The ISRRT is pleased to report that we have been able to 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.isrrt.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



The People's Festival, Denmark

Bornholm, Denmark
June, 2017

Report by [Troels Jeppesen](#), Consultant of communication

Once again, the Danish Council of Radiographers chose to participate in the political festival on Bornholm, Denmark, The People's Festival. And once again our message was, that X-rays should be used with care and consideration.

X-rays are not bananas!

Our focus this year was, that X-ray should be used with care and consideration. In 2015, we used skeleton-bodysuits to grab the attention of politicians and passerby's – this year it was bananas that caught the people's attention. And yes, bananas are actually radioactive. One medium sized banana delivering approx. 0.1 μ Sv.

We got inspired from David McCandless and Matt Hancock's most excellent illustration of radiation dosage charts, and then we converted the dosage to banana-dosage, thinking it a good way for people to relate to radiation in something they knew.

Of course, you would have to eat a REALLY big amount of bananas to put yourself at risk. So, radiation exposure is hardly a problem when you eat bananas. But it was fun and it did get attention.

Friday, Saturday and Sunday we had a stand in the mornings and evenings, handing out radioactive bananas and talking with people about X-ray, safety, ALARA and why thoughtfulness is necessary when using x-rays.

USSR, Atomic bombs, CT and x-rays in Denmark

What does the former soviet's nuclear testing have to do with radiation protection in Denmark?

This question was answered when the Danish Radiographer Council gave the floor to Jelena Heiber, in a debate that was more of a telling of her life. The debate was broadcasted live on our Facebook page.

Jelena spoke about when she was a child, and the Soviet tested their nuclear weapons in Kazakhstan. She lived in one of the areas exposed to massive radiation and told her story about the consequences of the massive amounts of radiation she, her friends and family were exposed to. The Soviet Union made 456 nuclear tests – in the period 1949-1989. They conducted test trials without regard to locals and the 200,000 inhabitants living in the region.

The purpose of the "debate" was to draw attention to the fact that ionizing radiation is dangerous and has consequences.

In the work of towards radiation protection in Denmark, especially ▶



on the legislative and political levels, we think there is a tendency to relate to the studies of the consequences of ionizing radiation, with a certain abstract distance - for example, to the risk of developing cancer.

Perhaps it is because there is no direct detectable correlation between a specific case of cancer and a previous exposure to ionizing radiation. It is not everyone who is exposed to radiation that later develops cancer.

But this abstractness was something we set out to challenge – or at least set in perspective.

A large part of the knowledge we have about how ionizing radiations effects on the body – and what consequences it may have – we have from the times large healthy populations have been exposed to ionizing radiation. For example, from Hiroshima and Nagasaki, from the Soviets bombs in Kazakhstan and from the times there have been nuclear accidents. From those espousers, we have obtained clear statistics that shows that there is a correlation between exposure to radiation and the risk of developing cancer later in life. And that was the story Jelena wanted to tell.

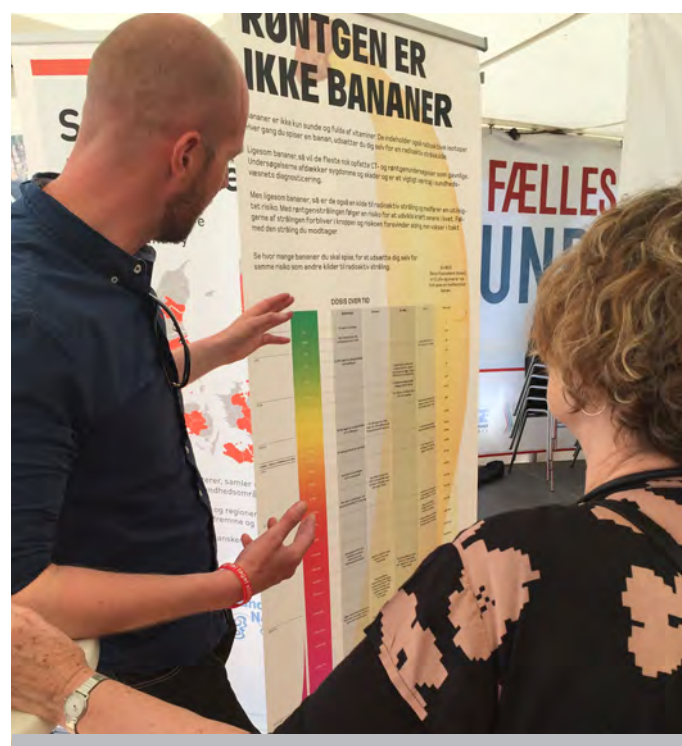
She wanted to remind us all - and especially our politicians, that even though X-rays are invisible, incredibly useful and absolutely indispensable in a modern healthcare system. There are consequences.

“Jelena is one of the individuals who make up our nondescript statistics of what radiation dos to the human organism. The statistics that form the basis for the decisions our politicians make about how we should, must and can use ionizing radiation here in Denmark.

When the legislative and political levels deal with how, when and how much radiation the population is exposed to. They do so on a statistical certainty. Given the amount of people in the population, the “risk” ends up being a certainty, when it comes to how many people end up suffering from the consequences by develop cancer later in life.

For the individual patient, who is about to be exposed to ionizing radiation, the risk of later developing cancer is a statistical uncertainty. As a patient, you cannot know if you end up developing cancer later in life, and that makes it difficult to understand and relate to the risk.

Therefore, it is up to our politicians to ensure that X-rays can, and are, being used with care in Denmark”, said Charlotte Graungaard Falkvard, president of the Danish Council of Radiographers, as she rounded up the debate. ■



1. www.informationisbeautiful.net/visualizations/radiation-dosage-chart/
2. One BED (*Banan Equivalent dosis*) is approx. 0.1 μSv – or equivalent of one medium sized banana.
3. On the Radiographer Council's Facebook page ([@RadiografRaadet](https://www.facebook.com/RadiografRaadet)) you can see photos and videos from the festival.



Strand-Idyll á la Röntgen. A radiographic view of swimmers on a beach.

History is us! The work of ISHRAD

Report by [Adrian Thomas](#), Secretary, International Society for the History of Radiology

ISHRAD stands for the **I**nternational **S**ociety for the **H**istory of **R**ADiology.

WE are an enthusiastic group, and are interested in all aspects of the history of radiology and radiography. We are the first international society that is dedicated to the history of the radiological sciences. The aims of the society are the advancement of scientific research, and the exchange of information in the field of the history of radiology. As the decades have passed radiography has become increasingly central to the patient's clinical pathway, and so our story should be celebrated. We need to know who we are and where we are going. We therefore need to know where we have come from.

These aims of ISHRAD include the collection and presentation of specialist scientific contributions, and through the organisation of exhibitions, scientific congresses and meetings. We have an annual meeting and this year we are visiting the Siemens Museum at Erlangen. Details may be found on our web page www.ishrad.org

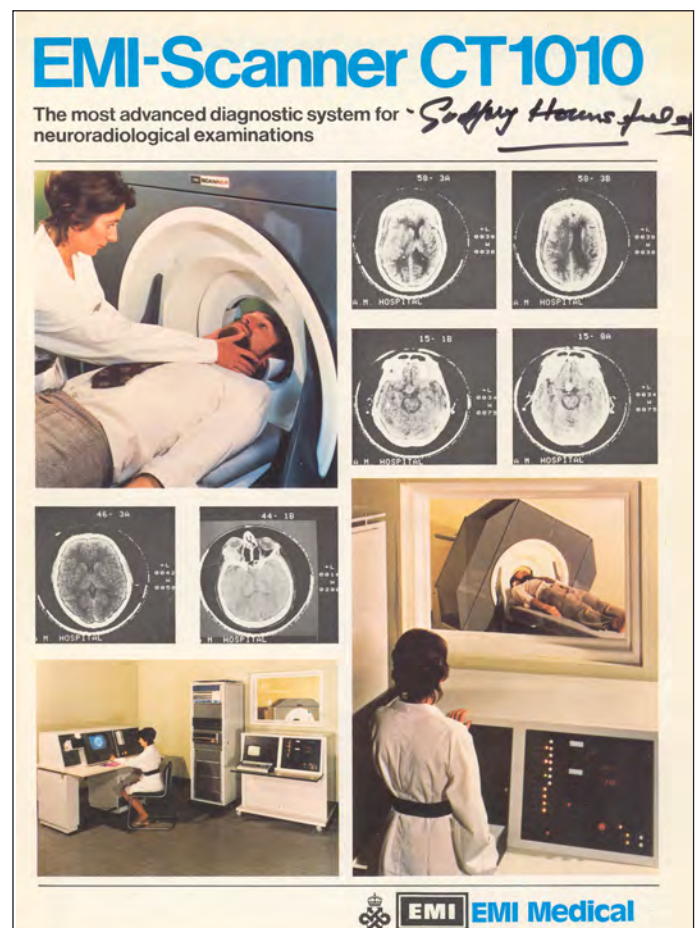
During my career I have seen the complete transformation of radiology, and our fascinating story needs to be both celebrated and recorded. I went to medical school in 1972, which is the year that the CT/EMI scanner was announced. Illustrated is the brochure for the EMI 1010 scanner that I asked Godfrey Hounsfield (the inventor of the CT scanner) to sign. I started radiology training in 1981 when MRI was in its infancy in my department. I have seen the birth of modern radiology during my working life. For a younger generation, the practice of medicine from my student days now seems to be from a completely different era – which I suppose it is!

So I suppose from a historical perspective we need to do two things:

Firstly, we need to document and record the development of our modern radiology – digital, CT, PACS, MRI, intervention and US. Our speciality is changing quite rapidly and we need to record the changes.

Secondly, we need to record the practice of radiography from the pre-modern period. Many of the previously performed are now either

Right: EMI Scanner CT1010 brochure signed by Godfrey Hounsfield.



forgotten or rarely performed. Just what was it like to work in a pre-digital department? And so our memories need to be recorded – either written down or as oral history. If we do not record our story it will be forgotten. As an example, recording the histories of schools of radiography and our departments is important.

I love old postcards and printed ephemera, and these are fun and interesting to collect. The two postcards depicted are from the early 20th century. The card 'Röntgen (X) Rays' shows the young couple in the back of the taxicab revealed as two skeletons. This is from 1898 and is quite charming. The other card shows bathers dancing on a beach (Strand-Idyll á la Röntgen). What should be a charming holiday scene is changed into a fantastic landscape of dancing skeletons. We are now so used to seeing images of the inside of our bodies that the sense of the ghostly and macabre that greeted Röntgen's discovery has almost entirely passed. It is interesting to collect old cards and documents reflecting our previous practice. Our old paper request forms and reports are disappearing in the digital age and they are worth keeping.

Our website is www.ishrad.org and we would be delighted to hear about your stories and experiences. Do visit our website and get involved in our exciting work. ■



Right: Röntgen (X) Rays. A postcard from 1898 showing a young couple in a taxicab.

Fit for pocket not fit for purpose

why radiological services will be everywhere and sometimes nowhere

Report by [Yahans De-Heer](#), Ghana

Desire for modernisation

Managers desire to own the most specialised equipment, but often in this quest, tend to overlook certain vital pointers in selecting the appropriate equipment that are fit for purpose.

In several cases however, this unguarded urge for service expansion, ends up at points where investments are put into new technology, without proper planning or feasibility studies, eventually procuring items not fit for purpose.

Universal justifications for procurement in radiology

A thorough reflective assessment is needed to justify the purchase of any equipment. Justifications may differ depending on sources of funding. Donor or Government funded purchases usually have a different focus from privately funded purchases by private investors.

Government purchases focus on social medical interventions, not necessarily on the fiscal returns on investment as private investors looking to primarily break even or making profit may focus on.

The usual grading of equipment purchase and applications, starts from simple to more sophisticated modalities. Such grading also advice the request of examinations by physicians.

Let's focus on the justifications listed below, though not exhaustive, serves as a guide for procurement.

1. **General purpose x-ray machine** – This is the very basic in setting up a Radiological facility, its success will determine the eventual success of the facility and future expansion.
2. **Multi Slice CT Scan** – Except in instances of complete diagnostic solutions, this advanced Radiological equipment is usually installed to complement already existing ultrasound and General purpose x-ray machines
3. **MRI Scanner** – This is the main point where the paths of Government and private investors cross as a result of common interests in achieving some goals.

In installing diagnostic equipment, it's essential that some critical factors are considered before venturing to invest in such advanced services. Taking into consideration the under listed factors will determine the success or otherwise of the whole process.

1. Why do you want to make this purchase in the first place? Is it essential to your service, will it complement whatever service is being rendered. It is recommended as a strategic service improver.
2. Do you have a strategic business plan based on financial and market analysis, for this acquisition or project? Starting without a plan will eventually lead to failure. This involves the gathering of facts, assumptions and considerations such as profit and actual aim of investment. Government funded purchases will not necessarily look at making profit but rather a social responsibility towards universal access to health.
3. How much is the Equipment going to cost you? This is the point where you look at the figures and consider if you would want to go for an equipment with specific desired specialised features. Your investment inclination will be triggered at this point, as a bad move may cost an investor dearly. Government funded purchases

will typically not focus on the cost, as such are usually allocated in periodic composite budgets.

4. Manpower needs, at this point, it's most essential to ensure that there is available manpower to operate the equipment at optimal levels.
5. How do you plan to capture your share of the business? Most investors forget that mostly the business environment is either saturated or clients are already being serviced by another provider, hence the need to actively capture clients and portions of the market. At this time, you may also consider asking
 - a. Who are your current referring physicians, what are their referral patterns like?
 - b. What is the strengths and limitations of your competition, where do their referrals come from?
 - c. What would make your facility different or better, is it location or patient access?
6. What is your payer mix and how effective is your billing? This will indicate if you will have a positive returns on investment or not. Considering the worst case scenario, most investors at this stage consider targeting clients on forms of medical insurance, Corporate supported, or high net worth individuals.
7. Construction costs – All Radiological equipment needs special housing with special fitting which when not done well will affect the existing structure.

Ghana in scope

With universal justifications for equipping facilities notwithstanding, central governments tends to channel funds into procuring equipment without considering the implications and their suitability to beneficiary communities.

Most Board of Directors of private facilities, go out of their way to raise the needed capital from private investors to equip private facilities without researching, but in order to have bragging rights to one equipment or the other.

Availability of specialised human resources

The first major factor to consider should have been the availability specialized human resource, before procurement, however most investors and procurement specialists ignore this crucial point only to purchase equipment before going head hunting for specially trained personnel to manage the equipment.

The non-availability of specialised Human Resources, further creates a vacuum that gives way to high incidence of the created gap being filled by untrained or under-trained personnel whose actions or inactions destroys the equipment, reduce the equipment life span or endanger clients. This only causes more harm than good.

Relative affordability

In Ghana, a lot of health sector interventions are donor driven especially in equipping facilities. Private individuals also carve out huge chunks of operational revenue to purchase equipment. Both Governments and private individuals also eventually, in most cases, ►

resort to loans to procure such equipment.

Though it's assumed that an equipment is affordable, the main nagging question is that is it relatively affordable?

Putting in place a proper cost-benefit analysis in most cases it is realized that it's more expedient to hold on with some purchases till the appropriate time.

Relevance of equipment

Will a non-research facility attending to 2,000 CT Scan clients annually who 70% of the time come in for head scans, need a 640 slice high end CT scan as against a 16 slice optimal high performing CT Scanner? Definitely NOT.

A facility managing 2,000 patients coming in mostly for head CT scans, which computes up to eight patients daily for every working day of the week will need a lower slice capability as the facility is not under immense pressure or undertaking any form of research to require such high end scanner.

However, the bragging for high capacity slice scanners pushes most non-technical decision makers to opt for such equipment, creating a situation of financial drain in the process.

In situations like this, it's not financially prudent to engage in such purchases as the equipment procured will definitely not be relevant to the facilities of interest, thus a huge beast of an equipment will only be installed to provide bragging rights but essentially not a functioning right.

In radiological settings, one rule of thumb is that presence does not always indicate relevance.

Availability of funds

A typical high end X-ray equipment for clinical radiological services, will on average cost between \$90,000 and \$600,000.

In most cases, when equipping radiological facilities, it also involves preparations of allied units to augment the works of the radiological services.

In several instances funds are exhausted or a budgetary cul-de-sac point is reached and it's a make-or-break decider between buying the equipment to start off BIG or finishing the facility before scaling up the business.

Most decision makers have opted for going all out, and ended up having equipment stuck in warehouses or at the ports of entry with no funds to complete the housing facility or even install the equipment when they arrive.

Reckless application of funds, only leads to loss of revenue, which has a chain effect on all connected equipment within the facility

Relevant requests from physicians

One other scenario to be taken into consideration is the situation where physicians do not make requests relative to the specialised equipment installed.

A specialist facility that has physicians specialising in chest conditions, may not necessarily need a sophisticated general purpose radiography system, but rather a dedicated equipment which will receive relevant feed in the form of requests from the referring physicians.

Relevance, frequency and varying distribution of particular requests play a major role in determining the appropriate equipment to purchase.

Relevance of equipment to geographic location

The socio-economic state of the residents and target patrons of radiological facilities will greatly advice the calibre of equipment to be installed. Putting high-end equipment in places of very low income, will only lead to situations where the equipment sits, but not used because the cost to the beneficiaries are so much it inhibits their

access to such facilities.

Even in cases where the services are highly subsidised, in the event of shortage of consumables, there would not be much funds available to reorder, thus there remains a long period of inactivity which affects the core reason why such equipment are placed.

Procurement processes and pitfalls

Professional roles versus experience comes in heavily in procuring or establishing radiological facilities. What pertains in most cases is that the integrity of decisions taken is compromised as procurement is based on instructions from external source, familiarity with brands and or familiarity with individuals offering equipment that is not proven such familiarities eventually works against the established systems.

Smart Procurement

Like a typical smart device fitted with artificial intelligence, Procurement processes to outfit radiological facilities must adopt a smart nature. Assume the role of the equipment, assume the space of the facility and finally the role of the investor. Instead of acting in a stiff-neck procurement environment, it's rather advisable and prudent to adopt a smart procurement approach as guide.

Not wired* – It's a must to think outside the box. Recommendations from several assessment tools should not be the basis for sole judgement, but rather a launch pad for innovative thinking and decision making process. The trapping of following boxed rules does not work well where the environment does not fit the recommendation. In most cases, the Conference of investors, Administrators, procurement specialists argue that they follow due process in procuring equipment, though such never function optimally for even a day after procuring. Following written protocols must be guided by an intelligent approach, which will determine that when reality on the ground does not meet data requirement then its better you opt for a workable solution.

Learnable* – Smartness in procurement especially for radiology facilities requires continues learning to keep oneself abreast with the ever changing trends of development in the industry. Averagely there is new invention, innovation and improvement every 3 months, thus the quotes given and the year old information received during a lecture with suppliers. Such information is quickly rendered redundant.

Research, observation of activities and utilization of existing systems and direct interaction with end users as well as patients greatly enhances the learning process. .

Interconnected* – Decisions to procure must not be made in vacuum, it must be directly linked to the full functionality of other allied units. A communication channel with end users as brief as a five minute chat will reveal a whole network of relevant information that would save thousands of Dollars in invested cash. Such a consulted end user may indicate that they have a DICOM system in place even if that system is not fully functional or utilised. A meer link to an existing infrastructure would save enormous time and funds that would otherwise have been expended in other nonessential ways.

Trusted* – Trust of a specialist advise and directions is based on track record of previous sound advice given.

If the earlier sequence smart procurement is followed, then sound decisions would be reached with the end user fully catered for. There are some equipment in Ghana that have never functioned optimally since the first installation, however, there are equally several equipment scattered across Ghana which is well appreciated ▶

by end users and have been fully functional since the first installation. The latter being a good indicator of sound and trusted judgement in equipping radiological facilities.

MY ASSESSMENT: Equipping for purpose

The influencing factors that push for some procurements, may not always be factually grounded and as such procured equipment may be brought in but fit only for the cameras.

Political influence, as well as procurement loopholes ensures that at the end of procurement and installations, the object of such processes are missing, and may not enhance the work of to end-users or be beneficial to patients.

Factors to consider in purchasing fit for purpose equipment are generally ignored, hence disappointing outcomes.

Data vs. Reality

Most procurement decisions are based on various facility equipping survey tools and reports. Though survey tools are a great for facility improvement, the question is whether such reports are reflective of realities on the grounds.

It has even been discovered on some occasions that local managers at some facilities falsify information in the data collection process, so as to paint a good picture for bad management situations. A manager may state that an equipment is over utilised though it is highly underutilised. All these wrong feeds, will eventually appear in a report which will be adopted. When this happens, jumping on to a data inspired report to procure, will only lead to procuring inappropriate items for a facility whose budget may well be stretched.

So setting aside the reports, the key consideration should be if a proposed equipment is fit for purpose. A flash purchase without the relevant background determinant investigations will only eventually lead to loss of revenue as equipment procured may not fit for the purpose for which it was procured.

Returns on investment will be higher if there is a deliberate aim to consider synergised models of facility upgrade. This will ultimately prevent situations of locked down investment as a result of non-performance investments.

My take: a case for Tertiary Regional Advanced Diagnostic and Interventional Radiology Centres

Resources will be saved especially if Government focuses attention on establishing Tertiary level Diagnostic units to serve the diagnostic needs of the populace at invariably lower cost.

My recommendation is for National Governments, to establish Tertiary Regional Advanced Diagnostic and Interventional Radiology Centres, equipped with high capacity fluoroscopy, angio-suite, cath lab, MRI, CT scanners and ultrasound scanners to effectively serve larger populations and catchment areas.

Tertiary Regional Advanced Diagnostic and Interventional Radiology Centres will serve as referral for advanced radiological examinations, ensuring that all examinations requiring advanced facilities can be referred to a well-equipped and staffed central facility for all such advanced diagnostic and interventional radiology services.

This will further serve as a standardised reference and Enhanced Radiological Skills Training Centre for practitioners as who may require specialist skills acquisition.

FIT FOR POCKET, FIT FOR PURPOSE – Ultimately Square pegs in square holes

In Conclusion, I call on key decision makers in the establishment of Radiological centres to involve professional end-users at every stage. Governments should consider establishing fully accessible Regional Advanced Diagnostic and interventional radiology centres, and ensure their full utilisation so their establishment will be FIT FOR PURPOSE. ■

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&
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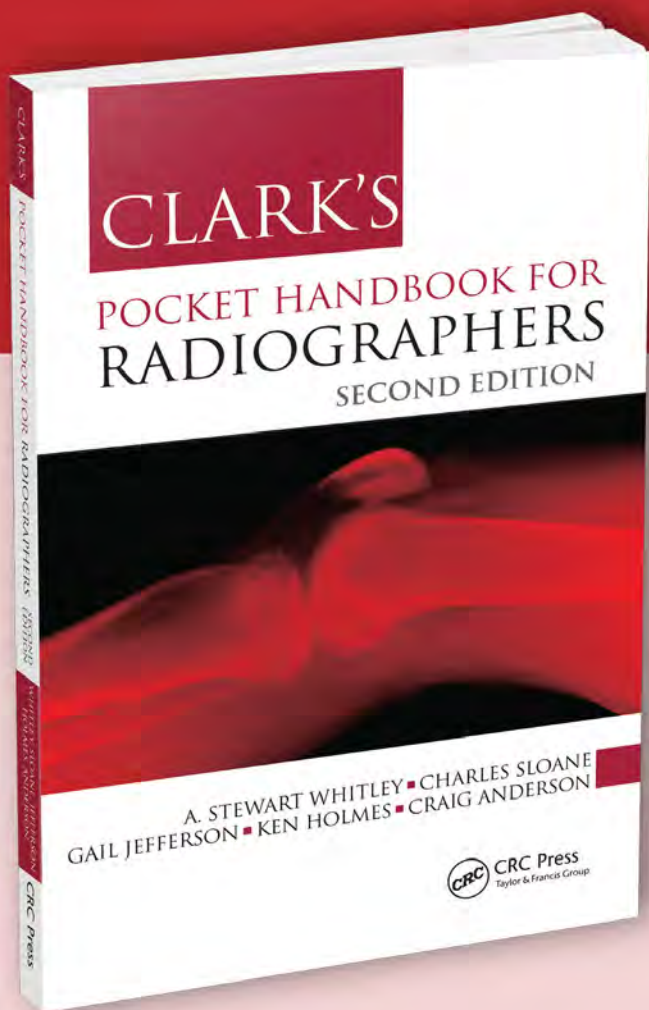
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Participants, lecturers and facilitators.

Ghana-Norway summer school

Ghana

June 12-16, 2017

Report by Prince Rockson, President Ghana Society of Radiographers

THE School of Nuclear and Allied Sciences of the University of Ghana (SNAS), under the auspices of the Norwegian University of Science and Technology (NTNU) and with support from the Ghana Society for Medical Physics, Ghana Society of Radiographers, Korle-Bu Teaching Hospital and St. Olav University Hospital organized the Ghana-Norway Summer School(NORPART) from June 12-16, 2017 in Ghana. The theme for this year’s School was “Radiological Imaging for Breast Diseases (Benign and Malignant): Diagnosis and Management”.

The course involved lectures and practical sessions handled by experts in the field of breast imaging (ultrasonography, mammography and magnetic resonance imaging) and management of breast conditions. This year’s training saw various professionals in attendance including radiologists, radiographers, oncologists, medical physicists and radiation therapists from Norway, Ghana, Nigeria, Niger and Zambia.

Organisers of the Summer School absorbed the registration fee for all participants, hence no one was required to pay for participation. Additionally, lunch and snacks were provided during the Course, likewise accommodation provided for participants who resided outside the Greater Accra Region.

The Summer School started with an opening ceremony on June 12 at the Ghana Medical Association (GMA) Secretariat, Korle-Bu Teaching Hospital (KBTH), Accra and chaired by Dr Joel Yarney, Director, NCRNM, KBTH.

A welcome address was delivered by the Dean of SNAS – UG, Prof Y. Serfor-Armah to congratulate all participants that were selected for the course and also to express their appreciation to the NTNU. Messages were also delivered by the NORPART Coordinator (Norway), Prof Pal Erik Goa and also from the NORPART Coordinator (Ghana), Prof J.J. Fletcher.

Various areas centred on breast imaging modalities such as ultrasound, mammography and magnetic resonance imaging were discussed as well as more efficient and patient-centred imaging techniques. Some of the topics discussed included;

- X-ray Mammography Physics (Fundamental Principles/ Introduction to Mammography Theory)
- Mammography X-ray Equipment
- Breast Anatomy/Physiology



The organisers paid a courtesy call to the Norwegian Ambassador in Ghana.



Ghanaian and Norwegian radiographers.



Norwegian and Ghana partners who organised the NORPART Summer School.

- Mammographic Procedures
- New technologies & applications (Transition from Screen-Film Mammography, Digital Mammography & Tomosynthesis)
- Patient Dose Assessment and Risk in Mammography
- Optimization in Mammography I
- Clinical Applications of Mammography Imaging
- Image Quality in Mammography
- Introduction to Ultrasound
- Clinical Applications of Ultrasound
- Image Quality in Ultrasound
- Application of Ultrasound in Breast Imaging
- Radiation Protection in Mammography Examinations
- Mammographic Instrumentation, Quality Control & Quality Assurance
- Quality Control in Mammography
- Quality Control in Monitors
- Breast Cancer Screening
- The role of imaging in breast cancer
- Introduction to Magnetic Resonance Imaging (MRI)
- Application of MRI in Breast Imaging
- MRI Safety Considerations for Patients & Personnel
- Optimization in Mammography II
- Radiation Protection and Safety - The Current Regulatory Requirements in Ghana
- Mammography References, Regulations & Guidance Documentation

The training session comprised of both theoretical and practical lessons and adequately covered every field in medical imaging and medical physics. Experts from each field were well represented and demonstrated a high level of knowledge in their respective fields. The practical sessions covered areas in:

- Ultrasound Laboratory Exercises
- Calculation/Computer Exercise in X-ray Mammography Physics
- Mammography Laboratory Exercises
- Radiographers: Do's & don'ts at the X-ray lab

Also in attendance was the Ghanaian Ambassador for the World Radiography Education Trust Foundation (WRETF), who enlightened participants on funding opportunities available through a series of presentations.

The training was crowned with a course evaluation, and came to a successful close on June 16 with a closing ceremony and award of certificates to participants and facilitators. Representatives from each country present delivered their closing remarks and their appreciation for such an educative and interactive experience.

The Ghana-Norway Summer School 2017 was a great success by all standards and participants were enthusiastic the training had afforded them knowledge in improving diagnosis and treatment/management of breast diseases. ■

Challenges faced by radiological technologists in justification of radiographic examinations and optimisation of the radiation dose to patients in Sri Lanka

V.G.Wimalasena, Principal, Sri Lanka School of Radiography, the National Hospital of Sri Lanka, Colombo

Introduction

It is well known that the use of ionizing radiation for medical diagnostic examinations should be limited to minimise the somatic and genetic effects of radiation. The three basic principles of radiation protection of patients are justification, optimisation and dose limitation. Out of that the justification is the most crucial amongst the above mentioned principles. This means that any radiological procedure involving ionizing radiation should be performed only when the benefits outweigh the risks received by the patient with regard to the particular procedure. The clinician who prescribes the diagnostic procedure bears the main responsibility in this regard while the radiologist and the technologist also has an important role to play.

The role of the radiographer with regard to justification varies from country to country according to the existing policies of each country. In this article I would try to describe how the Sri Lankan technologists get involved in this and the problems that they come across in the execution of their individual task.

Background

In Sri Lanka, the prescription for radiographic examinations are hand written by the medical officers on a printed form (figure 1). The completeness of the prescription forms is important for the radiological technologists to justify and to perform the correct projections for the prescribed examination as fast as possible while optimising the radiation dose. But some prescriptions are incomplete and incorrectly or illegibly written and the technologists face problems in justification, deciding the correct projection and selecting the appropriate exposure factors while performing the examination.

Study

An outline of a pilot study I performed recently to quantify the errors in x-ray prescription forms submitted for general radiographic examinations during a week at two x-ray rooms at the National Hospital of Sri Lanka is given below.

Method

Two general radiography X-ray rooms at the radiology department of the National Hospital were selected. A check list designed to assess the X-ray prescriptions was given to the RT in each room and they were instructed to mark the availability and appropriateness of each essential information on the x-ray prescriptions. They also were instructed to comment on how it affected their duties and the work flow. The completed lists were collected after one week and analysed.

Effect on the work:

The RTs positively indicated the following:

- Delayed the work
- Inconvenienced the patient and the supporting staff
- Had to repeat some projections
- Increased the dose to the patient.
- Increased the departmental expenditure.
- Created misunderstanding and arguments sometimes among health team.

Figure 1.

Date		Requisition for X-ray diagnostic examination		
Name & Address		Ward No		Sex
		Bead Head Ticket Number		Age
Clinical History		Region & Nature of Examination		Accident Assault In ward Trolley Wheel Chair
..... Surgeon / Physician	 Signature , MO		
Date	X-ray Number	Size & Number of films used	Remarks	
	X-ray Room			
	 Signature of the Radiographer / Radiological Technologist		
Date		Radiologist's Report		

Result

The following table shows the percentage of different mistakes found on the x-ray requisitions.

Total Number of prescriptions	Total incorrect	Name incorrect	History Not available	History illegible	Region / examination incorrect	Wd / Clinic not marked	Sex not written	Age not written
200	142	22	17	48	3	20	13	19
Percentage	61	11	8.5	24	1.5	10	6.5	9.5

Conclusion & Discussion

The completeness and accuracy of the x-ray prescription is important for efficient and accurate work of the general radiography department. It helps justification and reduction of unnecessary exposure to the patients and to reduce the cost of the examinations. But, if any information is missing or incomplete it will lead to delay or repeat examinations causing inconvenience and unnecessary radiation doses to the patients.

Following examples shows how the errors in request forms causes problems.

1. Wrong name of the patient or part of the name written

Usually there are two or more people with the same surname, middle name or last name. When only a part of the name is written, the ward staff might bring a wrong patient with a request form. When the technologist tries to identify the patient the information given by the patient may not tally with the information on the patient. So the technologist has to verify it before taking the x-ray. It might take a long time, inconveniencing the patient and the staff.

2. Sometimes a wrong age or gender may be written, which again confuses the technologist and delays the examination until verified.

3. No clinical history / illegible hand writing/ uncommon abbreviations

When the clinical history is not available the technologist is unable to decide which projections to take. e.g. A patient with facial injuries who was sent from trauma ward to the dental ward may come with a request X-ray skull, without giving a reason or a proper history. The technologist has to verify this wondering which projections to take. Sometimes, simply a chest PA x-ray may be requested without writing the history to confirm rib fractures where an oblique view may be better.

4. Wrong examination requested

Sometimes neck x-ray is requested for cervical spine. If the clinical history is not available this causes problems to the technologist. Wrong anatomical side may be written. This may lead to serious damages to patient unless properly dealt with. Sometimes shoulder joint AP is requested when looking for a fracture of the clavicle.

5. Not signing the request form by the clinician or the medical officer

This may leave room for anybody to write a request for an x-ray examinations. There were instances some nurses have written x-ray request forms for their relatives or friends who are not ward patients.

When there is a problem the technologist does not know whom to contact to verify.

In addition to the above hazardous outcomes, the other adverse result is the **Risk of creating misunderstanding among health team.**

When the technologist tries to verify the request, some members of health team will misunderstand and tries to argue to defend their work. This will create unnecessary unhealthy work environment in the hospital. Because of this reason some technologists tend to comply the request and do whatever the region and the projections requested.

Therefore I suppose that suitable action to be taken by the concerned parties to make sure that the X-ray request forms are accurately completed before they are sent to the diagnostic imaging department. ■

Radiation therapists' historical and central role in cancer care in Ghana: Professional inquiry

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Summary

The quality of cancer care in Ghana has been improving over the years, and the central role of radiation therapists cannot be undermined. The goal of the Radiation Therapist is to deliver quality and safe treatment to the cancer patient. The daily clinical duties of radiation therapists in Ghana could be categorised into patient simulation and treatment delivery, quality assurance, patient education/counselling, and daily patient assessment and chart review. This article's aim is to provide a holistic view on the historical growth trend of radiation therapy as a profession in Ghana by highlighting on the nature of radiation therapists' training or qualification, their fundamental job description in cancer care system, challenges, and future directions. A professional inquiry approach was used to uncover the gradual development of radiation therapy profession in Ghana.

In Ghana, the University of Ghana is the only institution that trains and provides qualification for radiation therapists since 2003. There are three Radiotherapy Centres, namely National Centre for Radiotherapy and Nuclear Medicine (NCRNM) at Korle-Bu Teaching Hospital, Oncology Directorate at Komfo Anokye Teaching Hospital, and Sweden Ghana Medical Centre. The Allied Health Professions Council regulates the registration of radiation therapists. In 2008, there were only 10 radiation therapists providing care for cancer patients in Ghana. Currently, there are 20 radiation therapists in the public sector and four radiation therapists practicing in the private sector. Professional uncertainty, and interconnectivity are two major challenges.

Introduction

With today's rapid increase in technological development and growth in the number of radiation therapists locally, and globally, we all need to pause every now and then to examine our past, present, and future directions as radiation therapy practitioners. Practitioners have the responsibility of making their field significant by continuously

acquiring knowledge and skills to support quality and timely delivery of patient care. Patient care in Ghana, just like many other countries, is multidisciplinary. An approach that is highly embraced in cancer care. The quality of cancer care in Ghana has been improving over the years, and the central role of Radiation Therapists cannot be undermined.

There are various treatment modalities for treating cancer. In Ghana, cancer patients have option for surgery, chemotherapy, hormonal therapy, and radiation therapy. Radiation therapy is the use of ionizing radiation to cure cancer or control pain and bleeding to improve quality of life of a patient with advanced disease. The professional who applies his/her clinical knowledge and skills to administer the radiation is called radiation therapist or therapeutic radiographer. No article or book has reviewed the historical trend that has been significant to the development of the radiation therapy profession in Ghana. This article's aim is to provide a holistic view on the historical growth trend of radiation therapy as a profession in Ghana. It provides a highlight on the nature of radiation therapists' training or qualification, their fundamental job description in cancer care systems, challenges, and future directions.

Approach

It is an ethical, political, and socio-cultural obligation of professionals to question and pursue strategies to improve their practice. This action can be performed by an individual or group through an interactive process of inquiry without an ethical clearance. Inquiry can lead to a sustainable professional growth by providing an in-depth understanding of the profession's past, present and future challenges and opportunities¹. Professional inquiry is an approach that has widely been used in health and education to directly explore and communicate key areas of professional experience²⁻⁴. This article used a professional inquiry as an approach to uncover the gradual development of radiation therapy profession in Ghana. The views expressed in this article are from radiation therapists who have

observed the development of the profession for almost two decades, to help provide public knowledge concerning the profession's growth trend and future direction. The deliberation focused on the number of training and treatment institutions, the number of qualified and practicing therapists, and the gender distributions.

Results and Discussion

Training and Treatment Institutions in Ghana

It is a necessary condition to provide accurate facts on events that happened in their right order of occurrence. History offers an exclusive opportunity of recording most useful information which then serve as generational knowledge^{5,6}. Globally, several institutions started training healthcare professionals on how to safely apply radiation in diagnosing and treating diseases after the discovery of X-rays in 1898. In Ghana, the University of Ghana has served as the only institution that trains and provides qualification for radiation therapists since 2003⁷. The radiation therapy program falls under the Department of Radiography of the School of Biomedical and Allied Health Sciences, one of the four colleges under University of Ghana⁸. The undergraduate training of radiation therapists is done biennially and few students are admitted compared to other programmes offered by the university. This is basically due to the number of teaching clinical centres available for the training, employment opportunities after qualification and the number of faculty members. The maximum and minimum number of students ever trained per academic year are eight and five respectively.

Over the years, the radiation therapy program in Ghana has grown from initially admitting only local students to admitting foreign students from Africa, mostly Nigerians. Student radiation therapists receive training in general radiography in their first and second year, and specialised courses in radiotherapy such as radiation physics, radiobiology, radiation oncology principles, radiotherapy techniques, brachytherapy, and radiation protection in the third and final year. The entire duration of the program is four years, followed by a one year compulsory clinical internship at the NCRNM, Korle-Bu Teaching Hospital. Students also undertake extensive clinical placements and vocational clinical training which is supervised during inter-semester breaks to prepare them in providing safe, efficient, and effective patient care. An external examiner, mostly from abroad, examines the students in their final clinical practical exams before students graduate. These progressions are of international standard^{9,10}. Similar developmental phases are outlined for students at the Michener

Institute of Education¹¹.

In order to practice in Ghana, graduates must pass a board exam organised and supervised by the Allied Health Professions Council, Ghana. Successful candidates are registered and given professional pins, and licensed to practice in Ghana¹².

There are three radiotherapy centres in Ghana, namely National Centre for Radiotherapy and Nuclear Medicine at Korle-Bu Teaching Hospital, Oncology Directorate at Komfo Anokye Teaching Hospital, and Sweden Ghana Medical Centre. Both NCRNM and Sweden Ghana Medical Centre are located in Accra which is the capital city of Ghana. These two centres are about 250km from the Radiotherapy Centre at Komfo Anokye Teaching Hospital which is in Kumasi, the second populated populous city in Ghana. Sweden Ghana Medical Centre is the only private institution that provides radiotherapy services in Ghana. Despite the equipment challenges, the two public institutions have played a critical role in reducing the burden of cancer by safely and efficiently using Cobalt-60 tele-therapy machines to serve Ghanaians, Nigerians, Liberians and other African countries¹³, whereas the private institution makes use of a linear accelerator.

Fundamental job description of radiation therapists

The daily clinical duties of radiation therapists in Ghana could be categorised into patient simulation and treatment delivery, quality assurance, patient education/counselling, and daily patient assessment and chart review.

The process of delineating the tumour volume using X-rays with less energy is known as simulation. Simulation determines the patient's treatment position, and gantry angles. The simulation is performed by the radiation therapist and radiation oncologist. During this process, all the necessary immobilisation devices are produced and incorporated to aid treatment.

The treatment phase involves the actual delivery of radiotherapy and managing the side effects of radiation. Generally, the treatment is scheduled five times a week, Monday to Friday. The first day of treatment requires verification of the plan generated by the simulator to ensure conformity.

The goal of the radiation therapist is to deliver quality and safe treatment to the cancer patient. This is achieved by conducting daily quality assurance on all the necessary equipment and treatment accessories. The quality assurance process is a systematic action performed with the support of the medical physicists, and engineers.



Figure 1: Radiation Therapists at KBTH and KATH, 2008-2016

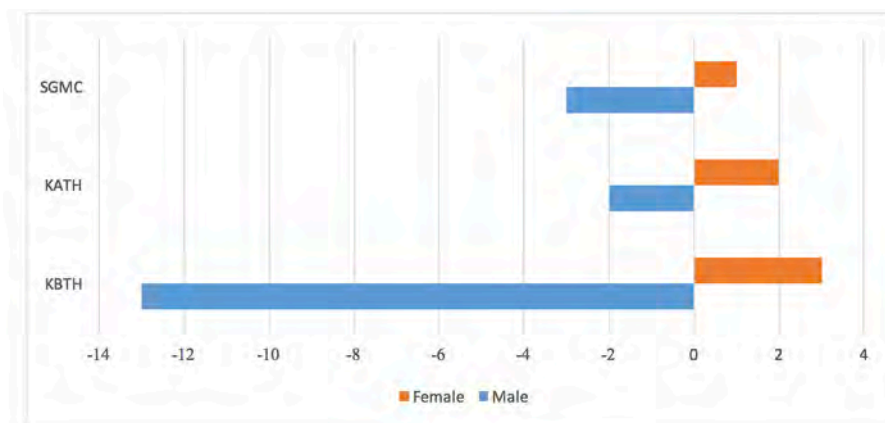


Figure 2: Gender distribution of Radiation Therapists in Ghana, 2016

Quality assurance such as portal verification, is a singular approach that confirms our confidence that the patient is receiving effective and efficient treatment.

Before and during the course of the treatment, all patients are educated on the side effects of radiotherapy, and self-management. This is a process that enables most patients to share their daily fears and challenges with the therapist. Through motivational interventions, effective communication and listening, patients are reassured of the positive outlook.

Another most important process is the daily patient assessment and chart review. Patient assessment is a vital process during the course of radiotherapy. Radiotherapy causes various side effects which can be medically managed. Hence, patients who experience side effects such as vomiting, diarrhoea or excessive bleeding receive extra medical attention from the Radiation Oncologist. Dose delivered cannot be extracted from the patient. Therefore, daily chart review of dose delivered is conducted to avoid or prevent over or under dosing a patient.

Changing Pattern of Radiation Therapists Workforce, 2008-2017

In 2008, there were only 10 radiation therapists providing care for cancer patients in Ghana. This number has steadily increased to 20 in the public sector as shown in figure 1. There are four radiation therapists practicing in the private sector. It is our expectation that the five intern Radiation Therapists, consisting of four males and one female will join the workforce to increase the numerical strength to 29.

Gender distribution of radiation therapists in Ghana

The impact and differences female radiation therapists are making in the field of oncology are remarkable. They are shaping the clinical pathways of cancer patients through quality care delivery, research, and teaching. They form a considerable percentage of the radiation workforce in the United Kingdom¹⁴. Ghana equally has a sizeable number of female radiation therapists defining a unique professional frontier.

In 2008, there was only one female radiation therapist in Ghana. Within a decade the number of females Radiation Therapists has increased to six. Currently, the gender distribution pattern of radiation therapists practicing in Ghana's cancer institutions stands at 13 males and three females at KBTH, two males and two females at KATH, and three males and one female at SGMC as shown in figure 2. The sex difference could be solved by making the profession attractive and dealing with the negative perspective females have towards radiation related professions, as well as elimination of gender bias.

Qualification of Radiation Therapists in Ghana

Table 1 shows the qualifications of radiation therapists in Ghana. Most radiation therapists in Ghana are Bachelor of Science Degree holders. Only one radiation therapist holds a Doctorate Degree. However, a few therapists are currently pursuing higher academic qualifications. Presently, five therapists are serving their one year internship and national service, and five students are undergoing training to become radiation therapists, an indication of a positive numerical growth.

The structure of radiation therapists' workforce

The vertical progress in radiation therapists' workforce has seen an outstanding increase within the past two decades. Vertically, therapists progress through the promotional rank as senior, principal, deputy chief, and chief based on their number of quality working experience. In fact, since 2003 the number of radiation therapists has increased fivefold. Currently, there are four senior, and two principal, radiation therapists at the Korle-Bu Teaching Hospital alone. Both Sweden Ghana Medical Centre, and Komfo Anokye Teaching Hospital have at least one senior radiation therapist. These senior therapists are responsible for supervising the daily workflow at the treatment floor, simulation and mould rooms. These positions satisfy the organisational hierarchy but not status and job satisfaction. They offer greater responsibilities but little recognition. However, horizontal promotion is a form of promotion that ensures professional upgrade in the organisation, increase in salary, higher authority, and responsibilities. In Ghana, horizontal promotion or an upgrade does not exist in the Allied Health Profession. Through horizontal promotion, employees' skills and knowledge are highly utilised at appropriate level¹⁵. As the population grows and ages, the burden of non-communicable diseases including cancer will equally increase. The country will need more therapists with upgraded positions. Therefore, radiation therapists should advance their knowledge by pursuing postgraduate programs. Similarly, the organisational structure should be transformed to recognise the significance of the advanced knowledge and skills of the therapists.

Professional Challenges

As the profession develops in numerical strength with diverse individuals with a broad spectrum of experiences, two main challenges can be highlighted. These are professional uncertainty, and professional interconnectivity. Professional uncertainty is the most frequent issue radiation therapists daily express. These uncertainties include continuous educational difficulties (scholarships), role

extension or optimal task shifting issues. These daily challenges make practicing radiation therapists uncertain about their future in the profession. To improve knowledge sharing and clinical protocol development, high degree of professional interconnectivity among radiation therapists is needed. However, the professional relationship is fragmented. A platform or an environment that connects and supports the coordination of all radiation therapists in Ghana does not exist. Hence, developing and sharing innovative techniques among therapists seem impossible.

The way forward

The profession, radiation therapy, has gone through exceptional numerical and clinical transformations over the past two decades. Radiation therapists have contributed to the quality cancer care status in Ghana. Although we have made tremendous strides, there are still areas which require improvement in order to fully develop the profession. Horizontal development of radiation therapists in Ghana is one of these areas. Advanced practice is still far from radiation therapists, a situation that could lead to skills and knowledge under-utilisation.

A new paradigm of radiation therapists with clinical duties such as treatment planning should be developed as the profession continues to grow. Equally, radiation therapists should get involved in regional, national, and international policies such as cancer prevention and control policies, and not just as an interface between advanced technology and patient. This will evolve through the development of a strong research environment. The teaching curricula of radiation therapists should include a detailed public health aspects of cancer prevention and control to increase their competency and capacity to be involved in national policy decisions.

In the area of gender ratio in radiotherapy profession, Ghana seems to have a larger portion being males, which is in sharp contrast to countries like the United Kingdom and Canada where females form the majority. This is due to certain myths that females who want to undertake the profession, have about occupational hazards associated with working in a radiation environment and therefore the need to demystify such myths to increase the interest of females.

Currently, the Government of Ghana is upgrading and expanding radiotherapy services in the country. The expansion will provide accessibility to diagnostic imaging and radiotherapy services to other regions in the country¹⁶. Such a national level initiative should be linked with a balanced healthcare professionals' workforce. Hence, other well-equipped public universities should be encouraged to establish programmes to train and educate radiation therapists in Ghana. With a systematic need assessment, the program can be structured to increase the student intake or possibly a yearly program. The number of Radiation Therapists and other healthcare professionals should continue to increase to deal with the gap in professional to patient ratio. Also, the Allied Health Professions Council should be strengthened and equipped to ensure high professional standard and recognition.

Conclusion

As national and international organisations attention shift to cancer prevention and control, the central role of radiation therapy can never be undervalued. Radiation therapists will continue to contribute to the quality of cancer care in Ghana. However, the overall impact of radiation therapists can be observed nationally when their knowledge and skills are well utilised through advanced practice or task shifting.

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ISRRT

20th WORLD CONGRESS

April 12th to 15th 2018
Port of Spain,
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ISRRT 20th World Congress

April 12-15, 2018

Trinidad and Tobago



My Dear Colleagues,

I'd like to personally invite each of you to the ISRRT 20th World Congress with the global theme "**We Care**".

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.

I'd like to give you an idea of what you can expect and what we hope to achieve over the next few months.

Deadline for Abstract Submission	– August 12, 2017
Registration opening	– July, 12 2017
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.

You are truly our greatest asset today and tomorrow, and we cannot accomplish what we do without your support. I ask you to stay engaged, keep us proactive and help us shape the next World Congress to total success. My personal respect and thanks goes out to all of you.

Reshma Maheepat
President
Society of Radiographers of Trinidad and Tobago

Professional Practice update

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

The Professional Practice Committee has participated in several projects over the last year and now that they are completed I want to share a brief update on these three activities. As a committee two of our regional coordinators have also provided professional practice and Radiation Protection news from their region.

ICRP Draft Report Occupation Radiological protection in Interventional Procedures

First I want to thank everyone who submitted comments to the draft *ICRP report Occupational Radiological Protection in Interventional Procedures*.

I thought it would be good to give a brief overview of the draft documents for those of you that haven't read the document and might be interested in reading the document. The ICRP's draft document contains guidance on exposure monitoring strategies, methods and options for radiological protection approaches. The document also covers some comprehensive information on to develop an effective radiological protection program with emphasis on education and training. The draft has great advice on parameters for quality assurance and effective implementation strategies. The draft is meant to be a global guidance document to be used by medical physicist and other health care professionals in charge of occupational protection. It is also meant for clinical application support personnel, regulators and all those having influence in overall safety culture and on quality assurance. This guide gives pointers to help engage training, standardisation of equipment and procedure to those with responsibilities for occupational health. The document is meant help give guidance to on accepted practices for hospital managers and for administrators responsible for providing financial support for protection purposes. Finally, the document is meant for use for professional bodies including interventionalist, medical physicists, nurses and radiographers. You can see by reading the overview why this document is of importance to the ISRRT organisation and the professionals working in the interventional practice.

As a global stakeholder representing the technologist voice we believe that radiographers play a vital role in ensuring quality radiation protection is met through high quality standards of practice to the patient dose, occupational dose and public dose. The ISRRT also believes that ongoing education to all staff engaged in the procedures are critical to reducing and maintaining occupation exposures.

As requested by the regional coordinators of all three committees at the last council meeting in Seoul Korea as Directors of Professional Practice, Education, and Public Relations and Communication we all reached out to all our regional coordinators and asked for a review of the draft document. We also asked the regional coordinators to also reach out to any experts in this field in within their region that may be a content expert on the matter covered in this draft and validate the evidence based information for accuracy relating to the radiographers' practice. We also, as requested, had our experts review the draft to look for trends and gaps that may need to be added or amended. The ISRRT Board of Directors also reviewed the draft as well. As always, the ISRRT board appreciates and again wants to say thank you to the expertise that took the time to give valuable input and

comments to the ICRP's draft you are helping shape the profession. As an organisation and profession, there is immense value in ensuring that the information published in global documents relating to the radiographer's profession is evidence based, current and accurate. The following are a summary of some of the information we received from radiographers/technologists that reviewed the document.

Over all the responses from our member experts summarised that the entire document was well written and contained crucial information. The overall responses also supported that the draft was based on evidence based practices. Finally, there was an overwhelming response that indicated that the information would be useful and should be implemented in the radiological profession. A few suggestions were made to make the document more accurate.

Suggestion one is that the globally accepted terminology used to describe the personal working in our profession is radiographer and hence this terminology should be used throughout the paper when referring to these professionals. There are some spots where technologist is used instead of radiographer.

Suggestion two came from several comments that were received that stated although the recommendation of two dosimeters may give the most information about occupational dosimetry it will be quite expensive for the hospitals to implement. This could be problematic depending on the country you are working in.

Suggestion three came from several comments that were received that there were several different terms used to describe the same person: interventionalist, operator, physician, interventional clinician the suggestion was to use one accepted global term such as interventionalist to be consistent throughout the paper.

Suggestion four was from a comment that was submitted that the Radiation Protection Officer is responsible for the staff protection according to Directive 2013.

Suggestion five came from several comments that were submitted that stated that some references are quite old and asking if there are newer supporting evidence based research to reference instead.

Among the information received from our member societies were several questions and points to consider further examination and more specific information:

1. Identification of how non-medical radiation staff (nurses, specialists etc.) working with radiation should be trained and educated and what level of training is required?
2. Identification of how medical staff who have formal training in radiation (MRTs, radiologists etc.) should be continually educated and to what level?
3. What educational mediums should be used and how it should be monitored, consistent with evolution of technology and practice (annual education/testing?)
4. Should there be an evaluation system to measure the results of a program/education?

The ISRRT believes this draft on occupations radiological protection is essential to good practice for radiographers working with Interventional procedures. We thanked the ICRP for the opportunity to comment on the draft ICRP Occupational Radiological Protection in Interventional.

Three new ISRRT Position/Policy statement that were adopted at World congress in Seoul Korea are now available on the ISRRT Website www.isrrt.org

ISRRT has focused on strategic priorities that show our commitment in pursuit of universal standards in radiation protection in medicine. These priorities included development of position/policy statements regarding radiation protection requirements consistent with the international Basic Safety Standards for inclusion in radiographer's scopes of practice. One of the goals of the ISRRT is to ensure that infrastructure is in place to support radiation protection in medicine and mechanisms for regulatory support to minimize medical radiation exposure. The Bonn Call-for-Action asked all global stakeholders to help enhance the implementation of the principle of optimization of radiation protection and safety in all countries. The ISRRT recognises that the radiographer/radiological technologist bears the responsibility for delivering exposure of ionizing radiation during diagnostic and therapeutic procedures and is the last person with the patient before the exposure is made. In response to the Bonn Call-for-Action, ISRRT has made this part of their strategic priorities. During the 2016 World Congress, held in Seoul Korea, the ISRRT Council asked that the following position statement be sent to all member countries for review, input and approval. Dimitris the ISRRT CEO did send the position statements to all member societies asking for review, input and final approval. All feedback was incorporated into the documents and the position statements are now available for use and implementation within our member societies. The following are a list of the three 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)

Also adopted by council members at this past world congress was that the following statement be added to the three-position statement. "The ISRRT expects all qualified radiographers and radiologic technologists to be competent in the principles of justification and the practice of ionizing radiation dose optimization relevant to their clinical work. "This has also been incorporated into all three of the position statements.

The three position/policy statements are now available for member countries to assist with implementing radiation protection processes in their countries. If you are interested in reading the entire position statement along with its supporting documentation and reference for the following please log into the ISRRT Website to read the documents in their entirety

"WHO priority list of medical devices required for cancer management", WHO Medical device technical series is now available for download

This publication of the WHO priority list of medical devices required for cancer management is now available at www.who.int/medical_devices/publications/priority_med_dev_cancer_management/en/ for member societies to download and help disseminate within their countries. This publication addresses medical

devices that can be used for management of cancer and specifically describes medical devices for six types of cancer: breast, cervical, colorectal, leukemia, lung and prostate.

This publication is the outcome of a project developed by the World Health Organization (WHO) in response to the need for a model reference list of basic and priority medical devices required for cancer management, with the goal of increasing access to these medical devices especially in low- and middle-income countries. According World Health assembly the WHO resolution 60.29, Health Technology requests WHO:

1. To provide support to Member States, where necessary in establishing mechanisms to assess national needs for health technologies, and to assure their availability and safe use.
2. To provide technical guidance and support to Member States in analyzing their needs and health systems prerequisites for health technologies, and medical devices.
3. To work jointly with other organisations of the United Nations system, international organizations, academic institutions and professional bodies to provide support to Member States in the prioritisation, selection and use of health technologies, in medical devices.
4. To establish and regularly update an evidence- and web-based health technologies database to serve as a clearing house which will provide guidance on appropriate medical devices according to levels of care, setting, environment, and intended health intervention, tailored to the specific needs of countries or regions.
5. To provide support to Member States with vulnerable health care systems to identify and put in place appropriate health technologies, in medical devices, that facilitate access to quality services in primary health care.

This project was developed to help meet the outcome of this resolution. The project was based on the list of clinical interventions selected from clinical guidelines on prevention, screening, diagnosis, treatment, palliative care, monitoring and end of life care. This publication addresses medical devices for six types of cancer mentioned above. Many of you may not be aware that the ISRRT has been involved from the start on this project and have given expert content in every step of this publications development. This draft was sent out several time times to the ISRRT members for expert review and input to the contact on the draft revisions over the past two years. As Director of Professional Practice, I served on one of the expert panels and teleconferences to represent the radiographers voice as well as review of the devices needed to start a radiology department and finally serving as one of the document editors emphasis on radiographer expertise.

The ISRRT can't thank it members enough for taking time to contribute, review and ensure that the radiographer voice is hear



and accurate within the document. The ISRRT Board I can't thank you enough for the help representing the radiographers voice in the development of this document. It can't be said enough if we participate and give feedback as an organization we will always be asked to be the expert voice for our profession.

For those of you that are interested the document is used to aid in the implementation of a cancer program within your country or elevate the cancer care if you have already established practice. The first section defines the global increase in cancer cases, the global goals to manage NCDs and the WHO activities related to these goals.

The second section presents the methodology used for the selection of medical devices that support clinical interventions required to screen, diagnose, treat and monitor cancer stages, as well as the provision of palliative care, based on evidence-based information. The third section lists the priority medical devices required to manage cancer in seven different units of health care services: 1. Vaccination, clinical assessment and endoscopy, 2. Medical imaging and nuclear medicine, 3. Surgery, 4. Laboratory and pathology, 5. Radiotherapy, 6. Systemic therapy and 7. Palliative and end of life care. The lists include the basic technologies required to provide general services and the specific priority medical devices to manage cancer. This section also examines other health system components such as infrastructure, human resources and quality management requirements and guidance documents by service unit. The last section proposes the activities required in a country or setting where the present guidance and lists are to be implemented. ■

Professional Practice for the Americas

Report by **Christopher Steelman**,

Regional Coordinator of Professional Practice for the Americas

2017 American Society of Radiologic Technologists Educational Symposium and Annual Governance and House of Delegates Meeting

Hundreds of medical imaging and radiation therapy professionals from across the United States and around the world traveled to Orlando, Florida to attend the American Society of Radiologic Technologists Educational Symposium and Annual Governance and House of Delegates Meeting. Over 440 radiologic technologists representing all 50 states as well as the District of Columbia, Puerto Rico attended this annual event. The ASRT also welcomed international professionals from Aruba, Chile, Jamaica and Japan.

The Educational Symposium was attended by 430 participants who had a choice of 26 lectures. It was a difficult decision for many as topics covered a wide variety of interest. Among the lectures offered were: Digital Breast Tomosynthesis: The Angle Advantage, Mobile CT in Neurological Emergencies, Accepting the Challenges of Today's Cath Lab and Measurement of Performance Improvement.

The ASRT House of Delegates meets annually to debate and vote on motions and proposed changes to the ASRT Bylaws and to adopt clinical practice and educational standards. This legislative body is composed of the speaker and vice speaker, 60 delegates from each ASRT chapter, 108 delegates from each ASRT affiliate society and four delegates from the branches of the military. The delegates' primary duties are to represent the radiologic science profession and their affiliates or chapters and to take action on issues that affect professional practice.

As the technology of medical imaging evolves so too must the profession's practice standards that serve as a guide for appropriate practice. The emergence of Hybrid Imaging is an example of the one of the many issues that the House of Delegates must address. The ASRT defines Hybrid imaging as "The combination of imaging

technologies that allows information from different modalities to be presented as a single set of images." Although this combination of technologies delivers excellent image quality, improves diagnostic certainty and provides an opportunity to explore new clinical applications, it also raises numerous issues. It is the position of the ASRT that medical imaging and radiation therapy professionals performing multiple modality Hybrid imaging should be registered by certification agencies recognized by the ASRT and be educationally prepared and clinically competent in the specific modality(ies) they are responsible to perform. However, as this technology emerges it has significant implications for those who perform these procedures. As a result, requires debate in the House of Delegates

ISRRT Represented at the ASRT Expo

ISRRT was proudly represented at the ASRT Expo by Donna Newman, Director of Professional Practice, Donna Blackwell Long, ISRRT Council, Sharon Wartenbe, Regional Director The Americas, Christopher Steelman, Regional Coordinator for Professional Practice The Americas. The ISRRT was one of more than 40 exhibitors at this event. The leadership team introduced expo participants to the work of the ISRRT and addressed questions regarding membership, international outreach opportunities and our 20th ISRRT World Congress. An assortment of printed materials including membership applications, information about the World Congress in Port of Spain, Trinidad and Tobago were shared with those who visited the booth. Additional information was also handed out to the representatives of the House of Delegates. The enthusiasm and interest of those learning about the ISRRT and our upcoming World Congress was exciting to witness.

The ASRT Student Leadership Development Program

The ASRT Student Leadership Development Program (SLDP) has played a significant role in the development of the Societies future leaders. Graduates of this program included the Speaker of the House and the incoming President. This year 90 students were selected to attend the ASRT's premier event. Each attends an educational program designed specifically for students and enjoys opportunities to network with both students and imaging professionals. Students are also paired with a professional mentor for the duration of the meeting. Mentors provide an insider's look into the governance of the largest association for medical imaging and radiation therapy professionals.



L-R: Christopher Steelman, Sharon Wartenbee, Sal Martino, Donna Blackwell Long, Donna Newman at the ASRT Education Symposium and Annual Governance and House of Delegates.

Federal Legislative Affairs - MARCA

The American Society of Radiologic Technologists, American Registry of Radiologic Technologists, American College of Radiology and the Society for Radiology Physician Extenders and are working together to obtain Medicare (a federal health insurance program) recognition of the radiologist assistant (RA) as a midlevel provider of health care services working under the supervision of a radiologist. The RA is a certified radiographer who has completed advanced education, clinical experience and certification to be able to expertly and safely perform radiologic assessments and certain procedures that traditionally were performed only by radiologists. RAs allow radiologists to devote more focused, uninterrupted time reviewing and interpreting complex medical images and providing timely diagnoses that will result in efficient, appropriate medical treatment. This means greater timeliness, accuracy and quality of care for Medicare beneficiaries. Radiologic Technologists throughout the country are petitioning their Legislators to support the Medicare Access to Radiology Care Act (MARCA) Without Medicare's recognition of RAs, the future of this specialty is uncertain. As a direct result of Medicare's current policy RAs are losing their jobs and universities are on the verge of suspending or terminating their radiologist assistant programs.

ASRT Foundation Named Global Humanitarian Award Winner

In recognition of its efforts to provide radiologic science education for medical imaging and radiation therapy professionals working in underserved communities throughout the world, the ASRT Foundation has been selected to receive the ACR Foundation 2017 Global Humanitarian Award in the Organization category. As the philanthropic arm of the American Society of Radiologic Technologists, the ASRT Foundation is the leading source of global charitable funding for medical imaging technologists and radiation therapists. ASRT Foundation programs have supported the educational and volunteer goals of medical imaging and radiation therapy professionals for more than a decade. In addition, the ACR singled out the ASRT Foundation Community Outreach Fellowship program as a world-class outreach initiative. The program has provided travel support for more than 60 ASRT members to perform volunteer medical relief services in 17 countries throughout Africa, Asia, Central and South America, and the Caribbean. Volunteers train local medical imaging and radiation therapy professionals and implement advanced radiologic systems in underserved countries.

State Legislative Affairs

There are many changes occurring at the state level in America. Several states have faced challenge of obtaining radiologic technologist licensure and some are facing threats to their existing licenses. There are currently only five states in the nation with no licensure or regulatory laws for radiologic technologists. Currently, individuals in these states can perform radiologic procedures without taking a single course in medical radiation safety, patient positioning or basic radiologic science physics. Missouri has recently introduced R.T. Licensure Bill a measure that would license radiographers, radiation therapists, nuclear medicine technologists, magnetic resonance technologists, radiologist assistants and nuclear medicine advanced associates. The Missouri Society of Radiologic Technologists strongly supports the enactment of this bill during the 2017 legislative session. A licensure bill supported by the Idaho Society of Radiologic Technologists was introduced in the Idaho House on March 23. This bill was introduced by the House Ways and Means Committee and will create licensure for radiographers, radiation therapists, nuclear medicine technologists, sonographers, magnetic resonance technologists, radiologist assistants and limited x-ray machine operators who perform medical imaging examinations

or radiation therapy treatments on Idaho patients. The bill also will create an Idaho Board of Medical Imaging and Radiation Therapy Examiners to issue licenses and establish licensure standards. Lawmakers in West Virginia have adjourned without taking action on companion bills that would have eliminated the 40-year-old West Virginia Medical Imaging and Radiation Therapy Technology Board of Examiners. This proposal put patients' health and safety at risk in an effort to reduce government oversight of health professions. The state has more than 3,100 board licensed radiologic technologists. However, the ASRT and West Virginia Society worked together to engage West Virginia technologists in a campaign that included media outreach and emails to lawmakers. R.T.s in the state sent more than 500 communications to legislators opposing the proposal. In North Dakota the Governor has signed a bill that maintains the state's radiologic technology licensure standards. Initially, this bill would have removed modality-specific licensure qualifications for technologists working in critical-access hospitals serving rural areas. As amended by the legislature and enacted, the bill will now preserve specific qualifications for licensure in the primary disciplines (radiography, radiation therapy, nuclear medicine technology and sonography) and adds magnetic resonance technologist licensure.

Professional Practice for Africa

Report by Elizabeth Balogun, Regional Coordinator Africa

Nigeria has a wonderful history in radiography training and has contributed to the training of others from the sub Saharan African states. A body was established by radiographers (registration etc.) Act 1997 known as Radiographers Registration Board of Nigeria. This came under threat by a proposed bill known as National Council of Radiology. These proposed to bring under its regulations, Radiographers, medical physicist and others where the members of the board will be majorly Radiologist.

This was opposed by the Association of Radiographers of Nigeria as it will not support good practice. Our stand remains that radiographers should be allowed to regulate radiographers for better patient care delivery. To support this point, we wrote to the parliamentarians as well as held a press conference to educate the public. Below is a summary from Elizabeth Balogun, President, Association of Radiographers of Nigeria used to oppose the proposed bill.

Radiography is the art and science of application of various forms of radiant and non-radiant energies on human beings and animals to promote health, treat diseases, and produce various diagnostic images using different imaging modalities.



Elizabeth Balogun, President Association of Radiographers of Nigeria, AFK Bakre, Chairman Governing Board of the Radiographers Registration Board of Nigeria.



Joshua Sule (Public Relation Officer), Elizabeth Balogun (President) Mabel Ugwuja (Treasurer). All are national officers of the Association of Radiographers of Nigeria.

Diagnostic images can be produced using, but not limited to the listed imaging modalities below:

- i X-ray Imaging
- ii Ultrasound Imaging
- iii Radionuclide Imaging
- iv Computed Tomographic Imaging (CT Scan)
- v Magnetic Resonance Imaging (MRI)
- vi Radiotherapy
- vii Industrial Radiography

A radiographer is a medical professional who is a trained, registered and qualified personnel with the proficiency to handle any of the above mentioned imaging techniques.

The established board that regulates the practice of radiography in Nigeria is the Radiographers Registration Board of Nigeria (RRBN), established by the act CAP 1987 and as amended as ACT 2004. It was therefore a rude shock when we stumbled on a proposed act by an Honorable Member of the House of Representatives, to establish the national council on radiology and radiation medicine (NCR).

It is a bill that seeks an unholy marriage between one regulated profession on one hand (radiography) and others accommodated in regulated professions (medicine and possibly nursing and engineering) but who by themselves or others acting for and on their behalf, with or without consent or authorisation seek for professional

status and divorce from their parental stock. Nigerian radiographers seek neither. They were not consulted and have no knowledge or inputs into the said bill.

The bill is vague and does not lend itself to clear citation, reference and understanding, neither does it toe the line of international best practices. For example, it is difficult to decipher any positivity in a bill which seeks to establish a council of 12 medical doctors, 3 radiographers, and 2 medical physicists.

The Nigerian nuclear regulatory authority (NNRA) is allocated one slot in the council because the bill in section 1 (1) 25 – 27 WRONGLY listed it as one of the agencies that monitor and regulate professionals

Radiographers are already being regulated as professionals, what is the motive for lumping them into others who don't have their status of satisfaction and placement?

While section 2 (b) and (c) created the impression that radiologists are different and distinct from radiotherapists, the explanatory memorandum, page c351 provides that the two are the same.

The bill has no respect for the doctrine of double jeopardy as it makes provisions for a professional to compulsorily register with its council in addition to registration and licensing by the parent board or council, e.g. RRBN and MDCN. Other duplicities include double disciplinary bodies of coordinate jurisdictions, section 1(k) 22 – 24.

Radiographers are not satisfied that the bill seeks to establish an empire for radiologists outside of medical council, where other radiologist form the majority to lord anything over others, including Radiographers who are professionals.

Nigerian Radiographers reject the bill and refuse to be associated in anyway with it. We are satisfied with the Radiographers Registration Board of Nigeria (RRBN) as our regulatory body. We are also aware of our legal right to fair hearing and freedom of association.

We stand firmly with the Radiographers Registration Board of Nigeria (RRBN).

Medicine, which is a profession, is already being regulated by the MDCN. Radiology is a sub specialty of Medicine with a post-graduate college that also has a governing board.

What does the tax payer and the innocent Nigerian stands to gain from the proposed bill, nothing but extra burden: duplication of duties of existing regulatory bodies? It will do more harm than good to the health sector which in turn affects the public.

We call on well-meaning Nigerians and the entire citizenry to call for active participation of Radiographers who are the end users in standard radio diagnostic equipment purchase, to help in accelerating the goal towards standard health care delivery rather than allowing an omnibus bill scale through. ■

ECR 2018 DIVERSE & UNITED

February 28 – March 4

ECR 2018 – Be a part of the most innovative meeting in medical imaging

The European Congress of Radiology (ECR) is the annual meeting of the European Society of Radiology (ESR) and the biggest meeting in Europe for both radiologists and radiographers.

Under its motto **DIVERSE & UNITED** the next ECR will take place in the beautiful city of **Vienna** from **February 28 to March 4, 2018**.

The congress features an extensive scientific and educational programme for radiographers and offers special support programmes.



Shape your Skills

The new *Shape Your Skills* programme is offered and exclusively financed by the ESR to aid the continued professional development of radiographers.

It is open exclusively to radiographers at the beginning of their career and supports 500 professionals by giving them free registration for the ECR and two nights hotel accommodation.

Are you a radiographer in your first five years of practice? Then apply now!

Application is possible from July 3 to October 10, 2017.

[Apply now!](#)

ESR membership application deadline for reduced ECR 2018 fees

Member registration rates for ECR 2018 will only be available to members who have activated their 2017 ESR membership before August 31, 2017. [Complete your membership registration now for only €11!](#)

Your ECR 2018 Timeline

July 3 – October 10, 2017	Abstract Submission Scientific Papers
July 3 – October 10, 2017	Poster Abstract Submission to EPOS™ (Electronic Presentation Online System)
July 3 – October 10, 2017	Student Abstract Submission Scientific Papers
July 3 – October 10, 2017	Invest in the Youth Programme Application Open
July 3 – October 10, 2017	Shape Your Skills (Radiographer support programme) Application Open
July 3 – November 20, 2017	Abstract Submission Clinical Trials in Radiology
July 24 – December 12, 2017	Submission for Case-Based Diagnosis Training
August 31, 2017	ESR Membership Application Deadline for reduced ECR 2018 fees
Beginning of September 2017	Online Registration Open
February 28 – March 4, 2018	ECR 2018

myESR.org/Radiographers



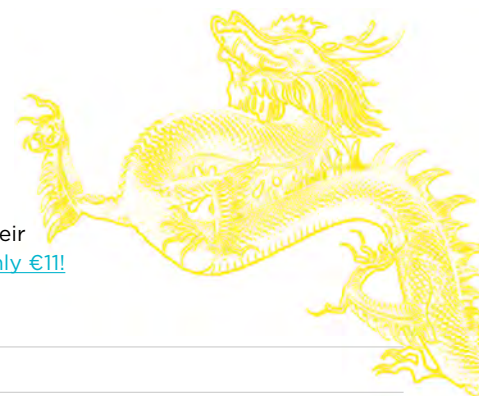
Invest in the Youth

The *Invest in the Youth* programme supports 1,000 young professionals by giving them free registration for the ECR and up to four nights hotel accommodation.

Are you a radiographer in training under the age of 30? Then apply now!

Application is possible from July 3 to October 10, 2017.

[Find out more!](#)





TRUSTEES

Cynthia Cowling
(Australia)

Alan Budge (UK)

Marie-Dominique Galy
(France)

Chris Steelman (USA)

Noreen Sinclair (UK)

Ian Henderson (UK)

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Sue Marchant

Website Manager:

Sue Marchant

susanmarchant@wretf.org

www.wretf.org

World Radiography Educational Trust Foundation

News



Trustees are pleased to announce that Robert Shen, left, of Taiwan has been appointed as a Trustee to replace Michael Ong.

Robert is no stranger to an international

organisation as for the last seven years he has been Co-ordinator of Public Relations for Asia and Australasia at the ISRRT with a particular interest in the developing countries and the role of education in the science and practice of Radiography, Radiation Therapy and allied subjects. He has just retired as the Secretary General of the Taiwan Association of Medical Radiation Technologists (TAMRT) but is still a very active member of the Taiwan Alliance of Medicine Quality and Health Excellence. He is the Trust's first representative from Taiwan.

Support

There is now a live page on the Trust's website with links to sites offering free or reduced cost to educational resources. The Trust hopes to be able to move away from sending hard copy books to recipient departments – a slow and costly process.

Ambassadors

The Ambassador Program continues to grow and benefit the aims of the Trust. Ambassadors provide a vital service through presentations at appropriate meetings and encouragement to their regional colleagues to apply for support and/or travel bursaries. The ambassador lead (Chris Steelman) is currently seeking to increase the numbers of ambassadors.

Bursary Scheme

Anesu Sabeta of Zimbabwe and Koffi Kouassi from Cote D'Ivoire attended conferences in Tanzania in February and in Bordeaux in March of this year respectively. The recent round



Anesu Sabeta

of applications produced nine that were considered for a bursary award. Of these, two have been selected to receive a bursary. One recipient will be attending a conference and one

WRETF Koffi Kouassi, bursary recipient, with Madame Cathy Thibaut WRETF Ambassador at the Bordeaux Conference.



will be making an educational visit to learn more about radiotherapy.

Social Media

The WRETF Facebook Group continues to increase its members, almost exponentially. The Facebook membership now stands at 3,000. A number of interesting articles, and lively debate has produced the sharing of knowledge to benefit local radiographic communities in developing countries.

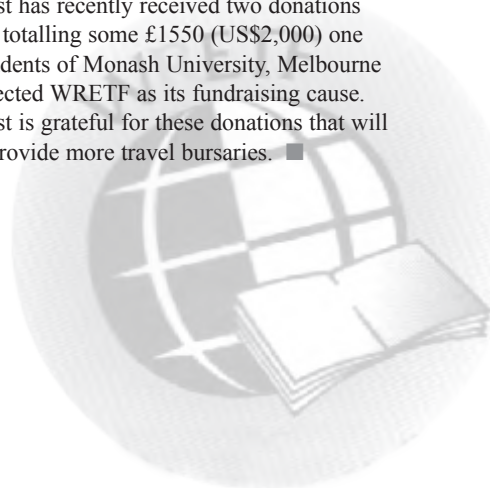
Fundraising

WRETF is launching its new Fundraising Strategy in an attempt to try to build a stronger, sustainable financial base to enable support of our mission by using radiography and radiology contacts from across the globe. With our 50th Anniversary in 2019 we are looking to raise £50,000 (US\$65,000) over the next three years. If you are interested in helping us or to make a financial contribution please contact Alan Budge – Honorary Treasurer or Sue Marchant – General Manager.

abudge@btinternet.com

susanmarchant@wretf.org

The Trust has recently received two donations recently totalling some £1550 (US\$2,000) one from students of Monash University, Melbourne who selected WRETF as its fundraising cause. The Trust is grateful for these donations that will help it provide more travel bursaries. ■



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News from member countries

THE AMERICAS

AMERICA



ASRT Announces Results of 2017 Election

Members of the American Society of Radiologic Technologists have elected three officers to serve on the 2017-2018 ASRT Board of Directors.

Melissa Jackowski, Ed.D., RT(R)(M), of Cary, North Carolina, was elected to serve as ASRT's 2017-2018 President-elect. She will serve one term as President-elect, one term as President and one term as Chairman of the Board, in accordance with ASRT Bylaws. Dr Jackowski is the competency management development specialist for Siemens Healthineers in Cary, North Carolina. Stephanie Johnston, MSRS, RT(R)(M)(BD) (BS), FASRT, of Holliday, Texas, will serve as the 2017-2018 vice president. She is director of the Breast Center of Texoma in Wichita Falls, Texas. Steven Cohen, RT(R), of Brownsburg, Indiana, will serve as the 2017-2018 secretary-treasurer. He is the senior radiologic technologist in the imaging department at Ortho Indy in Indianapolis. Former President-elect Amanda Garlock, MS, RT(R)(MR), takes the role of ASRT president for the 2017-2018 term, and former President Michel Latimer, MSRS, RT(R), FASRT, has been elevated to chairman of the Board.

Radiologist Assistant Bills Introduced in U.S. House and Senate

The Medicare Access to Radiology Care Act of 2017 was introduced on March 29 by US Sen. John Boozman as Senate Bill 769 and on April 5 by Rep. Pete Olson as House Resolution 1904. These bills propose a law that amends Medicare reimbursement policy and supervision levels for radiologist assistants to align them with state radiologist assistant laws. Currently, Medicare pays for services performed by an RA who is working under the personal supervision of a radiologist. The American Society of Radiologic Technologists, American Registry of Radiologic Technologists, American College of Radiology and Society of Radiology Physician Extenders are advocating for the adoption of statutory language that will set supervision for RAs at levels consistent with state RA licensure laws. By amending Medicare reimbursement policy and supervision levels to match state licensure

standards, RAs will work more independently and become more efficient health care providers. The adoption of this language would enable radiologists to devote more focused time to reviewing and interpreting complex medical images or urgent cases, thus increasing patients' access to care. An RA is an advanced-level registered radiologic technologist who enhances patient care by extending the capacity of the radiologist in the diagnostic imaging environment. RAs have completed an advanced medical imaging academic program encompassing a nationally recognized curriculum and a radiologist-directed clinical preceptorship. Read more about the legislation a www.asrt.org/main/standards-regulations/radiologist-assistant-legislation.

New Audience of STEM Educators Discovers Radcademy®



A surprising new audience has discovered ASRT's Radcademy® initiative. STEM schools – specialised learning institutions focused on science, technology, engineering and mathematics disciplines – have found an invaluable resource in Radcademy's fun but substantive take on uncovering the technology and science behind medical imaging and radiation therapy procedures. In evolving to meet that new interest, Radcademy offers science and technology teachers a suite of ready-to-use educator materials that includes a complete lesson plan, worksheet, discussion guide and quiz. Developed by radiologic technologists and created by the ASRT, the world's largest radiologic science organisation, Radcademy is now a trusted resource for teachers across the country. Many science educators are already using the materials to inspire and engage their students. For radiologic technologists, the Radcademy website and video series is an essential tool for helping young people understand the science behind the procedures of medical imaging and radiation therapy. It's also a great way to share with kids the pride radiologic technologists have in their profession. Discover – or rediscover – Radcademy soon, because, as the kids say, "it's really rad!" Visit www.asrt.org/radcademy to use the

Radcademy materials.

ARRT and ASRT Foundation Partner for New Professional Growth Grants

A new grant administered by the ASRT Foundation will award up to 50 radiologic technologists US\$500 each to support educational costs and professional growth opportunities. Funded by the American Registry of Radiologic Technologists, the Advancing Your Profession: Education and Professional Growth Grants program helps RTs keep their knowledge and skills up to date in the ever-advancing health care industry. The awards will be presented to at least one recipient per active affiliate of the American Society of Radiologic Technologists. RTs can use the funds as reimbursement for educational conferences and certain professional development programs. Applicants must be a member of both ASRT and an active ASRT affiliate, or be eligible for membership for both. There are active ASRT affiliate societies in nearly every state. The award will provide up to US\$500 as reimbursement for the cost of continuing education. Learn more about the grants at <https://foundation.asrt.org/what-we-do/scholarships/affiliate-membership-educational-grant>

ASRT House of Delegates Elects New Speaker and Vice Speaker

At the 2017 ASRT Annual Governance and House of Delegates Meeting in Orlando, Florida, last week, the ASRT House of Delegates elected Beth Weber, M.P.H., RT(R), RDMS, CRA, FASRT, as speaker of the House and Joseph Whitton, MS, RT(R)(CT) (MR), as vice speaker of House for the 2017-2018 term. Weber formerly served as the vice speaker for the 2015-2016 and 2016-2017 terms. She is the director of imaging services/privacy officer at Avera Heart Hospital in Sioux Falls, South Dakota. Whitton was the chairman of the ASRT Commission for the 2016-2017 term. In addition, he has served on a number of ASRT committees and task forces. He is the clinical assistant professor/program director, radiologic technology program, at Stony Brook University in Stony Brook, New York. Weber and Whitton are now members of the ASRT Board of Directors. They will manage the House of Delegates proceedings at the 2018 annual governance meeting in Las Vegas, Nevada.

ASRT Publication Update

From March 2017 through June 2017, ASRT produced, printed and mailed five member

publications, totaling more than 588,000 copies.

Upcoming ASRT 2017 Events

- Sept. 24-26
San Diego, California
ASRT Radiation Therapy Conference
- Nov. 5-11
National Radiologic Technology Week®
Theme: "Positioning to Save Lives"
- Nov. 29-30
Chicago, Illinois
ASRT@RSNA

Donna Long Council Member

Two honored with ASRT Foundation International Speakers Exchange Award

Two speakers selected as recipients of the International Speakers Exchange Award for 2017 presented at conferences in England and Canada this year. The ASRT Foundation has presented the award to medical imaging and radiation therapy professionals for more than a decade.

This award cycle's recipients were Regina Ley, AS, RT(T), and Carole South-Winter, EdD, RT(R)(N), CNMT.

Ley presented "The Quest for Hakuna Matata – My Journey into Community Global Outreach" in April at the Canadian Association of Medical Radiation Technologists Annual General Conference in Ottawa, Ontario.

South-Winter presented "Opinion Leadership in Health Care: A Study of Ghana" in June at the United Kingdom Radiological Congress in Manchester, England.

ASRT Foundation receives Humanitarian Award

In recognition of its tireless efforts to provide radiologic science education for medical imaging and radiation therapy



Howard B. Fleishon and Dr Sal Martino.

professionals working in underserved communities throughout the world, the ASRT Foundation was awarded the ACR Foundation 2017 Global Humanitarian Award in the Organization category.

As the philanthropic arm of the American Society of Radiologic Technologists, the ASRT Foundation is the leading source of global charitable funding for medical imaging technologists and radiation therapists. ASRT Foundation programs have supported the educational and volunteer goals of medical imaging and radiation therapy professionals for more than a decade.

The program has provided travel support for more than 60 ASRT members to perform volunteer medical relief services in 17 countries throughout Africa, Asia, Central and South America, and the Caribbean. Volunteers train local medical imaging and radiation therapy professionals and implement advanced radiologic systems in underserved countries.

"It was my honor to accept this award on behalf of the Foundation's Board of Trustees, staff and especially the many passionate volunteers who have played a role in making our international outreach efforts such a success," said Sal Martino, EdD, RT(R), FASRT, CAE, chief executive officer of the ASRT Foundation. "We're always pleased to receive recognition for our efforts, but the real gratification comes in knowing that we've made positive changes in underserved countries across the globe. I also want to recognise our selfless donors who have empowered this program with their generous gifts."

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.

2018 World Congress Trinidad and Tobago

The ISRRT 20th World Congress will be held at the Hyatt Regency Hotel in Port-of-Spain, Trinidad Tobago.

April 12-15, 2018

CALL FOR PAPERS.

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Sharon Wartenbee Regional Director for the Americas

CANADA



Advanced Practice MRTs in Canada

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.

Following the successful piloting of the process, the CAMRT will be rolling out the Advanced Practice Certification in Radiation Therapy this summer. Information on the process will be available a www.aprt.ca/

75th Anniversary of the CAMRT

CAMRT has been celebrating its 75th anniversary in 2017. The special occasion is being celebrated in many ways over the year. The CAMRT-OAMRS Annual General Conference in April 2017 was an important focal point of the celebrations. In addition, we encourage anyone interested to check out the new CAMRT history section of our website www.camrt.ca/about-camrt/history/, which details some of the major milestones and contributors over the decades.

CPD from CAMRT

The popular and user-friendly CAMRT repository www.camrt.ca/repository allows users to search through dozens of courses, webinars and events from CAMRT and its partners to identify opportunity for professional development and personal growth.

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, and accepted by the ARRT and others.

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 will like to invite you all to attend the 20th ISRTT World Congress in Trinidad and Tobago

from April 12-15, 2018 at the Hyatt Regency.

For further information please check the website isrrt2018.org.tt

Abstract submission is currently opened and registration will be opening soon.

Locally

It’s been an eventful few months for members of the Society. We held our annual general elections recently and a new



President was elected. Our new President is Mr Aleth Bruce and the new ISRTT Council Member is Aneesa Ali. For more information on the current executive members you can check the Society’s Facebook page or our website.

Members had an awesome time at our annual family day which incorporated many games and fun activities for every age.

The Radiography students recently held a karaoke competition as a fundraiser which proved to bring out some of the talent within the fraternity .



Regionally

The CAMRT held their Annual General Conference in April this year and we were invited to market the World Congress in Ottawa at their conference. Our Canadian colleagues invited us to attend meetings with key stakeholders in the profession which was a great success.

The society was well represented by the President in Guyana recently where we held talks with the principal radiographer who is affiliated with the Ministry of Health in Guyana. Also discussions were held with affiliates from the University of Guyana who we will be working closely with in the future.

The President had the pleasure to attend the Jamaican Annual General Meeting which was held in June, he had the opportunity to discuss the upcoming world congress with our Jamaican colleagues and we are looking forward to collaborating more with them in the future.

Due to timing however, the 2018 conference was marketed by our fellow

ASRT colleagues at their recent Annual General Conference and we will like to thank them for it most graciously.

In conclusion the next few months we will be hosting various social and educational events and we are looking forward to welcoming you all in 2018.

Aneesa Ali
Council member

AUSTRALASIA

AUSTRALIA



Our Vision and Mission statements

In line with the change of name to ASMIRT we have also revised our vision and mission. Our new Vision

for the Society is “Empowering medical radiation professionals for a healthier Australia” and to this end we have put the patient front and centre of everything we do. Our revised mission states:

“The members of the Society improve healthcare by:

- Advocating for patients
- Influencing local, national and international policy and practice
- Advancing professional standards and pathways and
- Leading and engaging in research and learning”

Our Chief Executive

Our new Chief Executive Sally Kincaid started in January 2017. Sally was previously the Chief Executive Officer at General Practice Registrars Australia, and National Manager at the Royal Australian College of General Practitioners.

Our offices

The Board of ASMIRT have made the decision to sell the building which currently houses the Secretariat in the heart of Melbourne’s CBD. The building was auctioned on 26 May and the search is on for new premises.



Napapong Pongnapang and Christopher Whennan at HKTA.

Our projects

We are pleased to report that four radiation therapists and one radiographer have been assessed and certified as Advanced Practitioners in their area of practice. This is the culmination of the work of the Advanced Practice Advisory Panel over a number of years.

A major project is currently underway looking at radiographer commenting. The first ‘face-to-face’ meeting took place on April 29 in Melbourne. A range of stakeholders from around the world have been invited to contribute to the project.

Our conferences and events

The annual conference continues to be a major education event for practitioners, with strong competition to present by both members and non members alike. The peer review process ensures that the presentations are of a high standard, and invited speakers complement the theme of each of the conferences. 2018 will be held in Canberra and the 2019 conference in Adelaide will be the joint AACRT event. The theme for the 2019 conference is “Better together – Patients, Professionals, Possibilities”

Our Journal

We have renewed our contract with Wileys to continue publication of JMRS for the next three years. The Journal was awarded Medline listing in 2016 which is a testament to the reach and quality of the content.

Support for the Asia Australasia region through ISRRT

ASMIRT have agreed to fund a placement for an educator to travel to an area of need in the region, to present and teach at an appropriate occasion. This fund covers travel and accommodation for the educator up to \$2,000.

Christopher Whennan Council Member

TAIWAN



Taiwan Society of Radiological Technologists (TWSRT), which was established in 1968, continuously plays an important

role in connecting worldwide radiological technologists, and also strengthening the relationship and cooperation between International Society of Radiographers and Radiological Technologists (ISRRT).

TWSRT holds its annual conference every year, this year marking its 50th conference. We have steadily accumulated a good reputation due to the leadership of every president previously as well as the contribution of every member. The 50th Annual Meeting of TWSRT and the International Joint Conference of Radiological Technologists was held on March 25-26, 2017. There were around 70 overseas guests from 13 different countries, and more than 2,000 attendees who came to celebrate the 50th anniversary of TWSRT with us.

The theme of the conference this year is “Towards New Horizons - Challenges for Radiological Technology for The Next 50 Years.” The core conference program consists of 12 invited lectures by renowned speakers whose speeches are included on state-of-the-art aspects related to the radiological science, radiation protection, infection control, and gender difference). Additionally, 64 oral presentations and 232 poster presentations selected from the very best of hundreds of submitted abstracts. We were honored to have our guests coming from overseas to give us speeches. Especially, we had ISRRT CEO, Mr Dimitris Katsifarakis, who talked about the past and future prospect of ISRRT; Vice President Asia/Australasia, Dr Napapong Pongnapang, gave us the



Welcome Party with guests from Myanmar and Philippines.



Top: Opening Ceremony.
 Above left: Congratulatory address from Dr Napapong Pongnapang.
 Above right: Gift Exchange with invited speaker from the Republic of Cameroon.
 Right: ISRRRT delegation with Prof. Andy Beavis.
 Below right: Japanese delegation.
 Bottom: Guests from Greece, India Japan, Korea, Malaysia, Thailand.

congratulatory address. We thank all the speakers, presenters and delegates, for their intellectual contributions for making the very successful and memorable event. We sincerely hope that this conference will benefit all participants and pray that everyone would be able to utilise the knowledge and networking therein to improve the quality of life of ourselves and patients.



NEW ZEALAND



Having just returned from the humid warmth of Hong Kong to the midst of winter in New Zealand, it is opportune to thank the Hong Kong College of Radiographers & Radiation Therapists (HKCRRT), Hong Kong Radiographers' Association (HKRA) & Hong Kong Association of Radiation Therapists (HKART) for their hospitality and organisation of an excellent Conference and meetings.

The Asia/Australasia countries met at our regional meeting during the Conference in Hong Kong and it is always exciting to meet colleagues once again in such a warm, friendly environment. The NZIMRT is excited to be working with ASMIRT to support volunteer 'experts' to provide educational opportunities throughout Asia and the Pacific on a formal request basis. This process was formalised at the A/A meeting and there is much enthusiasm from all involved. World Radiography Day celebrations and fundraising will focus on supporting this initiative.

The NZIMRT has faced some challenging times over the last six months. The registration body – the Medical Radiation Technologists Board, which is a government body, announced some significant changes to the way in which the mandatory continuing professional development programs were to be run. Since the advent of mandatory CPD in New Zealand, radiographers were required to participate in an approved CPD program. The NZIMRT offered a robust program which resulted in the greater majority of radiographers within New Zealand also being NZIMRT members. Radiographers are no longer required to participate in a program and can manage their CPD entirely independently. The change period was very short, leading to an intense period for the NZIMRT Board to introduce a new, enhanced online platform to facilitate this CPD process for members and so maintain membership levels. The changes have seen a reduction in membership levels which we are working hard to address with new membership benefits and opportunities.

The NZIMRT is excited to have launched a new website in April 2017 and with this a brand new CPD platform. The new website is bright and informative and has met with much positive comment from members. See www.nzimrt.co.nz

The NZIMRT Annual Conference is scheduled for August 17-20 this year. It is



being held in Nelson, which is situated at the top of the South Island with the theme 'Perfectly Centred'.

The NZIMRT continues to raise awareness of ISRRT and its work by making available the ISRRT newsletter on the Member's Section of our website and contributing articles for our own newsletter "Attenuation".

Kathy Colgan
NZIMRT ISRRT Director

EUROPE

FRANCE



The French Association has had the honor of celebrating the Marion Frank award given

to Dominique Zerroug at the last World Congress of the ISRRT in Seoul, during a ceremony that took place during the National congress of the AFPPE last March in the beautiful city of Bordeaux.

Approximately 900 radiographers were

present during the national congress. For the occasion the Association invited Danielle Boué, President and Alain Crompt CEO of the OTIMROEPMQ, Sal Martino, CEO of the ASRT and Sandy Yule Past CEO of the ISRRT accompanied by his wife Alison Yule.

The award was presented by Dr Yule, a good friend of Mrs Zerroug. His speech reminded everyone about the participation of Dominique in all the educational projects of the ISRRT and the AFPPE as well in Africa and Asia, corresponding to the criteria to receive this award.

Sal Martino made a remarkable presentation of the radiology museum build at the headquarter of the ASRT in Albuquerque, New Mexico.

In May, our annual francophone MRI days brought together 1,300 radiographers from Switzerland, Luxembourg, Belgium and France in the capital of Alsace, Strasbourg.

We have five major events annually for the radiographers in France.

In January, the Scanner Days took place in Paris with more than 1,000 participants, in 2018 the Scanner Days will take place in La Rochelle.

Our national conference was in

Bordeaux this year and will be in Toulouse next year.

Our MRI days will move from Strasbourg to Nice in 2018. Radiation therapy is meeting every year during the month of May in Paris, also the French Radiology Days in collaboration with French Society of Radiologists where we welcome over 2 000 radiographers.

More and more foreign radiographers are participating in our activities and it is a pride for our association, also a great pleasure to meet colleagues from elsewhere.

Philippe Gerson
Vice President AFPPE

GREECE



In September last year our society, the Panhellenic Society of Radiological Technologists was delighted to participate in the

very 1st European Congress of Medical Physics in Athens with an ISRRT session. Following a board meeting, we decided to present the hot topic: "Radiographer's input for improving a safety culture for medical imaging and therapeutic procedures".

The session was "kicked off" with an introductory presentation where the ISRRT Regional Manager Europe, Mr D. Katsifarakis highlighted the ISRRT activities linked to safety culture development in medical imaging and therapy by RG/RTs. This was succeeded by four comprehensive presentations concerning safety culture in CT (Mr T. Agadakos, MSc), Neurointerventional Procedures (Mr K. Thanassoulas, MSc), Medical Informatics (Mr N Delikanakis MSc), and Radiotherapy (Mrs A. Sarchosoglou, MSc).

The ISRRT session was highly appreciated by radiologists who attended the congress and was proposed to be included in 20th Panhellenic Congress of Radiology held in Athens. Our society has a life long relationship with the Hellenic Radiology Society and is traditionally allotted for a round table during their annual congress. Therefore a round table on Safety culture enhancement in medical imaging and therapy was enriched to facilitate for a presentation in MRI (Mr M. Polenis, MSc) and was presented in Greek.

The consequent discussion included several examples where many incidents with harmful effect on patients, staff and



PASTA speakers.
Above left: Tim Agadakos.
Above right: EM Agadakos.

organisations went unreported. Evidently, there is a need to shift from the existing blame culture in Greek hospitals to a safety culture environment. It was agreed that this change would require a multidisciplinary approach, involving all health professionals. In addition, ongoing training and continuous quality improvement systems were considered valuable tools towards this aim.

Unfortunately, Mr Dimitrios Koumarianos MSc, a devotee toward this endeavor unexpectedly passed away in June. He was a distinguished lecturer at the sole tertiary radiography faculty in Athens and an exceptional educator who was well-known for his Atlas on Radiography and textbook in MRI, his e-learning scheme, his countless publications, his chairing in ECR radiographers' subcommittee, his role in peer reviewing committees among others.

He will be greatly missed by his family, colleagues and friends. His work in medical imaging is renowned. We are confident that his legacy will be continued by colleagues, radiography students and his immense educational material.

Euthimios Tim Agadakos
Council Member



SWEDEN



The Swedish Society of Radiographers (SFR) has approx. 1,500 members. 3,500 radiographers are registered radiographers in Sweden. The Board

consists of ten members, from the north to the south. Our President is Kerstin Hillergård, radiographer and working as a leader of a Mammography department in Jönköping.

The Radiology week 2017 is coming closer and in September this year the venue is Linköping, a University town, quite close to Stockholm. The Radiology week will be arranged by the department of Radiology at Linköping University Hospital together with Center for Medical Image Science and Visualization (CMIV), in close cooperation with the Swedish Society for Radiographers and the Swedish Society for Radiology.

The theme of the year is "Integrated diagnostics" and stands for radiology in collaboration with surrounding specialties, where Radiology is the center of health care in close collaboration between radiology, radiography, patient, clinics, pathologist and genetician. The radiology week will illustrate how diagnostic radiology interacts with other disciplines and how important it is to participate in the development of integrated

diagnostics, like a spider in the net. The week will offer many interesting presentations. One of the invited speakers is Philippe Gerson, Vice President, Europe, and he will present Management of Terrorist Attack Situation Paris, November 2015. Bodil will have a presentation about "What does ISRRRT stands for"? Another focus will be on the development of a specialist-education and the need for specialised radiographers to meet the demand from the health care system and the radiology department.

The SFR established a Scientific Advisory Council (SAC) in 2015, consisting of seven radiographers, with doctor's degree and active in research. The purpose of the SAC is to be advisory, quality assurance, recommendations for future research, scientific foundation, follow-up scientific developments in the field of radiography, long-term focus and support the profession. Radiographers with specific skills in different branches of activity of importance to the SFR and the development of the profession can be nominated to the SAC. The SAC has carried out two important studies focused on the radiography profession. Another SAC- issue is to define "radiography" from a scientific point of view. The SFR has a definition on radiography: an interdisciplinary field of competencies that draws knowledge from nursing, imaging and functional medicine, radiation physics and medicine. An article was published in 2016 in the *Journal Radiography* focused on the concept of radiography – a student perspective.

The SFR has been body to which a proposed measure was referred for consideration regarding radiographers from countries outside EU and the process to get Swedish registration as radiographers. There is a proposal from The National Board of Health and Welfare to make the registration-process easier for these people to get their Swedish registration and to work in Sweden as radiographers. It is an important issue to open doors and facilitate this process. The radiographer education in Sweden have double exams, a Bachelor degree and a professional. The work of radiographers in Sweden can differ from that of their peers in some other countries. In Sweden, registered radiographers are responsible for performing the entire radiographic examination thus they have to take care of the patient as well as dealing with the medical technology, e.g. IVP, catheterizing and medical technical equipment.

At the end of June the Nordic Congress took place in Iceland. It was a great venue with many excellent lectures. More about this in the next *News & Views*.

Bodil T Andersson
Council Member



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