ISRRT
INTERNATIONAL SOCIETY OF RADIOGRAPHERS & RADIOLOGICAL TECHNOLOGISTS

news & views

DECEMBER 2015

from around the world

The Official Publication of the ISRRT

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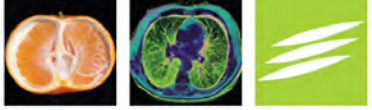

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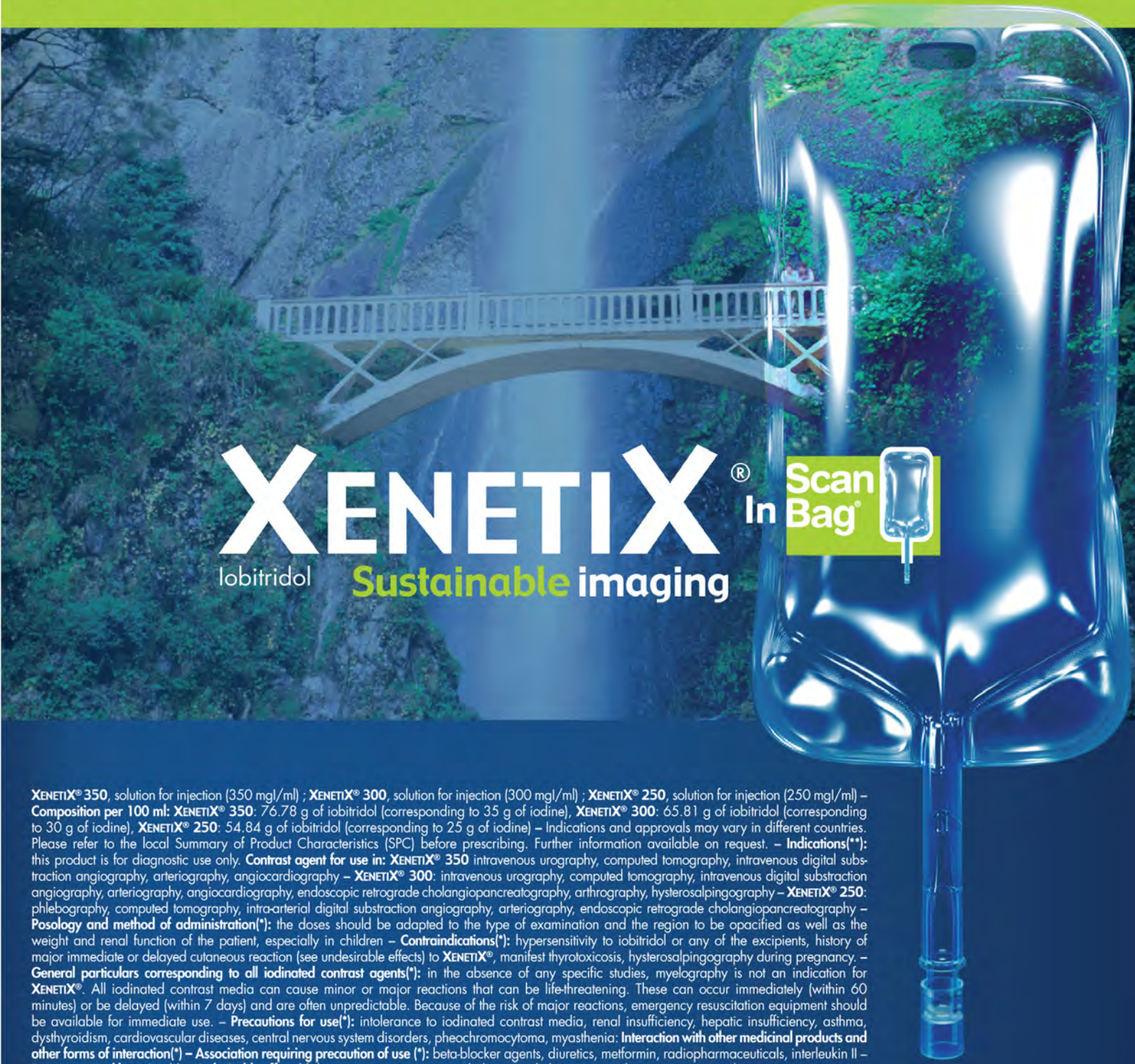

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Remember to e-mail your news before the deadline to:

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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.

Advertisements/Secretariat

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

For further details or to advertise your program or new publications please contact the ISRRT CEO:

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ADVERTISING INFORMATION

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

The ISRRT Newsletter reaches 72 countries, 4500 associate members, libraries and schools of radiography, government bodies and professional societies.

The following are costs for colour advertising as at January 2015.

	1 issue	2 issues	3 issues
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Dr Fozy Peer
President,
International Society of Radiographers and Radiological Technologists

President's message

This past four months since the last edition of *News & Views from Around the World*, has been extremely busy on the ISRRT Board of Management. As the global voice of radiography, members of the Board have been called upon to provide input on various forums often involving travel to different destinations.

During September-October 2015, a survey of member countries of the ISRRT was undertaken by a research student. Another different survey of relevant stakeholders was also completed (at no cost to the ISRRT) during October 2015. The ISRRT Board of Management was requested to provide a SWOT analysis of the ISRRT. This was analysed by an external strategic planning specialist (also at no cost to the ISRRT). The final reports of all three activities will be available shortly and these will be used to direct the strategic plan of the ISRRT for the next four years.

The ISRRT and the EFRS have separately conducted surveys regarding the levels of qualifications and scope of practice required to work as a Radiographer or a Medical Radiation Technologists. Cynthia Cowling who had performed the initial survey and report on behalf of the ISRRT kindly also compiled a report on the Radiography Assistants. The reports are in the process of being submitted to the International Labour Organisation (ILO) as the profession of Radiography is not correctly defined within the International Standard Classification of Occupations document and are not identified within the professionals grouping.

As the global voice representing Radiographers, the ISRRT was invited to and participated in the:

- IAEA Consultants' meeting on Clinical Audit in Radiology in Vienna in August 2015
- Training Course on 'Implementation of the IAEA Safety Guide on Radiation Protection and Safety in Medical Uses of Ionizing Radiation' held in Vienna from 2 to 6 November 2015.

The ISRRT has committed to the 'Bonn Call-to-Action' to strengthen the implementation of safety requirements as related to the medical uses of ionizing radiation globally. The ISRRT has developed a diagnostic tool for radiographers on justification and authorisation of medical exposures to radiation. The ISRRT believes that a common approach, with a defined pathway, will assist radiographers and technologists worldwide in understanding

President's message

the principles and their role in the justification and the authorisation processes. We urge Radiographers/Radiological Technologists to access this tool on the ISRRT website www.isrrt.org

During 2015, the ISRRT hosted successful workshops in Myanmar, Rwanda and Nicaragua. The workshop scheduled for Poland in 2015 will now be held in 2016. Philippe Gerson, ISRRT Vice President for Europe-Africa was instrumental in establishing the Society in Warsaw, Poland called the Polskie Towarsystwo Elektroradiologii (PTE).

The Treasurer and CEO diligently hold meetings with the financial advisor to discuss the ISRRT portfolio to ensure that targets are being met with respect to income and investments held. Present and future investments are discussed and finances are allocated for workshops and projects.

The ISRRT was the recipient of a very welcome legacy from the estate of the late Chesney sisters. In acknowledgment, the ISRRT Board has earmarked funds for the 'ISRRT – Chesney Research Fund'. A percentage of the funds received was donated to the WRETF who were mentioned in the Chesney will.

Meetings were held to discuss the replacement of the CEO, the proposed Memorandum of Understanding related to the ISRRT administrative functions with the Society and College of Radiographers, the timescale and financial implications related to the replacement of the CEO.

The ISRRT DoseWise Radiographer of the year for 2015 has been announced. This award is made in conjunction with Philips to encourage best practice in recognition of dose-conscious radiographers and to support radiation dose management awareness. The awardee, Mr Anthony TESSIER from France, has been invited to attend the RSNA 2015 meeting.

A visit to Seoul Korea was undertaken in October-November this year to check on the arrangements for the 19th ISRRT World Congress scheduled for 20-22 October 2016. We met with a very enthusiastic new local organising congress committee and a new Board of Management of the Korean Radiological Technologists Association (KRTA). Arrangements related to the congress venue, the exhibition areas, delegate accommodation and finances were finalised. Possible sites for delegates and accompanying guests to visit; including two excellent hospitals and universities were visited. We also attended and presented at the KRTA 50th Anniversary Congress and officiated at the opening of their 'museum'. I am confident that the KRTA will host a magnificent event and we look forward to your participation at the 19th ISRRT World Congress in Seoul next year.

Dr Fozy Peer
President, ISRRT

2015
ISRRT DoseWise Radiographer of the year

Mr Anthony Tessier

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Radiographer of the Year contest 2015

And the winner is...

Thank you to everyone for your enthusiastic participation! There were dozens of excellent submissions to be considered for this year's Radiographer of the Year award.

From amongst all received, the panel of the International Society of Radiographers and Radiological Technologists (ISRRT) and Philips has selected a winner. He is Anthony Tessier, currently Diagnostic Radiographer at H.I.A Sainte-Anne Service d'Imagerie Medicale Pr. Arteaga in Toulon, France.

His response demonstrated very promising improvement, on a systemic level, regarding reduction of eye lens X-ray dose in head CT procedures using hyperflexion patient positioning. Eye lens exposure is one of the greatest concerns for both patients and clinicians as the eye lens is very sensitive to radiation. Although the benefit of the procedure outweighs the risk, it is incumbent upon the radiographer to use the least amount of dose necessary for a good diagnostic image.

His conclusions suggest that a dose reduction of 40% is possible when the patient's head is positioned in a hyperflexion orientation and the scan starts above the eye orbit to prevent direct beam contact with the eye lens.

We congratulate our award winner, Anthony Tessier. He receives a trip to RSNA 2015 where he will present his findings and we will recognize him as the Radiographer of the Year!

For more information about dose management please visit **www.dosewise.com**.

PHILIPS

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Dr Alexander Yule
CEO

Chief Executive Officer report

In the first week of July I attended the inauguration of the President of the Society and College of Radiographers in London. This was a very pleasant event which was attended by many organisations and individuals. The College are great supporters of the ISRRT and I took the opportunity to pass on the good wishes of the ISRRT Board and Council to the new President.

During October I visited Seoul in South Korea, accompanied by the ISRRT President Fozy Peer and the Treasurer Stewart Whitley, to discuss the ISRRT World Congress to be held there in October 2016. We finalised issues relating to the budget, the scientific program and the venue rooms.

Part of the visit was spent in reviewing social activities which will be offered to those attending. In addition we visited two hospitals and Pusan University which will be excellent venues for educational visits during or after the Congress. We were treated with the utmost kindness and hospitality and I can assure everyone that they will find the Korean people very friendly and helpful and that it is a very safe country.

The week of the 8th November once again saw the celebration of World Radiography Day and a number of events took place all over the world. Congratulations are due to all countries who participated in the International Day and records of these events will be found on their many websites.

In November I was invited to attend the UK College of Radiographers "Radiographer of the Year Awards" an event which is held in the Houses of Parliament in London and is a very prestigious affair. During the event awards are made to individual radiographers for outstanding work done and to teams from hospitals who have been nominated for outstanding initiatives and patient care

At the end of November I attended the RSNA in Chicago with Fozy Peer and a full report will be made in the next edition of the newsletter. This year the ISRRT will once again take an active role in the proceedings. The ISRRT is sponsoring one of the sessions to be held as part the Associated Sciences Course Program. I chaired the session and Jonathan Mazal, the Regional Director for The Americas, was one of the speakers. The session is entitled "Global Health" and the other two speakers were Melissa Culp who spoke on, "Challenges of Medical Imaging in Resource Limited Communities and Miriam Mikhail whose topic was, "The Role of Medical Imaging in Global Health". Jonathan's topic was, "Organisational Support for Global Imaging Needs". The name of the ISRRT is now very well known at the RSNA and we are now recognised as one of the leading organisations

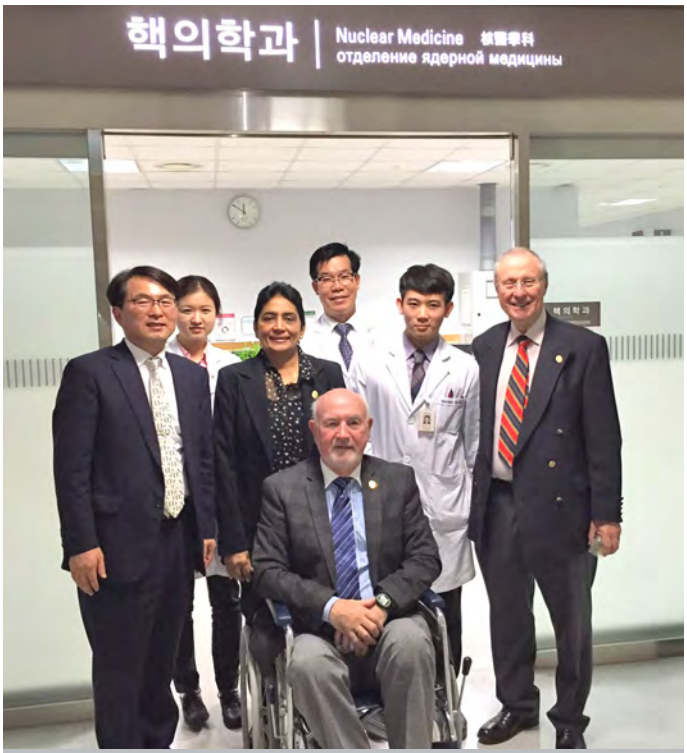
related to radiology and radiography and I would like to emphasise how important this visit is from the public relations perspective. The attendance at the RSNA also provides the opportunity to meet with our sister organisations and technologists and liaise with commercial companies in order to promote sponsorship and funding for education and learning throughout the world.

The past few months have been a busy period for me with on-going preparations for the ISRRT Board meeting in Dubai in January 2016 and with the organisation of the World Congress in Seoul October 2016. In addition, of course, I am assisting the President and the Board preparing for my retirement in October next year.

I would like to thank the Board and all others who have helped me throughout 2015 and wish everyone a very good and fruitful 2016.

Dr Alexander Yule
CEO, ISRRT

Below: Visit to Pusan Catholic University.
Below right: Visit to Busan Hospital.
Middle right: Visit to the KRTA headquarters in Seoul.
Top left: International group from: Thailand, Taiwan, South Africa, UK, Sri Lanka and of course Korea visiting the Folk Village.
Top right: Speakers.



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Stewart Whitley
Treasurer

Treasurer's report

This year has been a fruitful and productive year with workshops supported in Yangon, Myanmar, Kigali, Rwanda and Managua, Nicaragua in partnership with PAHO.

The ISRRT has also received an unexpected legacy of £232,000 from the estate of the late Chesney twins who sadly passed away in recent years. As reported on the ISRRT website Muriel and her sister Noreen were great supporters and therefore to acknowledge their dedication and memory the ISRRT Board decided to invest the majority of proceeds to generate an annual income stream to support radiography based research which will be called the 'ISRRT – Chesney Research Fund'.

The World Radiography Educational Trust Foundation (WRETF) is a charity which was originally set up and supported by ISRRT members. The work done by the WRETF is of a similar nature to that of the ISRRT and was greatly appreciated by the Chesney sisters throughout the years. As they both referred to the WRETF in their bequests the ISRRT Board therefore felt it appropriate that a percentage of the inheritance be passed to the WRETF.

Just recently the ISRRT Board approved the budget for 2016. This will be an unusual year financially as we appoint a new Chief Executive Office to replace Dr Sandy Yule who retires and who will be supporting the new CEO during a period of transition. We owe a lot to Sandy who has been prudent in looking after our limited resources over the years.

We are pleased to announce that next year workshops have been approved to take place in: Poland, French African – Kinshasa, Latin America and Vietnam. These workshops will be sponsored by a number of member organisations in partnership with ISRRT to help reduce the overall cost to ISRRT.

The ISRRT 2014 accounts have recently been approved by our official accounts Wormald & Partners based in Bristol, UK. The accounts demonstrate good management of our resources and these have now been submitted to the UK Charity Commissioners which is a legal requirement. These can be seen on the Charity Commissions web site under registered charily number 276218. See http://apps.charitycommission.gov.uk/showcharity/registerofcharities/registerhomepage.aspx

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

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

Stewart Whitley
Treasurer

SEOUL

Above: Inside the History Museum which celebrates the 50 years of history of the organisation.

Below: Cutting of ribbon to open the Korean Radiological Technologist Association (KRTA) History Museum.

Association of Educators in Imaging and Radiologic Sciences

www.aeirs.org

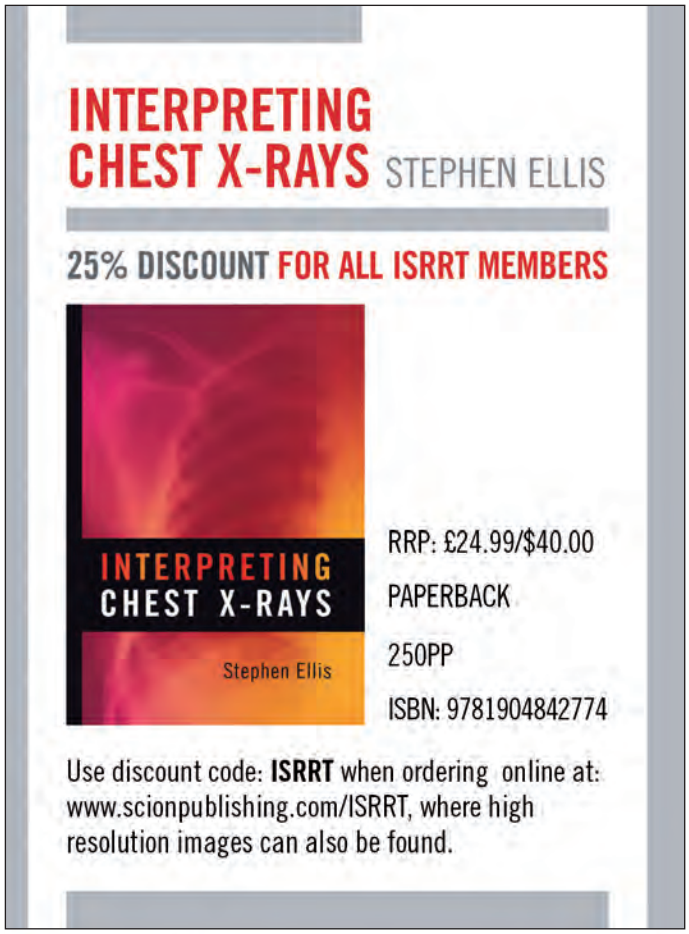
Rebecca Ludwig, Ph.D., FAEIRS, FASRT

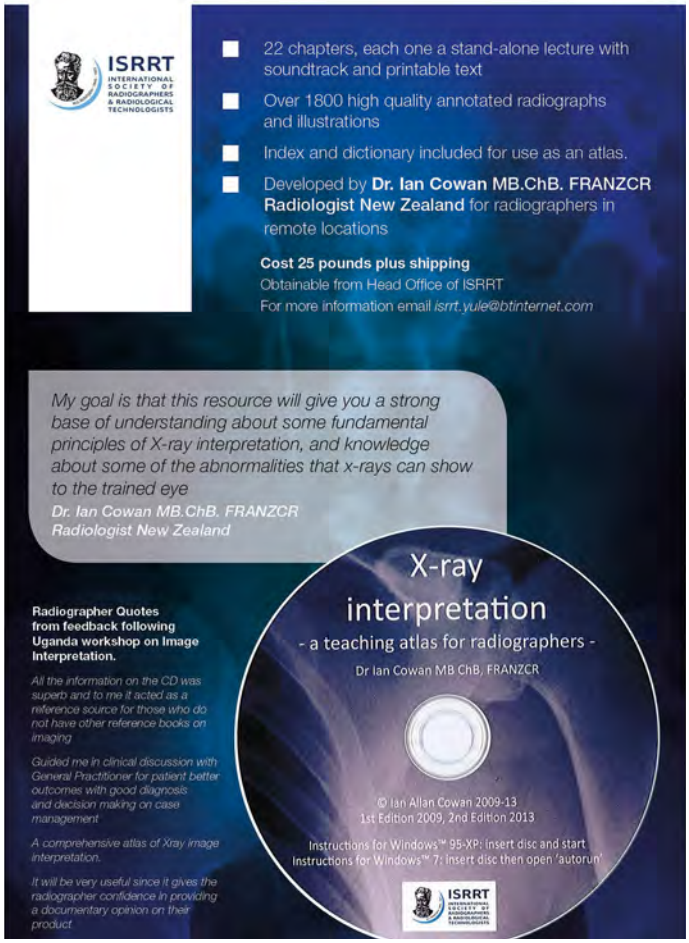
AEIRS lost an iconic member recently. Judith (Judy) Williams passed away on October 12th, 2015. Judy has been a radiography educator since 1963. She was instrumental in developing the highly popular Atlanta Society Student & Educator Seminar which continues as a nationally renowned educational event for students and instructors. Ms Williams will be missed by many imaging professionals.

On February 26, 2016, AEIRS will host an Educator's Workshop in conjunction with the Atlanta Seminar. The one day workshop will offer six continuing education credits. AEIRS has assembled great speakers with interesting topics for all educators in the radiologic sciences. Don't miss out on the chance to join AEIRS at the Crowne Plaza Ravinia Hotel. What a great way to honor Judy! More information is available at http://www.aeirs.org/hp_atl_info.html

AEIRS also invites you to submit a proposal to present a poster presentation on July 14, 2016, at the 2016 AEIRS Annual Meeting being held at The Benson Hotel in Portland Oregon. The submission deadline is February 1, 2016. Submit your application at http://www.aeirs.org/ to office@aeirs.org

For more information about the meetings, the strategic plan, educational opportunities, position openings, member benefits, or the organization, please go to www.aeirs.org





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ISRRT Chesney Research Fund

Call for Grant Application 2016

Theme:

A Novel approach on optimisation and/or justification of Medical Exposures by radiographers for radiation protection and safety

The aim of the ISRRT Research Fund is to promote research that helps improve the standards of delivery and practice of medical imaging and radiotherapy as well as to encourage evidence-based practice. The ISRRT Research Fund was set up in 2009 and a research proposal was funded the first time in 2010.

Starting 2016 to commemorate the Chesney sisters who left in their will a legacy to ISRRT we will name the ISRRT Research Award as the ISRRT Chesney Research Fund.

The theme of the 2016 award is the "A Novel approach for optimisation and/or justification of Medical Exposures by radiographers for radiation protection and safety".

The theme is based around actions spelt out in the Bonn Call for Action published by the WHO and IAEA in which radiographers play an important role in radiation protection in medical exposures. Please refer to the following website for the joint statements by IAEA and WHO:
https://rpop.iaea.org/RPOP/RPoP/Content/News/bonn-call-for-action-joint-position-statement.htm

While Radiographers play a major role in is in optimisation process, their role in justification is also important for the healthcare team as they are the usually the first to see patients following a request for imaging from the referring physician.

What are the possible roles of radiographers or Radiological Technologists in the optimisation or justification of medical exposure? Around this theme, you and your colleagues are invited to submit a research proposal.

Bids may include new methodology and modification to standard protocols and procedures which may result in patient dose reduction with no detrimental effect on image quality or patient management.

Applications with other themes are also welcome but priority will be given to applications following the proposed theme for 2016.

The grant is **£2500 for 1-year** and **£5000 for 2-year** projects. Full details of the Research Fund Guidelines and application form can be downloaded from the ISRRT website www.isrrt.org.

Closing date for submission of grant application is April 30, 2016.
Funding decision will be announced in July 2016.

I would be grateful if you could promulgate the invitation message to members of your societies. This call for application is also available on the ISRRT website website: www.isrrt.org

Yours faithfully,
Alexander Yule OBE
CEO, ISRRT

Student experience at

ASRT Educational Symposium and Annual Governance and House of Delegates Meeting

Albuquerque, New Mexico
June 25-28, 2015

Report by **Kayla Gonzales**

THE ASRT Educational Symposium and Annual Governance and House of Delegates Meeting and Student Leadership Development Program became a huge eye opener for many students entering into the radiologic technology field. It showed how the rules and bylaws are discussed or changed based off debates and proposals. It allowed students to meet people from their affiliates and how they could get involved with this process and help to make this a better career for all registered technologists. Allowing students to take part and get involved in these proceedings, gives the students a voice to bring up topics that they feel are important to discuss and allows them to give their opinions on any topic that comes around. At this conference there were many opportunities to learn about the affiliates, the Chapters, and the House of Governance. Students were able to attend meetings and lectures that interested them and each showed them how they can become active members in many societies. For many of these students, this conference became a turning point into expanding and excelling in their profession.

This five day conference began with a simple orientation for the students attending this program. The president of ASRT gave a lively, entertaining lecture about the program and what we were to expect to get out of it. President Bill Brennan encouraged us students to look around and see that we are the future of our profession and we have to get involved to insure its future! Being apart of this program is the first stepping-stone towards being able to help shape a profession that is equally loved by all those who attended. This first day had more to offer than inspiration and a desire to be more involved, this first day gave all the students the chance to meet, the start of many great friendships. “In the first 20 minutes of the program I had already met five people from five different states. The best part is that we all already had a connection between us, being students and being focused on career development!” said student Monica Caggiano from Massachusetts. Having friends who feel the same about your newly chosen profession is such an amazing feeling. You can use terminology that most of your other friends might not understand, and you can have fun discussions about anything radiology!

The second day was probably the most important day for the students because this was when we learned about the governance and the House of Delegates and how they worked. It started with the CEO of ASRT Sal Martino, giving us a reminder of where we came from, where we are now, and where it is we are going in the future in radiology. It was a good reminder how young radiology as a career is and that there are still many changes occurring. There was a lecture ▶

on the proceedings that were going to happen over the next few days during the meetings with the governance and House of Delegates. At first it was so confusing as to what they were talking about. Everyone was taking notes, but only at the real meeting would we start putting the pieces together. After these briefings of the meetings to come, we got to choose three of many lectures to attend. It was refreshing to be able to choose the three that were interesting to you. Student James Harris from Texas comments on the lecture 'Radiology in Haiti', "I was very impressed by the individuals who committed time and resources to help victims of the Haiti earthquake in 2010. It was interesting that members could organize time and equipment to serve and help those who had lost everything. This really has inspired me to volunteer in the future." At the end of the day, we all had dinner together and got to experience the Pin Exchange. Everyone from all over the country brought over pins that represent their states, and most everyone's goal was to get them all! This is where students got a chance to talk to their state affiliate mentor and ask them questions about the meetings or about getting more involved with them. It was a great way to end the day!

We woke up the next day with a continental breakfast sponsored by the ASRT to fill us for the flag ceremony. The flag ceremony is a tradition for the House of Delegates first business meeting. Students who participated got to hold a flag representing a state, territory, or military branch. The flag ceremony opened up the room to the beginning of the meeting. This first meeting consisted of updates, open forums, and reports on ASRT, JRCERT, and the affiliates. Looking back the order of business makes sense to me now, but I remember how confused I was trying to figure out what was going on. This day was also the opening of the ASRT Museum and Archives. Student Dystany Danylczuk from Florida commented on The Night at the Museum, "… We were to be a part of the first group of people to experience the new ASRT museum. What a true honor. The ASRT museum gave us an insider's look on what it took to get the Radiologic Technology and Radiation Therapy professions to where they are today." This museum was interactive and educational. Everyone got to touch the objects and try to figure out where things go or how they worked. The children who attended had fun playing with all the interactive computers and gear.

The meetings continued the next day by starting with the Bylaws Open Forum and Commission Hearing and the election of the new Speaker of the house and Vice Speaker. It was interesting to see how new members of the house get voted on. The majority of the day consisted of chapter meetings, where the students got to choose the three they were most interested in attending. The chapters were divided by the different modalities, such as: the radiology chapter, mammography, sonography, radiation therapy, radiology assistant, and so much more. These chapter meetings are where people got to make plans and changes to the bylaws to help their chapter. They were able to discuss the modality that pertained to them, and the bylaws that pertained to them. When they decided that a bylaw should be changed or reworded, they wrote it down to be added to the agenda for the next meetings. The day ended with the Honors Evening Event. This event honored five people in this profession, who made it their job to make this profession better. "These individuals have dedicated their lives to their professions and have gone above and beyond their job duties, making changes in the field of radiologic technology. It was refreshing to be reminded that they all started their involvement in the ASRT and their affiliates as a student like myself. I wish to be as passionate as these individuals about my profession in the future," stated student Yukie Furukawa from Indiana.

The last day of the meetings ended quickly as the chapter meeting leaders spoke to make their changes and debates. No one thought any idea was a bad one and no idea was left out. After the meetings ended, we students had a small ceremony of our own. We were awarded certificates stating that we completed the Student Development Leadership Program. There were others students who spoke to give their opinions of the program and their input to make it program better for years to come. This program helped many students realise that they want to do their part too. James said, "I hope that I personally have the opportunity to volunteer in the future, as I believe I will have a lot to offer when I graduate." Yukie stated, "The experience I had in Albuquerque was truly inspiring. This trip has definitely inspired me to be more actively involved in my affiliate." Dystany expressed, "This experience has pushed me to involve other students and other technologists. I will never forget the experience I had in Albuquerque or the people I met, and I hope to continue to attend every year just to continue my experience."

ISRRT WEBSITE

The ISRRT website carries up-to-date addresses of all member societies.
Please contact:
isrrt.yule@btinternet.com
Here you can find information on the ISRRT and details of future meetings.

COMMENTS ON THE NEWSLETTER

You are invited to comment on the presentation and contents of the newsletter and make suggestions for future issues.
Your comments will be considered by the Editor and her Committee.
email: deepbluedesign1@me.com

The 3rd Annual Conference of Vietnam Association of Radiological Technologists and in conjunction with The 2nd Vietnam-Philippine-Myanmar Conference

Hi Chi Minh City, Vietnam
June 19-20, 2015

Report by **Phang Duc Tin,** International Relations Director of HART

ON June 19-20, 2015 we successfully organised The 3rd Annual Conference of Vietnam Association of Radiological Technologists and in conjunction with The 2nd Vietnam-Philippine-Myanmar Conference. The theme of this conference was: "The position and the role of radiological technologists or radiographers in developed countries, an knowledge update and future developmental orientation for the profession of radiological technology in Vietnam".
This is the first time our association organised an international conference in which 16 countries participated. There are so many thing to learn and improve. It makes us more determined in the development of our association.
Many thanks to the ISRRT representative, presidents and members from the 16 countries who participated in our conference. We need more help and support from the ISRRT and countries all over the world as our association is young and developing.

Digital Radiography Workshop

Managua, Nicaragua
Septmber 21-24, 2015

Report by **Jonathan Mazal,** Regional Director America's

IN September this year the Pan America Health Organization/World Health Organization (PAHO/WHO) office in Nicaragua and SILAIS Managua (Local System for Integral Health Care) held a workshop on digital radiogarphy for technologists. This workshop was held with the support of the International Society of Radiographers and Radiological Technologists (ISRRT) and the PAHO Regional Radiological Health Program.

Fourteen radiographers from the five public hospitals currently operating digital systems participated in the workshop. Dr Gilma Arias, responsible for educational activities in SILAIS Managua and Dr Roger Montes, PAHO Consultant in Nicaragua, opened the workshop. Professor Elena Cotelo from Uruguay, Temporary Advisor of PAHO and Eng. Ileana Fleitas, PAHO Consultant in Cuba were the lecturers.

The workshops objectives included a review of the specific characteristics of digital technologies, the procedures to improve quality, as well as the radiation protection for both patients and staff. Hands on sessions on the two digital radiology modalities, CR and DR at Hospital Antonio Lenin-Fonseca were also organised.

During the closing session, participants expressed their satisfaction for the quality of the workshop and commented about the need for organising more courses and trainings for technologists.

For more information on the workshop, please contact Jonathan Mazal, ISRRT Regional Director – Americas at jmazal@isrrt.org

Impact of trained radiographers on imaging & healthcare

National Conference of Indian Society of Radiographers & Technologists

Chandigarh, India
September 25-26, 2015

SHRI JP Nadda, Union Minister of Health & Family Welfare, inaugurated the two day National Conference of Indian Society of Radiographers and Technologists (NCISRT-2015) at Govt. Medical College & Hospital (GMCH), Chandigarh on September 25-26, 2015. The conference was organised by ISRT Chandigarh chapter. The theme of conference this year is "Impact of trained Radiographers on Imaging & Healthcare". Delegates from all over India and abroad participated in the mega scientific event having seven sessions.

Shri JP Nadda, Union Minister of Health & Family Welfare, inaugurated the conference by lighting the lamp. In his inaugural address, he stressed the need for team centric holistic approach instead of doctor centric approach, as radiologists and paramedic staff are not only the back bone of the medical profession but its soul too due to their major role in the field. Shri Nadda said that for strengthening, capacity building and skill development of the radiographers and other medical technologists 32 components for their training are identified. He said that skill development training of paramedical staff is the need of the hour as there is a shortage of two lakh paramedical staff in the country at present. He said that a regulatory body in the shape of national paramedical council is being deliberated upon, on the pattern of paramedical council of Himachal Pradesh.

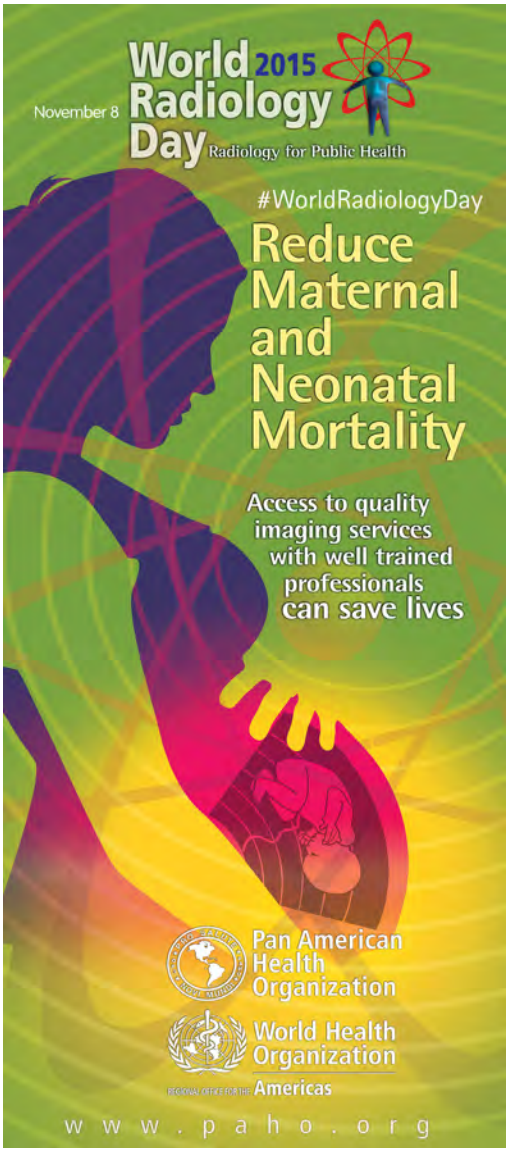
Union Minister of Health & Family Welfare Shri JP Nadda, released the NCISRT-2015 souvenir and the latest issue of ALARA Informative Pages, India's First Radiographers' Magazine. Mrs Kirron Kher Member of Parliament (Chandigarh) & Shri Sanjay Tandon, President BJP, Chandigarh were the Guests of Honour for the function, who also spoke on the occasion.

The conference provided a common platform for the Medical Technologists working in the field of Radio-diagnosis, Radiotherapy and Nuclear Medicine in different parts of India and other parts of the world to exchange their knowledge and challenges involved in different imaging modalities for doing accurate diagnosis, in delivering radiotherapy techniques utilised for precise radiotherapy and for treating & diagnosing the disease with the help of radionuclide in Nuclear Medicine. Twenty three invited speakers have delivered their lectures on the latest modalities in the field of Radio-diagnosis, Radiotherapy and Nuclear Medicine.

Dr SD Sharma, Head Medical Physics Division, BARC, Mumbai, Prof. Anuj Tyagi, SN Medical College Agra, Prof. LM Aggarwal, BHU, Varanasi and Sh. inod Chauhan, Registrar Paramedical Council Himachal Pradesh along with other invited faculty from all over India are attended the conference. Lifetime achievement for their contribution in the field of Medical Radiation Science has given to Emeritus Professor BD Gupta, Sh. SK Dhawan, Sh. JS Kohli, and Sh.SA Wazid and Sh. BC Thapar by the Union Health Minister Shri J P Nadda ji. Shri Anurag Aggarwal, Home Secretary-cum-Secretary Medical Education and Research, UT, Chandigarh also addressed the inaugural ceremony of the conference. He honoured the Union Minister Shri JP Nadda with Himachali cap and a shawl. Shri Laxmi Kant Tewari, Vice Chairperson NCIRST-2015 presented a vote of thanks.

A workshop on Quality Control & Radiation Safety was also organised as part of conference by Ms Sara Tagris, from Sweden on September 26, 2015.

Pictured:
Above left: Union Health Minister JP Nadda lights the lamp and Mrs Kirron Kher, member of indian parliament looks on.
Above right: Union Health Minister JP Nadda releasing the conference souvenir with Mrs Kirron Kher, member of indian parliament.



PAHO **World Radiology Day** 2015

Report by **Jonathan Mazal,** Regional Director Americas

The Pan America Health Organization/ World Health Organization (PAHO/WHO) celebrated World Radiology Day on October 30

THE celebration is to raise awareness on the role of radiology in maternal and neonatal health in Latin American and the Caribbean. To celebrate, PAHO organized a half-day seminar including specialist speakers and invited guests. The ISRRT was honored to be among those in attendance.

The speakers shared information on how radiology plays a significant role in maternal and neonatal health through the proper use of ultrasonography and can help reduce maternal and neonatal mortality and morbidity. Radiology's contributions to obstetric care and neonates' health was also highlighted. Issues such as population access, quality, effectiveness and proper delivery of the services were discussed in the context of health technologies and universal health coverage. It should be noted that in Latin America and the Caribbean, approximately 16 women die every day from complications of pregnancy or childbirth. Furthermore, according to data from 2013, approximately 9,300 women died from maternal causes and 250 babies die each day before having reached 28 days of age.

For more information as well as links to a free educational module on the topic, please contact Jonathan Mazal, ISRRT Regional Director Americas at jmazal@isrrt.org

Quality Assurance Standards for mammography in Latin America and the Caribbean (LAC)

Report by **Jonathan Mazal,** Regional Director Americas

FROM October 27-29 the Pan America Health Organization/World Health Organization (PAHO/WHO) convened a meeting of experts to discuss development of baseline mammography quality standards in the region of Latin America and the Caribbean. Currently, breast cancer is the most common cancer among women in the LAC and screening/early detection, as well as timely and appropriate treatment, is critical to reduce breast cancer mortality. For this reason, it is key that mammography services be available, but also effective. This means having quality assurance standards in place that ensure factors such as high quality equipment, skilled medical imaging professionals, and optimal image quality.

Representatives from 10 countries within the Americas, as well as three professional associations were invited to collaborate on this initiative. The ISRRT was one of those associations invited to attend the meeting and represented the technologist's perspective on the issue.

For more information as well as links to useful related documents, please contact Jonathan Mazal, ISRRT Regional Director Americas at jmazal@isrrt.org

Board of the Polish Society.

Poland 5th Annual Congress a success

Warsaw, Poland
October 10, 2015

Report by **Philippe Gerson,** Vice President Europe and Africa

AS ISRRT Vice President Europe and Africa I was invited by the PTE to attend their Annual Congress in Warsaw.

The PTE is the radiographers association who represent radiographers with a high level of education (5 years at the university with a master degree). There are two others radiographers association in Poland which are represented at the two years education level. I met one of these associations in 2012 during my first visit to Poland but they were not represented in Warsaw in October.

The PTE this year organised a one day education program with three symposiums for diagnostic radiographers, radiotherapists and constructors. There were approxiamtely 120 participants.

In 2012, they had 34 presentations in one day, which was too many. This year only 25 papers were presented which was a good amount and left time for coffee breaks and discussions.

PTE now has a very good collaboration with medical doctors, physicists and sponsors. In the past, the profession in Poland was considered to be a simple medical assistant by the radiologists.

They have now become more independant and they have also received support from the trade union. The result is that they now have more power in Poland, especially from students as it is a young association with a young board.

There were three papers in English:

- Filipe Moura (Portugal)
  Radiation therapist education and training
- Sonia McFadden (Ireland), ISRRT DoseWise 2014 winner
  Radiation protection in interventional cardiology
- Philippe Gerson
  20 years working experience in Africa

At the end of my presentation, I was nominated as honorary member of the PTE as ISRRT Vice President. They thanked me to help the society become an association which is now recognised on the international stage. I told the PTE association that it was easier for me to communicate with the African countries in the 90s than to find an association of radiographers in Poland.

We now have the pleasure to announce that the 2016 ISRRT-EFRS workshop will take place in Lublin (in the east of Poland). The support from the university and local hospital have been confirmed.

The workshop theme will be the same as when held in Lithuania in October 2013: Radioprotection in CT and interventional radiology

We carry on our cooperation with EFRS by setting up workshops in Europe for radiographers who have difficulties to get to a high level of postgraduate education.

4th Myanmar Medical Radiation Technologists Conference and Commemoration of World Radiography Day 2015

Yangon, Myanmar
October 25, 2015

Report by **Khin Maung Tin,** President MSMRT

THE 4th Myanmar Medical Radiation Technologists Conference and Commemoration of World Radiography Day 2015 was held at Chatrium Hotel, Yangon, on October 25, 2015.

Over hundred and ninety delegates from throughout Myanmar and foreign countries participated. There were eminent speakers from Japan, Thailand, Singapore, Macau and Vietnam who gave the scientific lectures. The local medical radiation technologists also participated in the lecture program and 17 papers were presented for various modalities.

The Myanmar Society of Medical Radiation Technologists also organised a Pre-Conference Symposium on the Administration of Contrast Medium and a workshop on “Efficient Presentation” was conducted at the same venue on October 24, 2015, in honor of World Radiography Day.

Donna Newman, Stephen Mkoloma and Ceasar Barare with delegates from Kenya and Tanzania.

South African Congress goes green

SORSA RSSA Imaging Congress

Johannesburg, South Africa
October 9-11, 2015

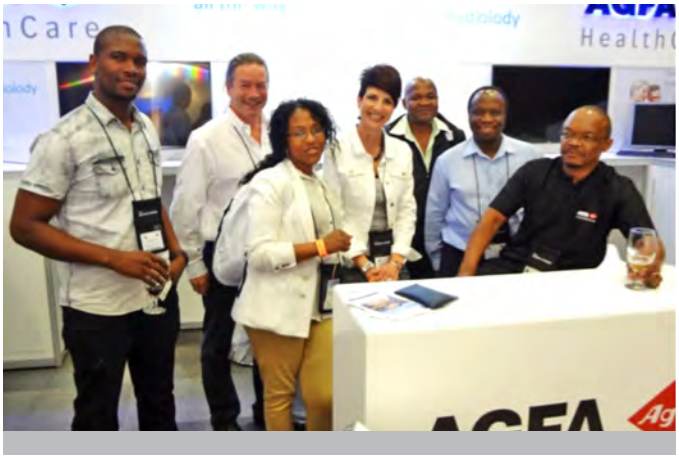
Report by **Hesta Friedrich-Nel,** Edication Representative Committee, Africa

THE SA 2015 Imaging Congress took place at the Sandton Convention Centre in Gauteng, South Africa October 9-11, 2015. Sessions offered at the congress were:

- dose optimization, justification and ethical considerations,
- role extension,
- current trends in diagnostic imaging,
- current research in imaging and radiation therapy,
- education and training update,
- current professional issues in radiography,
- forensic radiography.

Fozy Peer (ISRRT president), Leonie Munro and Ferial Isaacs (picture below left) organised the successful congress. Professor Leon van Rensburg from the RSSA arranged a short course on current ethical issues in imaging, a neuroradiology course, and a strategic management symposium. The presentations, engagement and discussions were of a high level and we were proud to witness how the radiography profession has advanced. This year the conference organisers emphasised 'going green' with the 'SA 2015 Imaging App' downloaded on smart phones to replace the printed program and abstracts.

The guest speakers included Ms Donna Newman, Director of Professional Practice of the ISRRT, Mr Christoph Trauernicht from the International Radiation Protection Association (IRPA) and Dr Mathys Labuschagne, the Head of the Skills and Simulation unit, University of the Free State. Ms Newman presented papers on 'Occupational radiation protection in medicine – the way forward: A technologist's perspective and health care 2015, justification and optimisation: Is this an individual or team role'. In addition Ms Newman also participated in the panel discussion on current professional issues in radiography was discussed. The delegates enjoyed her presence and were eager to interact with her during refreshment sessions. Mr Christoph Trauernicht presented papers on 'Practical hints and tips on dose optimization' and 'Dose limits and the optimization and justification of dose'. Dr Mathys Labuschagne



The delegates, above left, above right and right, enjoyed the interaction with the vendors during refreshment breaks.

informed delegates on 'Clinical simulation – an ethical approach to teaching and learning' with an emphasis on the importance of interprofessional education.

The panel discussion focussed on matters pertaining to the Professional Board of Radiography and Clinical Technology, results on an online survey on role extension in South Africa, work integrated staff needs (WISN), CPD, private practice codes and fees, use and ownership of ultrasound equipment. A robust open discussion highlighted the importance of these 'burning issues'.

We acknowledge the hard work and dedication of the current SORSA president Belinda van der Merwe with the past president Ferial Isaacs.

Picture right:
At open SORSA meeting during the Congress the President Belinda van der Merwe bestowed Honorary Membership on Ferial Isaacs, Fozy Peer, Hesta Friedrich-Nel and Antoinette Grundling (not pictured).

The National Council of the Society of Radiographers of South Africa (SORSA) had the second council meeting of 2015 on October 8, 2015. The Johannesburg SORSA branch entertained our guest Donna Newman as well as the council members with a lovely dinner on the evening before the congress started.

Shared and agreed competencies play vital role

The American Society of Radiologic Technologists Practice Standards Council

Albuquerque, New Mexico
October 12, 2015

Report by **Christopher Steelman**

SHARED and agreed competencies and practice standards play an integral and important part in our roles as radiologic technologists and radiation therapists. They assist consistent, evidence based and therefore quality patient care by articulating the components of our role in each area of specialty. The American Society of Radiologic Technologists (ASRT) practice standards are shared with its membership as authoritative statements for judging the quality of practice, service, and education. However, professional practice is ever evolving as a result of a number of factors including technological advances, economic forces, and statutory and regulatory mandates. As a result it is necessary to revisit these standards on a regular basis.

In 1993 the ASRT published a manual titled "The Scopes of Practice for Health Care Professionals in the Radiologic Sciences." In 1998 this document was replaced by the document "The Practice Standards of Medical Imaging and Radiation Therapy." The first publication of the Practice Standards was approved by the House of Delegates in 1997 and contained standards for eight disciplines. Today, Practice Standards Council (PSC) members are appointed by the ASRT Board of Directors as representatives for 13 disciplines and specialties. Those include Bone Densitometry, Cardiovascular Interventional, Computed Tomography, Limited X-ray Machine Operators, Magnetic Resonance, Mammography, Medical Dosimetry, Nuclear Medicine, Quality Management, Radiography, Radiologist Assistant, Radiation Therapy and Sonography.

In 2004 the ASRT Office of Practice Standards was established. The mission of the office is to provide information to members concerning permissible practice according to the Practice Standards for Medical Imaging and Radiation Therapy, ASRT Position Statements, The Joint Commission standards and applicable statutes and administrative regulations. The ASRT Office of Practice Standards supports the Practice Standards Council (PSC) and Practice Standards Council subcommittees, coordinating council meetings and facilitating the work of the council as its members update the Practice Standards for Medical Imaging and Radiation Therapy.

Practice Standards Council members have in-depth knowledge and real life work experience in the discipline or specialty they represent to provide opinions on behalf of members. Each PSC member serves for a term of four years. The primary responsibilities of the council members include reviewing scope of practice and practice standards, recommending changes or additions to be approved by the House of Delegates, reviewing practice-related position statements for relevancy and inclusion in practice standards and researching practice issues and developing opinions through the advisory opinion statement process. Council members provide guidance on practice trends that emerge as well as promote the practice standards among the profession. Each council member serves as chairman of a Practice Standards Council subcommittee. In the year when the discipline or specialty practice standards are due for revision, the council member facilitates the work of their subcommittee by reviewing practice standards documents, leading webinars and finalising practice standards revisions. The work of the subcommittee is then submitted to the Practice Standards Council.

This year the Practice Standards Council convened at the ASRT Office Albuquerque, New Mexico on October 12, 2015 to review Scopes of Practice, Practice Standards, Advisory Opinion Statements and Position Statements. In addition to reviewing the proposed changes to practice standards of the Mammography, Quality Management and Sonography standards, the ASRT Board of Directors charged the PSC with refining a current position statement titled "Qualifications for Performing Image Acquisition with Hybrid Imaging Equipment in Fusion Mode." Position statements address issues that the legislative body of the organisation feels strongly about, and express the organisation's opinion about the issue. Position statements can be used by state, institutions, and legal advisors to assess appropriateness of practice, however, position statements typically are not considered as "strong" as practice standards and scopes of practice.

The Practice Standards Council began the process by collecting input from the members of the ASRT at the 2015 Annual Governance and House of Delegates Meeting. Requesting that this issue was placed on each disciplines agenda, written commentary from each of the individual chapter meetings was ensured. The PSC also utilized the Societies new ASRT Communities website to collect individual members commentary. Society members use the ASRT Communities to connect using a member directory, participate in online discussions and share documents.

Based upon feedback obtained during the June 2015 House of Delegates chapter meetings, and through member postings on the ASRT Communities, the PSC has determined that:

- The term fusion imaging is commonly accepted as applying to post-processing techniques whereby images acquired from multiple imaging modalities are digitally combined to aid in diagnosis.
- The term hybrid imaging more accurately reflects the technique whereby images are acquired either simultaneously or sequentially, using a single imaging system that structurally combines the acquisition technology of multiple imaging modalities.

Based on this process the PSC will be submitting the proposed wording of this position statement to the representatives convened at the 2016 Annual Governance and House of Delegates Meeting.

Qualifications for Performing Image Acquisition with Hybrid Imaging Equipment

It is the position of the American Society of Radiologic Technologists that radiologic technologists performing multiple modality hybrid imaging should be certified by the American Registry of Radiologic Technologists, Nuclear Medicine Technology Certification Board, American Registry for Diagnostic Medical Sonography or equivalent and be educationally prepared and clinically competent in the specific modality(ies) they are responsible to perform.

Using this comprehensive approach the PSC was able to truly represent the members of the Society by utilising their valuable feedback as basis of their work on this important issue.

Danish Council of Radiographers hosts conference about Radiation Protection at the Danish Parliament

Denmark
November 11, 2015

Report by **Troels Jeppesen,** Head of communication, Danish Council of Radiographers

For the past two years, the Danish Council of Radiographers has been working strategically on brining the consequences of ionizing radiation to the attention of the Danish politicians and policymakers. Wednesday November 11, 2015 saw the climax of those efforts, as the Danish Council of Radiographers was host to a conference about radiation protection, held within the Parliament.

"IT HAS been a giant political venture", says Charlotte Graungaard Falkvard, President of the Danish Council of Radiographers about the path, that eventually led to the hosting of a conference at the parliament. "And it payed off!"

It started more than two years ago. We realised, that when it came to seeking influence on matters of government, in regards to ionized radiation, we were too focused on being radiographers. The knowledge we took to be self-evident and obvious, about the dangers and consequences of radiation, and on which we founded our arguments, was not. We were not being heard – or understood.

Therefore, we, the Danish Council, decided to challenge ourselves, by asking. What would it take to - once and for all - establish the foundation for our arguments?

The answer, we decided, was a conference about radiation protection. A scene from which to establish that ionized radiation is dangerous. That radiation can have negative consequences for the patient. That, with all the positive aspects it brings to modern diagnostics, there also follows a risk of damaging the DNA.

A scene to sat, that while that risk puts a great responsibility on the practitioners treating the individual. It also puts a great responsibility on the policymakers who defines the boundaries within which the practitioners exercise their craft.

Lobbying

The means, by which the Council set out to archive their goal, was through political articles in newspapers, personal meetings with members of both the National and Regional Parliament, and by participating in the "Folkemødet" - The People's Political Festival.

"In other words, we have been actively lobbying. Our massage a simple one. That xrays should be used with care ... by both practitioners and politicians alike", says Charlotte Graungaard Falkvard.

"When it comes to xrays. That which may be a statistical uncertainty, in relation to the risk, for the individual, is a statistical certainty when considering the consequences for the Danish Society as a whole."

Our point being, that if we know, that we as a society, statistically are killing citizens every year by radiation-induced cancer, due to our use of xrays in diagnostics. then we are all obliged to make efforts to use only as little as absolute necessary.

And it payed off

Wednesday November 11, 2015 the Danish Council of Radiographers was host to a conference about radiation protection. The conference was co-hosted with Mr Flemming Møller Mortensen, member Parliament and Spokesman on health for one of the "Socialdemokratiet", and member of the parliament's health committee.

Denmark Charlotte Graungaard Falkvard and Haakon Hjemly (Norway)

The scene was the Christiansborg building – the actual Danish Parliament. Among the attending was members of Parliament, many also members of the National Health Committee, members form the regional Parliament's Health committees, representatives from the Danish Health Authority's Department for Radiation Protection, along with representatives from professional organisations, patient associations, and a wide array of health care professionals from across the Danish Healthcare Sector. ▶

The conference

During the first course of the conference, a number of guest speakers were invited to give an insight into what ionizing radiation is, how it works and how the legislation is in this field, along with different political views from professionals, politicians, and stakeholders.

During the second part of the conference, representatives from the Danish Council presented some of the challenges in modern diagnostics, which are evident from our perspective as practitioners.

They also presented the Danish Council of Radiographers proposal on how xrays can be used with care, through:

- The introduction of a national xray record for each individual that stores ALL the information regarding any xray a patient receives through their lives.
- The introduction of National Clinical Guidelines for the use of radiology in Denmark.
- The introduction of a "broker" system that would allow access to all patient data across our regions' different computer systems.
- The introduction of minimum requirements for education in radiation protection for ALL who would work with ionizing radiation.

And we couldn't have wished for a better stage from which to raise a debate about the radiation protection in Denmark, or a more suited audience form which to ask the questions:

- Do we need to use so much radiation in Denmark
- Can we do better
- Can we do it differently and
- Can we do it more effectively

"We all need to recognise, that it is possible to do something about the impacts and consequences the use of ionizing radiation has", says Charlotte Graungaard Falkvard and continues:

"It is a central part of our professional DNA, to speak up, when we observe unnecessarily use of radiation, or when there are doubts about the safety of the patients. This is what justifies our authority as radiographers and that authority demands commitment.

Our hope was to make an actual difference by inviting all the stakeholders to recognize the impact of ionizing radiation, and encourage them to work together to reduce the amount of unnecessary radiation we inflict on the Danish patients.To tell them, that we can reduce the amount of medical radiation the population receives, and thus make radiation protection better, and more, improve patient safety. That we can do it without compromising the diagnostics, and that we can do it by thinking things differently… and just by using X-ray wisely with care.

IAEA's Consultant's meeting on
Clinical audit in radiology

Vienna, Austria
August 2015

Report by **Dimitris Katsifarakis,** Regional Director Europe

Clinical Audit has become a key issue procedure towards establishing quality functioning imaging departments.

CLINICAL Audit in Radiology (CAR) has been acknowledged within Europe through a European Council Directive (No.97/43/Euratom) and is under consideration in other regional areas. Moreover European commission issued the document "European Commission Guideline On Clinical Audit', RP-159 on 2009."

CAR has attracted also the attention of the IAEA for many years and as a result a publication under the title "Comprehensive Clinical Audits of diagnostic Radiology Practices: A tool for Quality improvement (QUAADRIL document)" has been issued by the IAEA on 2010. Throughout the 192 pages of the QUAADRIL document the reader can find detailed guidelines for a comprehensive audit which can be adopted by those who want to perform a CAR.

Clinical Audit Team should be consisted by a radiologist, a medical physicist and a radiographer who should preferably have managerial experience according the IAEA's QUAADRIL publication.

The Department of Nuclear Sciences and Applications, Division of Human Heath Dosimetry and Medical Radiation Physics Section and Nuclear Medicine and Diagnostic Imaging Section (NMDI) organized a Consultant's meeting in the IAEA's headquarters in Vienna to review audit requirements in diagnostic radiology and develop /review IEAE QUADRIL training material.

As a radiographer and hospital ex-CEO, I had the honor to be invited to participate in that 3 day meeting, in August 2015, reviewing the QUADRILL document. The total group of participants was limited to 12, consisting of radiologists, medical physicists and radiographers.

As a board member of the ISRRT I stressed the importance our international organisation pays to the functioning quality of the imaging departments for the benefit of our patients.

I also had the opportunity (once again) to receive the respect and the expectations of the Division of Human Health of the IAEA to work with the ISRRT.

The IAEA's QUAADRILL document can be downloaded for free from the IAEA website: http//:www.iaea.org/Publications/index.html

The EU Clinical Audit RP-159 can be downloaded for free at the EU website http//:Europa.eu

More similarities in practice issues affecting countries around the world than professionals realise –

Professional Practice view of South Africa's meeting

Report by **Donna Newman,** Director of Professional Practice ISRRT

I had the opportunity to be asked to give the keynote lecture along with Christoph Trauernicht, from the IRPA at the **2015 SA Imaging Congress** meeting, jointly hosted by the Society of Radiographer of South Africa and the Radiological Society of South Africa in Johannesburg, South Africa in October this year.

I WAS to speak on Health Care 2015 - Justification and Optimization; is it an individual or team approach. Christoph covered dose limits and the optimisation and justification of dose as a Medical Physicist and I covered the technologist role in team approach to justification. The timing was perfect as Stewart Whitley and I had been working on the ISRRT's response to the Bonn Call-to-Action item on justification and we had just finished our guideline for technologists to use in daily practice with respect to the team approach to Justification. There was a perfect platform for educators, radiologists and technologists on how each person on the health care team plays an important role in Justification including the technologist. This topic gave rise to lots of good networking and collaboration during the meeting with both radiologists and technologists from South Africa.

I also had a chance to speak on a subsection of the program called dose optimisation, justification and ethical considerations.

Dr Fozy Peer talked on the subject of the ISRRT being the voice for radiation protection in technology worldwide. Chris Trauenicht spoke on practical tips on dose optimisation and I addressed the topic of occupational radiation protection in medicine from a technologist's perspective and the title of Hesta Friedrich-Nel's talk was; Dose Justification and Optimization – how committed are we in South Africa? This was followed by a panel discussion group with other leaders from South Africa including our ISRRT President, Fozy Peer. The audience included radiologists where there were discussions about imaging practice issues facing the profession in South Africa. Several 10 minute presentations were given about the important issues that are currently facing the radiographic profession at this time including role extension as related to reporting, contrast injection that need to be approved by the national licensure board, the Health Professions Council of SA (HPCSA). Forensic imaging related to available equipment and whether the radiographer requires separate training in forensic radiography was also discussed. The importance of dental radiography both pre-and post- mortem was addressed. The panel discussions on practice issues affection the profession in South Africa aroused much interest and debate from the audience. It was during this panel discussion that I realised as a technologist we all face many similar issues just at different stages of the practice.

Another thing I learned at this meeting was that South Africa is a leader in the radiography profession having legislation mandating licensure for technologist to practice since the early 1970's. They also have a licensing board (Radiography and Clinical Technology Board with representation on the Council of the HPCSA). The legislation also mandates a certain amount of continuing education credits or as it is called in some part of the world as continuing professional development. The radiologists in South Africa do not have their own Board but belong to the Medical and Dental Board representing them on the HPCSA Council. I applaud this accomplishment to South Africa.

I found this very interesting as I am from the United States and in our country we only have voluntary standards since 1981 for educational requirements and I have with and our national organisation been involved in trying to get national legislation passed call the CARE bill for the past 13 year with no success as yet. Each of our states in the United States has varying laws some, for example,

Congress convenors Prof Leon van Rensburg for RSSA and Dr Fozy Peer for SORSA with the invited key note speakers, Donna Newman and Christoph Treunicht.

New York is similar to South African some states do not have any laws related to this. Some states make you take an additional radiation protection test and mandates continuing education specific to radiation protection while others do not. I personally as a professional I have been actively helping with our legislative committee in the state of North Dakota to try and get legislation passed since 1997 and I am proud to say that we finally got a law that mandates education for radiology, nuclear medicine, ultrasound and radiation therapy. As a professional I have learned over time that you have to stay the course and never give up for the sake of the patients we serve and eventually success is attained. I am happy to say that our national registry for our profession mandates continuing education so I do believe this is a very good safeguard for patient care in our country.

Lot of discussion happened between the radiologist and the technologist regarding Intravenous Contrast injections not being in the scope of practice for technologists in South Africa. At first one would say this is globally accepted basic skill set of technologist and should be within the scope of practice for technologist in this country. What is the hang up on this professional issue? While the technologist are asking for about 120 hours of education regarding the subject radiologist don't necessarily think this is necessary and will support the practice under certain conditions as a radiologist in direct supervision of the injections. I even think my own country and think we learned this in entry level course as a technologist for IVP's. In the United States you have to have indirect supervision of a radiologist but they have to be readily available in case of a reaction. Now after listening to the technologist discussion I have to applaud the technologist for standing their ground regarding the practice and education they are asking for regarding this practice within their country to protect the patients they are serving. As a practice issue you really have to look at the laws of the country and how the practice can be affected by these laws.

South African registered radiographers may set-up their own private practice and may own equipment. It is not currently in their scope of practice to inject contrast media. The Society of Radiographers of SA have requested the HPCSA to include this in the scope of the radiographer provided the radiographer can prove accredited training which includes education on how to handle reactions to contrast media and basic resuscitation.

I applaud the technologist in South Africa for taking their duty of care under consideration and ensuring that the educational components meet the national laws within their country.

The final professional practice issue that was discussed was role extension for radiographers to train in reporting in specific areas. The lack of sufficient radiologists in the country to provide reports on all images was cited as a reason for the requested extended role of a radiographer. Many centres already perform 'pattern recognition' but may not legally report in writing on radiographic images (except for Ultrasound). While this is a new practice in the United States calling this new profession a radiologist assistant and a very old practice in the UK varying practices are happening depending on the countries laws with respect to this role extension for radiographers. It is still a complicated professional issue facing the technologist in South Africa. Much consensus building happened during the panel discussion with the radiologist saying they are in support of the concept and just need to work out the details of what will be included in the practice. I know change takes lots of time in our profession and I am hopeful that this issue for South Africa can be moved forward between the two groups and have a positive outcome for the patients of this country.

It was so apparent the dedication and leadership that the technologist had to the profession. Lots of great discussion and dialogue was heard between the two groups (Radiologist and Radiographer/Technologist) mainly at this panel meeting and throughout the entire meeting. What is did garner is the fact that the radiologist were supportive of the radiography profession for role extension and hoped to work out the detail over this next year.

So as the Director of Professional Practice for the ISRRT it is important to remember that change takes time and it takes many meetings and years to come to consensus on professional issues that affect laws within a country.

As professionals I urge you to never give up, and continue to work toward the common good of our patients. Just know that because of your dedication as professionals all over the world you are aiding in elevating patient care. We are all challenged with similar scenarios facing our profession just at different levels. Continue to stand and protect the patients' best interest and reach consensus with all stakeholders, it can only better practice standards around the world.

So you can see as professionals around the globe we all face similar professional issues to protect the patients we serve. I am proud to have had the chance to share in the professional practice issues facing South Africa. South Africans are leaders in the world related to the licensure laws and something that other countries could model themselves on. South African Radiographers can also garner information from other countries related to professional practice issues. Thank you South Africa for the hospitality and a chance to share in you joint meeting with the Radiologists and Technologists.

On a personal note I was simplify delighted to have the opportunity to share a professional moment with my friend Dr Fozy Peer (ISRRT President)as she received Honorary Membership of SORSA, along with two other South African professional's Hesta Friedrich–Nel (ISRRT regional Director of Education) and Ferial Isaac of the Society of Radiographers which is the equivalent of a Life Membership in my national Society (ASRT). As I shared time with each of these professionals at the conference it was so apparent the dedication to their professional society and the amount of work they contribute to their profession. So few professionals receive such an honor in their career and when I asked Fozy how long she had been actively involved in her society she stated twenty five years. I have to say it will be a moment I will remember and feel blessed been there to celebrate my professional friends from the ISRRT moment of achievement.

ISRRT response to the Bonn Call-for-Action

Report by **Stewart Whitley,** Treasurer ISRRT and **Donna Newman,** Director of Professional Practice

New International BSS calls for a team approach to justification and authorisation of medical exposure – what role can the technologists/radiographer play in justification and authorisation

Overview

The "International Conference on Radiation Protection in Medicine: Setting the Scene for the Next Decade" was held December 3-7, 2012 in Bonn, Germany. It was organised by the International Atomic Energy Agency (IAEA), co-sponsored by the World Health Organization (WHO), and hosted by the Government of Germany through the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. The Conference had the specific purpose of identifying and addressing issues arising in radiation protection in medicine, and aimed to:

- indicate gaps in current approaches to radiation protection in medicine;
- identify tools for improving radiation protection in medicine;
- review advances, challenges and opportunities in the field of radiation protection in medicine; and
- assess the impact of the International Action Plan for the Radiation Protection of Patients, in order to prepare new international recommendations, taking into account newer developments.

Participants from 77 countries and 16 international organisations attended the Conference, and an important outcome was the identification of responsibilities and a proposal for priorities for stakeholders regarding radiation protection in medicine for the next decade. This specific outcome is called the Bonn Call-for-Action. It is a statement that identifies the main actions considered to be essential for the strengthening of radiation protection in medicine. Participants and organizations who attended the Conference expressed the need for a joint statement to be issued by the IAEA and the WHO.

The joint position statement to the Bonn Call-for-Action by the IAEA and WHO, published July 2013, identified ten major actions and related sub-actions as being essential for the strengthening of radiation protection in medicine over the next decade. The actions can be found at http://www.who.int/ionizing_radiation/medical_exposure/Bonn_call_action.pdf and are listed as:

- **Action 1: Enhance the implementation of the principle of justification**
- **Action 2: Enhance the implementation of the principle of optimisation of protection and safety**
- **Action 3: Strengthen manufacturers' role in contributing to the overall safety regime**
- **Action 4: Strengthen radiation protection education and training of health professionals**
- **Action 5: Shape and promote a strategic research agenda for radiation protection in medicine**
- **Action 6: Increase availability of improved global information on medical exposures and occupational exposures in medicine**
- **Action 7: Improve prevention of medical radiation incidents and accidents**
- **Action 8: Strengthen radiation safety culture in health care**
- **Action 9: Foster an improved radiation benefit-risk dialogue**
- **Action 10: Strengthen the implementation of safety requirements globally**

Since the Bonn Call-for-Action meeting the new Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (BSS) was published by the International Atomic Energy Agency (IAEA) as General Safety Requirements Part 3 in July 2014.

The ISRRT was as a stakeholder and participant at the Bonn Call-for-Action meeting making a number of positive contributions and as a result the ISRRT followed this up by producing their own response called the 'ISRRT Action Plan to the Bonn Call for action'. This was adopted at the January 2015 ISRRT board meeting in London.

This document, which can be found on the ISRRT website, outlines specific areas that the ISRRT will concentrate their resources and effort to over the next four years.

The ISRRT Board believes that work in these areas will help radiographers and technologists to contribute positively to the safe and effective use of radiation in medicine.

The first initiative and response to the ISRRT Action Plan is that undertaken by Stewart Whitely and Donna Newman who have worked focused on The Bonn Call-for-Action 1 which addresses the issues that relate to the enhancement of the principle of Justification and Action 10 which addresses the strengthening the implementation of safety requirement globally.

The aim is to:

a) Add a section on the web site to promote and post information on Justification and the contribution of the radiographer/technologist
b) Develop decision tool on Justification relating to the role of radiographer in the health care team house on ISRRT website and present to HERCA
c) Produce a policy document which supports and influences the implementation of the BSS

The overall objective is to produce a common approach to Justification and Authorisation of medical exposures across all countries and healthcare settings. ISRRT believes that common approach, with a defined pathway, will assist radiographers and technologists in understanding the principles and their role of justification and authorisation process and provide some helpful and practical information to enable this to happen successfully.

Background Information

The two principal cornerstones of radiation protection of a patient are optimisation and justification of the medical exposure. Much is still needed in the area of Justification in the day to day practices in Hospitals and clinics through the world to ensure these two principles are met. In the old BSS, the role of Justification was described as the referring physician's role while in the new BSS defines the role to involve more than just the referring physician including the radiologist for consultation for appropriate justification. To understand Justification completely and how it works it is important to review the three level's and how they fit into the BSS.

Level 1 which is the Justification of the use of radiation in medicine which is covered in the BSS in paragraph 3.154 describes the most general level of believing that radiation in medicine is accepted ▶

as doing better than harm and that the benefits outweigh the risk. Level 2 is the Justification of the defined radiological procedure. This is dealt with in the BSS in paragraph 3.155 and is defined to include the Health Authorities in conjunction with national professional bodies to determine the specific evidence based guidelines and appropriateness criteria for different radiological procedures. These guidelines should be reviewed as new technology advances.
Level 3 is the Justification of the procedure for the individual patient. This is defined in the BSS under paragraphs 3.156 and 3.157 is the application of the procedure to the individual patient is justified in order to perform the medical exposure. These two requirements of the BSS ensure that the individual medical exposure is justified in advance taking into account the specific objectives of the exposure and the characteristics of the individual involved. Particularly this third level is where active participation of each member of the health care team will share a different aspect of responsibility for justification process.

Donna Newman and Stewart Whitley

The second and third levels of justification are a common part of the everyday operations of hospitals and clinic medical imaging deptments. In the new BSS Justification in general is delegated to a member of the imaging team specifically the radiological medical practitioner (radiologist) but it is important to understand that the entire Health care team contributes to both level two and level three to ensure Justification happens effectively and that good communication through a team approach will produce the best method for success.

Each member of the health team (referring physician, radiologist and technologist/radiographer) can use their resources including evidence based guideline, appropriate use criteria and departmental protocols to assist them in their process of Justification and Authorisation.

While a referring physician may use appropriateness criteria to request a study which they understand has the lowest radiation dose a Radiology Department may use referral guidelines in a very different manner.

The imaging team comprising the radiologist, technologist/radiographer and the medical physicist will use appropriate criteria and guidelines that are developed with a strong evidence base to build their protocols for each diagnosis for a specific disease process which is the responsibility of the lead radiologist. While each member has a distinctive role; the radiologist providing the input to the clinical referral guidelines; the radiographer/technologist is providing image acquisition protocols of the relevant imaging modality and the physicist providing information on how to achieve the best image with the lowest dose achievable to obtain a high quality image with input from for the radiologist to read reads the image. This practice of producing protocols needs to be audited as new technology become available or updates on software of equipment is released to ensure the highest image quality to the patient which in turn contributes to the radiation protection.

The radiological medical practitioner (radiologist or in some countries a radiographer/technologist working in accordance with guidelines issued by the radiological medical practitioner) serves as the gate keeper for the imaging department but this depends heavily on all members of the imaging departments health care team to do their part in the protection of radiation exposure to the patient.

Without the team approach many aspect of the protection of the patient can be missed. It is unlikely in common day practice that a radiologist can see all requests for justification and authorisation before the patient is exposed to radiation. It is more common than not that the technologist/radiographer will bring the requests to the attention of the radiologist when the request is not appropriate because of missing information or when the patients history doesn't support the request for imaging.

There are some common areas that requests for imaging are protocoled for appropriateness before the exposure is made i.e. CT and MRI are two modalities where this is common practice but for all the other procedures this may not happen and it is therefore, in cases of concern, the technologist/radiographer has a duty of care to review the justification criteria before the exposure is undertaken. Thus using a team approach.

When following this practice radiographers/technologists will bring their concerns to the attention of a radiologist or a radiographer/technologist who has been delegated the task of justification and authorisation according to an agreed protocol which may be the case is some countries.

Discussion then must take place between the referring medical practitioner and the radiological medical practitioner to resolve the matter which may end result in the request being modified to a more appropriate procedure or the request being cancelled with the reasons documented in the patient's notes or the examination continues to be performed.

Conclusion

One may ask why we are making our member aware of this important team approach to justification and authorisation.

There are many reason why imaging requests for procedures using radiation are ordered inappropriately by referring physicians. World Wide peer review studies published information showing that ▶

referring physician ordering procedures underestimate patient radiation exposures often and this can contribute to the overuse and increase in public's exposure to ionizing radiation.

One peer study, Physician Knowledge of Nuclear Medicine Radiation Exposure *Radiologic Technology*, November/December 2013, Volume 85, Number 2 reviewed 14 studies from eight different countries including the United Kingdom, Northern Ireland, Hong Kong, China, Belgium, The Republic of Ireland, Iran, Canada and Australia to study the question about physicians knowledge of patient radiation exposures in nuclear medicine and CT. The aim of this study was to use a systematic review to assess physician knowledge of patient ionizing radiation exposure from nuclear medicine diagnostic procedures and relate it to physician knowledge of radiation exposure from CT imaging. "The hypothesis is that physician knowl¬edge of patient ionizing radiation exposure from nuclear medicine and CT procedures will be similarly insufficient review. This study demonstrated the important concept that underestimate and overestimate radiation exposure of radiology procedure on a regular basis. In a meta analysis of committee report on health risks from low-level exposure to ionizing radiation con¬cluded that lifetime effects of 1-time exposures less than 100 mSv were difficult to estimate, but a 1-time exposure of 100 mSv increased lifetime risk of cancer development by 1%".[2]

This study proved that a worldwide knowledge deficit exists among physician and physician trainee about patient exposure to ionizing radiation from nuclear medicine studies. The study also demonstrated that this same lack of knowledge also existed as well in CT procedures. The study concluded that physician that are ordering these procedures and are underestimating patient exposures can be contributing to the overall increase in public radiation exposure over the past decades which in turn contribute to cancer risk in general. It was suggested that algorithms could aid physician with more education regarding patient radiation exposure with perhaps evidence based appropriate use criteria might reduce exposure rates to the public.

Interestingly a similar outcome was discovered in a related peer review study on referring physician's knowledge on medical exposures in diagnostic imaging in Africa where the author found of the 151 referring physicians at a university affiliated hospital in Cameroon the concepts of "useful exam and Justified exam were not know by 113 or 78.8% and 95 practitioners. Also interesting was the fact that MRI was selected as irradiating by 62 or 41.1% and SPECT and PET scan as non radiation examinations by 98 or 64.9% and 115or 76.1% of the participants. Only 11 clinicians knew the terminology of Justification and Optimization and limitations to radiation protection. The conclusion of the study was "The knowledge of physician on radiating medical procedures and justification of requests for these procedures is inadequate. Training in radiation protection and the introduction of guideline for the proper use of imaging test could improve physician's justification of radiating examinations.[3] "Referring Physicians' Knowledge on Justification of Medical Exposure in Diagnostic Imaging in a Sub-Saharan African Country, Cameroon. Moifo, B., et al. (2014) *Open Journal of Radiology*, 3, 60-68.

As can seen peer review studies worldwide demonstrated a lack of knowledge on radiation exposure in all of the medical imaging modalities as sited above. The need for more education in the principle of radiation protection in the form of Justification and Optimization is needed worldwide.

Until the education and training for referring physicians is brought up to an acceptable level a team approach is essential with each member of the health care team contributing to the overall justification process. This best practice will produce the best outcome for the patient in healthcare today in relation to radiation protection. While different countries have varying regulations the overall concept can be incorporated with all countries.

For instance in countries where a radiologist is in every hospital and clinic the concept of referring physician consulting with the radiologist can be incorporated into the justification process. For those countries that don't have a radiologist in every clinic or hospital and where it applies with regulator processes, the Authorization may be carried out by either the practitioner or a radiographer (medical radiation technologist ref. BSS) working to the guidelines issued by the medical radiation practitioner.

In some countries the radiographer/technologist acts as the practitioner for different radiological procedures so in these countries the radiographer/technologist can help with the consultation process using a departmental adopted protocol.

Countries where the radiologist isn't present in the hospital or even the country and when images are being reviewed using Telemedicine the radiographer/technologist play a vital role in the role of justification and authorisation.

It is good practice when developing and implementing protocols and improvements in practice for Justification that these should be tested against the 3A's, i.e. Awareness, Appropriateness and Audit (Clinical).[1]

The ISRRT web based decision tool for radiographers/technologists for the justification and authorisation of imaging procedures using ionizing radiation can be found at www.isrrt.org

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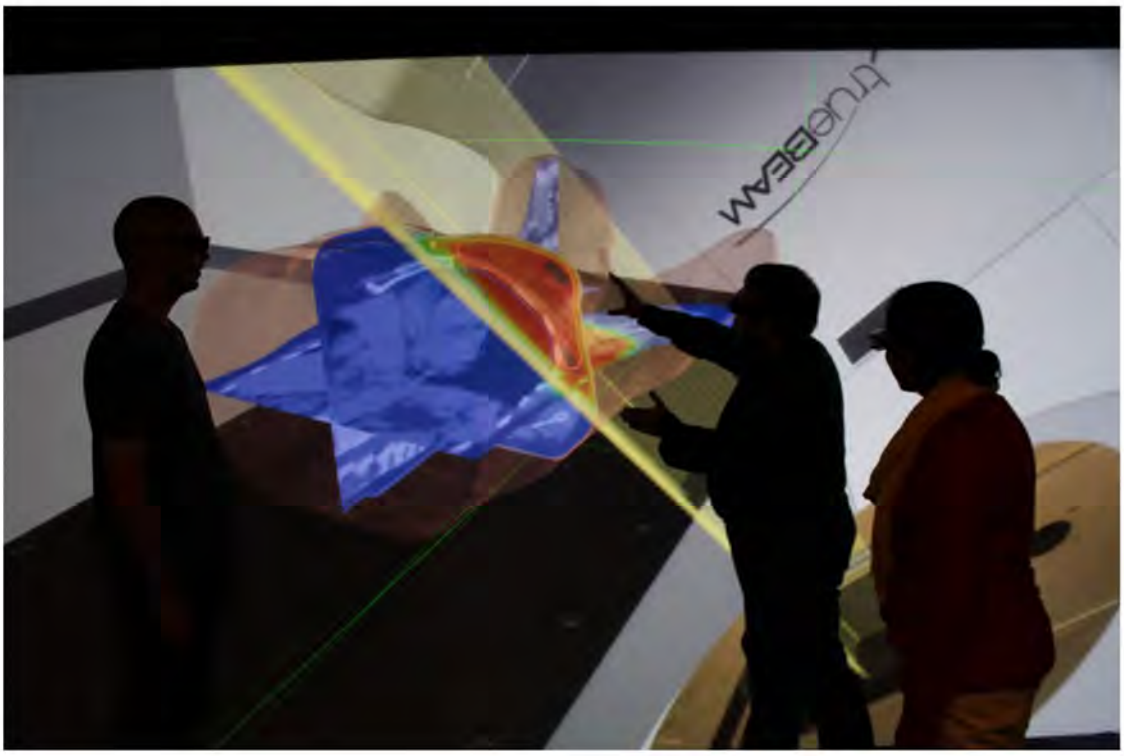

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Technologist voice represented at
Consultancy to address Member state comment on the draft Safety Guide DS399

Vienna, Austria
July 6-10, 2015

Report by **Donna Newman,** Director of Professional Practice

As an organisation the ISRRT has committed to the Bonn Call-to-Action and the implementation the 10 action items that came out of this meeting. In response to this call-to-action the ISRRT developed their own ISRRT response to the Bonn Call-to-Action and under action item 10 strengthen the implementation of safety requirements globally we are focusing on the subsection of this item Development of practical guidance's to provide for the implementation of the International Basic Safety Standards in health care globally. We will continue to educate our members as any event that contributes to this implementation of the BSS happens that we are a part of. As a global voice for technologist we want to continue to strengthen radiation protection and safety in medical uses of ionizing radiation globally.

The technologist voice was represented at the Draft Consultancy meeting on the Safety Guide DS399 (Radiation Protection and Safety in Medical Uses of ionizing Radiation held at the IAEA Headquarters on the week of July 6-10, 2015. The purpose of the meeting was to review and address collected comments from Members States and professional organizations, and to prepare an updated draft of the document DS399, which will be then finalised by the technical officer for presentation to the Radiation Safety Standards Committee.

The IAEA invited experts from the core writing group of the DS399 to review the comments that were submitted. The group included two technologists Mary Coffey (Ireland) from the Radiation Therapy writing group along with myself Donna Newman (USA) from the Nuclear medicine writing group. Also invited to the consultancy group was Dr Maria Perez from the WHO, representing the physician's voice, and two Physicist form the core writing group, Anthony Wallace (Australia) and Cari Boras (USA). Jena Vassileva coordinated the meeting and acted as the technical officer to incorporate the accepted comments back into the draft DS399 document. Also in attendance for expert input from the NAHU of the IAEA was, Ahmed Meghzifene, Harry Delis, Gian Luca Poli, Brendan Healy, Karen Christraki, and Ola Holmberg from RPOP. IAEA and several staff from the Radiation section of the IAEA contributed their expertise throughout the week of review including John Heron (New Zealand) author of the Safety Series

Invited expert reviewgroup and IAEA staff.

who the previous coordinator of the writing groups of the DS 399 and author of the write of this draft series who has retired from the IAEA was invited as an expert and to ensure history of the document for the new invited guests.

A total of 847 comments to the IAEA had been collected through the official channel by the deadline from Members states and professional organisations. Five international organisations were officially asked to review the draft DS399 including professions representing the technologists (ISRRT), Radiologists (ISR) and the Physicist (IMOP), WFNMB and ESTRO.

I am happy to report that the ISRRT submitted a total of 177 comments for review from its member countries. Once again your expertise and dedication to our profession showed in the detailed responses the ISRRT received from its members on comments of this draft document. As director of Professional Practice I combined and submitted all comments in their original form to be considered. The ISRRT board wanted to thank everyone who took the time to review this important document and submitted expert comments to be considered in the draft DS399 the technologist voice showed real leadership in our profession.

A breakdown of the 847 comments was as follows with 49 general comments on the safety series as a whole being reviewed. Chapter one which is the introduction, background, scope and structure of the book received only two comments.

Chapter two covered the general recommendation for radiation protection and safety in medical uses of radiation including the types of exposure situation and categories of exposure, applications of the radiation protection requirements, graded approach, roles and responsibility, and education training, qualification and competence had a total of 178 comments submitted to be reviewed. The group met the first day and half of the second day of the meeting to address these comments ensuring that expertise was available for all comments submitted for consideration.

The group then broke into sub-groups to review the comments received on the specific recommendations for radiation protection and safety in Diagnostic radiology and Image guided interventional procedures (Chapter 3), Nuclear Medicine (Chapter 4) and Radiation Therapy (Chapter 5). Chapter three received a total of 226 comments, Chapter 4 201 comments and Chapter 5 177 comments to be reviewed and considered. Each speciality group took the comments related to their expertise on the appendix which received 14 comments for consideration.

One important comment that was received from the ISRRT and technologist voice was asking the term radiographer to be used to describe our professional instead of medical radiation technologist which is the term used in the Basic Safety Standards. I wanted to help educate our profession that as a safety series which is a supplement of the BSS we have to use the terms defined in the BSS. As a profession we will have to keep this in mind and work toward changing this term in the next revision of the BSS. One important thing to note with the many comments received regarding this was world wide the excepted term radiographer is that the safety series

Cari Boras and Donna Newman at IAEA Headquarters.

writing group decided to add a new paragraph in the beginning of each speciality chapter explaining the term from the BSS medical radiation technologist and adding the more widely and commonly used terms used to represent our professional roles. So you can see here that as experts in the field our voice is heard and changes can be made to address our concerns. If we take the time to review and send our comment forward to represent our voice we can impact the outcome of these documents. .

Also accepted were our comment to included evidence based to the referral guidelines, adding the radiographers to the section on providing radiation protection and safety training for health professionals

In the specific chapters many comments were accepted or accepted with modification including bioassay requirement to be included, cultural sensitivities to be included, clarification on fume hoods as well to just mention a few that were considered in my subgroup on the chapter on nuclear medicine. The group got together on the last day and reviewed any comments that might be cross referenced in all of the chapters or any comments that needed more involvement of expertise to decide if accepted or accepted with modification or rejected.

A Training Course on Implementation of the IAEA Safety Guide on Radiation Protection and Safety in Medical Uses of Ionizing Radiation was held November 2-6, 2015 in Vienna where member states sent delegates to learn about the new safety series. I have been asked to give lectures on optimisation of protection and safety in medical exposure in Nuclear Medicine Operational considerations for diagnostic NM, optimisition of protection and safety in Radiopharmaceutical Therapy – Dosimetry and operational considerations, Management system for radiation protection and safety panel discussion: Experience from countries as well as Roles, responsibilities and competences for radiation protection in medical uses of ionizing radiation the role of professional organisations. We will report out the outcome of this meeting as well.

As Director of Professional Practice for the ISRRT I believe we are making good contributions to elevating global standards in countries throughout the world. I thank everyone that continues to contribute to radiation protection and safety in medical uses of ionizing radiation.

ISRRT participates in training course on Implementation of the IAEA Safety Guide on Radiation Protection and Safety in Medical Uses of Ionizing Radiation

Vienna, Austria
November 2-6, 2015

Report by **Donna Newman,** Director of Professional Practice

NOVEMBER 2-6 the IAEA held a training course designed to meet the basic requirements of the International Basic Safety Standards for Radiation Protection and Safety of Radiation Sources. (IEA Safety Standards Series No. GSR, Part 3) in cooperation with WHO, PAHO and ILO at United Nation. More than 50 representative from member states including regulatory representative, health authorities radiologist, technologist and physicist participated and exchanged practice experience and approaches on how to implement the new safety guide.

The five day course was divided into in dept training on roles and responsibilities and competencies of each professional including how to collaborate with regulatory bodies and health Authorities.

Of note was the role of professional organisations identified in the BSS and safety series which is covered in Chapter 2 Section 2.61-2.69 which defines the role of professional Bodies in contributing to the Radiation Protection and Safety in medical uses of ionizing radiation. Setting Standards for education which includes:

- Setting Training Standards
- Setting Qualifications and Competence for given Specialty
- Setting Technical standards
- Giving Guidance on practice
- Development of referral guidelines and appropriate criteria for use in Justification of medical exposure in individual patients
- Adopting and developing resources Quality Management System
- Encouraging Members to contribute to safety reporting and learning Systems (SAFRON) and ROSIS
- Disseminate Information on Standards and Guidance relevant to radiation Protection and Safety
- With Health Authority and radiation protection regulatory body establishing:
- DRL's
- Dose constraints
- Carers and Comforters
- Volunteer in biomedical Research
- Criteria and guidance for release of patients after

All four international professional organisations were invited to give presentations on how their organisations were contributing to meeting these standards within their organisations including

the ISR, IMOP, ESTRO and ISRRT.

Donna Newman Director of Professional Practice for the ISRRT presented how the ISRRT was addressing this section including our document on Benchmarking Curriculum analysis document and guideline for Education of Entry level Professional Practicing on in Medical radiation Science, ISRRT Collaborates With IAEA, WHO ,HERCA, International Professional Organizations and other international NGO's on Stakeholder projects that affect our profession including the successes that have happened in the last few years (WHO-Communication Radiation Risks in Pediatric Imaging to support Risk-Benefit Dialogue(For Referring physicians), Joint Position Statement on the IAEA Patient Radiation Exposure Tracking ,Referral Guidelines for Diagnostic Imaging For referring Physicians. The ISRRT commitment to updates on the BSS and Safety series in on their Website and official News and Views, the ISRRT Response to Bonn Call-to-Action including Action 10: strengthen the implementation of safety requirement globally promoting the new BSS, ISRRT Workshop 2015-2016 and the ISRRT's new Web based decision tool for radiographers for the Authorisation and Justification of imaging procedures using ionizing. Although the ISRRT has been involved with many more projects I tried to highlight projects that were directly related to the BSS and Safety series.

Core members from the writing team of the Safety series were invited and presented in depth guidance on how to meet the requirements in the BSS which are spelled on in the Safety series. Session were dedicated to detailed discussions on how to improve radiation protection of patients, staff and public in diagnostic radiology and image guided interventional procedures, in nuclear medicine and in radiation therapy, and actions needed to prevent unintended and accidental exposure. Several powerful tools are identified in the BSS for optimisation of protection, including equipment design and maintenance, quality assurance program, equipment quality control, calibration, patient Dosimetry, as well as optimisation of protocols for procedures, taking records and performing periodic reviews. I spoke on the nuclear medicine Chapter giving three presentations and participated in two panel discussion on the specifics of these tools and detail as it applies to nuclear medicine.

free e-book for ISRRT members

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

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

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

As part of the BIR's open access initiative, BIR Open, the eBook version is

FREELY AVAILABLE ONLINE at:
www.birjournals.org/site/books/ultrasound.xhtml

as well as in print

Whether the health economic systems are influencing radiology?

Report by **Dimitris Katsifarakis,** Regional Director Europe

Why the health care market failure? The origin of the health economics.

In an ordinary market, the client uses their knowledge and the resources available in order to make purchases which will cover their needs. Depending on their knowledge, their needs and the money that they possess, they compare prices and products in order to make informed decisions on what to buy.

When it comes to their health care, the client do not have a specific knowledge, so they seek a physician. The physician has asymmetrically more knowledge than the patient and in that way they act as the patient's agent when it comes to the purchase of health services. In cases where the patient is covered by a social security plan (that means broadly that somebody else will cover the bill), neither the patient nor the doctor are interested in the cost of the health care services. This may lead to over-utilisation of services or, in other words, to a moral hazard[1] to the social security system. This creates health care market failure.

Health economics are interested in how health care market failure can be confronted. The issue becomes even more complicated because the sources of the society are scarce at the same time that the needs are unlimited.[2] Therefore, societies have to allocate their scarce sources amongst health and the other goods that they provide (such as education, transportation ect).

The question is not only how to allocate the resources amongst health and other goods, but most importantly, on how to allocate the scarce resources within the health care sector itself. Within this sector, the demand of health services is unlimited. Opportunity cost is a key concept in order to approach this issue. It has been described as expressing "the basic relationship between scarcity and choice". For instance, the opportunity cost of buying a new scanner might be not to have a refurbishment on the reception area of your department. This cost of the lost opportunity of the refurbishment as a second alternative choice of the budget's usage, represents the opportunity cost and reassures the good or the bad use of them.

The notion of opportunity cost plays a crucial part in ensuring that scarce resources are used efficiently. This is because societies express major concerns about the following issues:

- How much are we willing to spend to save a life?
- How much do we value quality of life, or patient satisfaction, against cost?

Thus, health economics is used to orient policies on

- Which services must be produced?
- How many sources will be allocated for those services?
- Which way and on which combination those services will be produced?
- Who will provide them and which way they will be used?'

Moreover, health economics evaluate multiple types of financial information, such as costs, charges and expenditures.[3]

In this evaluation radiologists, radiographers, physicists, radiology managers must take active part by using evidence based knowledge on the appropriateness and the utility of the imaging services related to each particular clinical question of their clinicians or managerial fellows.

We know, for instance, that an MRI for patient with back pain typically leaves them no healthier, but it does leave them more satisfied. Is it a cost that the citizen taxpayer should bear?

Everyone in a department wishes has to have offered the best available services to patients without would have thought about cost. Unfortunately cost is tightly linked to offered services and somebody must to cover it.

Health economic systems and Radiology departments

Cost for health services becomes more and more unbearable by the working class people.

Unfortunately in the highest percentage of the World's under development countries patients have to buy their health services by their pocket money. It is expected that under no insurance coverage umbrella, only the rich people or those of a political elite can have access to the health services. This is called an out-of-pocket payment health coverage "system": It is practically a "non-system".

In the Europe region but also in other areas of the world, systems have been established based on re-distributional policies to equalise the financial burden of health care and to ensure access on the basis of need and not to ability to pay.

These models[4] in broad description, and in the chronological order they have been developed are:

The Bismarck model: This model was introduced by Chancellor Bismarck in Germany around 1883. In Bismarck model countries health care providers and payers are both private entities. The model uses private health insurance plans, usually financed jointly by employers and employees through payroll deduction, to cover every body and they don't make a profit. Although Bismarck model is a multiplayer one, tight regulation of medical services and fees gives the system a strong cost – control clout.

The Beveridge model: The system was introduced in Britain around 1945.

In this system health care is provided and financed by the government through tax payments. There are no medical bills.

Many or sometimes all hospitals and clinics are owned by the government.

These systems tend to have low cost per capita, because the ▶

government as the sole payer controls what doctors can do and what they can charge.

The core theory of the now-a-days Beveridge model can be summarized as 'services can be provided to everyone, but not everything.

The national health Insurance model: This system has elements of both Bismarck and Beveridge. The provider of health care is private, but the payer is a government-run insurance program that every citizen pays into. The insurance plan collects monthly premiums and pays medical bills. As a single payer covers everybody, tends to have considerable market power to negotiate for lower prices. The national insurance model runs as a non for profit one.

Summarising the above in relation to radiology departments' reimbursement we observe:

Departments working under a health coverage system offer services free or near free at the point of delivery to every patient properly referred to them.

Those Departments are expected to develop a gatekeeper's role by justifying the imaging referral of a patient by assuring the prescribed examination will contribute to address their health problem.

By practicing a gatekeeper's role imaging departments preserve the rare sources of the Society, contributing this way to keep low the overutilization and the consequent moral hazard.

European Rad. Protection Directives,[5] EU's "Referral Guidelines For Imaging", can have a chance to be precisely followed by the departments that working under a Social Security reimbursement system.

To the CONS can attributed the zero financial transaction between the customer and the provider at the point of the service delivery. This may causes an overutilization of the services both from the customer and from the provider, the later for the incentive of the fee for Volume reimbursement.

Governmental bodies attempting to eliminate moral hazard from that free at the point of delivery imaging services have developed mechanisms which are:

- Referral criteria that must be fulfilled in order for a patient to be booked for an imaging examination.
- A pre-determined order of examinations from lower cost to those of a higher cost, associated with the available technology, like an ultrasound imaging as a pre-requirement to a CT referral for an abdominal examination.
- Booking time delays,
- A direct out-of-pocket percentage of an amount that the patient must pay, even though they will claim it later.

Publicity of the protocols and the referrals criteria give transparency to those mechanisms and reducing the public criticism, reassuring also that no one can trespassing them

Despite all the aforementioned methods of patient's coverage, the reality is that the health services are getting more expensive.

From the experience of ever-rising costs, it was realized that cost control alone is not effective.

Policies have to be developed aiming to improve efficiency of service delivery and use.

Developing effective and efficient radiology departments

Radiology departments are units that transform inputs to outputs through the imaging process.

Inputs are the medical referrals of the patients. Main aim of an imaging department is to produce the maximum possible output from a fixed resource, in other words to function efficiently.

Question is what the department considers as an output and how they measure it.

The key word here is the "maximum possible output" in relation to the "fixed cost".

It is the responsibility of every one who is involved in the imaging services to protect the scarce resources of the system by making efficient use of them and by keeping the cost to the minimum.

In the health sector cost is a broad meaning beyond financial expenditures, that also includes time, education and training of the personnel, availability of the imaging units around the clock, etc.

Health Service's funding mechanisms are believed to influence the delivery and quality of patient care.

Private imaging providers are looking for a considerable volume of examinations in a time frame, as their reward comes from the volume of examinations providing.

It is expectable the fee-for-volume funding to be associated with overutilisation of imaging services.

The contribution of the referring physician under the possible existence of any financial incentives it is unquestionable due to the asymmetric information the physician has and the patient lacks. The existence of a Health coverage system which will later pay the bill probably increases the volume of the prescribed examinations, as the Roemer's law states: "Under a Social Insurance payment plan, every offered imaging unit is a usable unit".

When the hospital based imaging departments are reimbursed through global budgets they are expected to have a gatekeeper's role, by exercising the principles of justification and optimisation.[6] Those two pillars of radiation protection are also expected to increase the effectiveness of the department by allocating imaging resources and controlling the radiation risk to patients.

Critical parameter to the effectiveness of radiological departments should be the number of accurate diagnosis in relation to the number of exams produced, booking waiting time, and the radiation dose burden delivered to patients.[7]

The number of exams performed by itself may not be an indicator of efficiency of the department.

If the reimbursement is on a fee-for-volume basis, it is expected the interest of the department to be on the volume of the produced exams in a time frame rather than the accurate diagnosis given to the patient's problem.

It is established empirically that money follow the patients with the more patients treated, the higher the reimbursement to the efficient, flexible providers. This should encourage

departments to meet the needs of their customers which are both patients and their referring physicians. Patients have the need of quality services and referring physicians have the need of an accurate report. Departments also have the task to minimize costs not only by switching to new efficient technologies, but to extend the working hours of the existing facilities, developing this way economies of scale. Modern competitive departments must always ask themselves:

- Do we solve the clinical problem of the patient?
- How accurate diagnosis vs. non accurate do we produce weekly?

Everyone must start to measure value, quality and performance as we transition from a fee-for-volume to a fee-for-value performance. In that case the department creates realistic expectations on the revenue it can have, as more referees trust it, and more patients followed by money are asking services from it.

A plan for measuring and identifying weak performance areas must be established in the departments. Although "erratum humanum est" occurred mistakes must be analyzed and provisions must be taken for them not to be repeated.

That procedure when incorporated as a standard one, it can be a valuable source of information which potentially transforms the department to a learning organization.

This is the way the evolving imaging departments always meet the needs of their clients.

And that way the department is working effectively and efficiently.

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Justification and authorisation of planned medical exposures

The new Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (BSS) was published by the International Atomic Energy Agency (IAEA) as General Safety Requirements Part 3 in July 2014.

In terms of Justification of medical exposures the BSS covers four areas of responsibilities for the protection and safety of patients. It states that the person or organisation responsible for facilities and activities that give rise to radiation risk shall have the prime responsibility for protection and safety. Paragraphs 2.40 and 2.41 state that other parties such as the referring medical practitioner, medical physicist, and medical radiation technologists (MRT) (radiographer), shall also have specified responsibilities.

Justification can be explained as the process of weighing the expected benefits of an exposure against the possible detriment of the associated dose. The benefit or versus detriment may relate to the individual and/or to society as a whole.

The following narrative includes extracts from the new BSS and puts into context the roles and responsibilities of various groups and key personnel specifically related to the delivery, authorisation and justification of medical exposure. The BSS should be read in detail for further information.

Requirement 35 – Responsibilities of the regulatory body specific to medical exposures

Paragraph 3.149 states that the regulatory body shall ensure that the authorisation for medical exposures performed at a particular medical radiation facility allows personnel such as radiological medical practitioners (radiologists), medical physicists, MRTs (radiographers) and any other health professionals with specified duties in relation to the radiation protection of patients to take on the responsibilities specified in these standards only if they:

a. Are specialised in the appropriate area
b. Meet the respective requirements for education, training and competence in radiation protection, in accordance with paragraph 2.32
c. Are named in a list maintained up to date by the registrant or licensee

Requirement 36: Responsibilities of registrants and licensees specific to medical exposure

This section outlines the responsibilities of registrants and licensees specific to medical exposure.

Registrants and licensees shall ensure that no person incurs a medical exposure unless there has been an appropriate referral, appropriate responsibility has been assumed for ensuring protection and safety and the person subject to exposure has been informed of the expected benefits and risks

Paragraph 3.150 states that Registrants and licensees shall ensure that no patient, whether symptomatic or asymptomatic undergoes a medical exposure unless:-

a) The radiological procedure has been requested by a referring medical practitioner and information regarding the clinical context has been provided or it is part of an approved health screening programme;

b) The medical exposure has been justified through consultation between the radiological medical practitioner and the referring medical practitioner, as appropriate or it is part of an approved health screening programmes;

c) The radiological medical practitioner has assumed responsibility for protection and safety in the planning and delivery of the medical exposure as specified in paragraph 3.153(a)

d) The patient or the patient's legal authorized representative has been informed as, appropriate, of the expected diagnostic or therapeutic benefits of the radiological procedure as well as the radiation risks

Requirement 37: Justification of medical exposures

This section highlights that relevant parties shall ensure that medical exposures are justified and addresses issues such as 'benefits and risks', generic justification carried out by health authorities and the consultation relationship between the radiological medical practitioner and the referring medical practitioner. Paragraph 3.156 spells out what should be taken into account in terms of the consultations as well as identifying the important issues relating to pregnant or breast-feeding patients and paediatric patients. Criteria to be considered are:

a. The appropriateness of the request
b. The urgency of the request
c. The characteristics of the medical exposure
d. The characteristics of the individual patient
e. Relevant information from the patient's previous radiological procedures

Paragraph 3.157 highlights the importance of **referral guidelines** in the justification process prior to the exposure of an individual patient in a radiological procedure whilst the remaining paragraphs address issues relating to justification for radiological procedures pertaining to health screening, early detection of disease in asymptomatic individuals and medical exposure of volunteers as part of a programme of biomedical research.

General Principles and working examples

When authorising and justifying an exposure, there are a number of considerations for healthcare professionals to take into account. For

a	The specific objectives of the exposure	What is to be gained by carrying out the exposure? How may the outcome affect the management of the patient?
b	The characteristics of the individual involved	Such as previous imaging, medical history, age or pregnancy status of the patient, body habitus.
c	The potential diagnostic or therapeutic benefits to the individual from the exposure	What is the expected benefit of the medical exposure? Will the patient's treatment be altered?
d	The detriment the exposure may cause	What is the possible detriment from the associated radiation dose?
e	The efficacy, benefits and risk of alternative techniques having the same objective but involving no or less exposure to ionising radiation	What other alternative imaging modalities are available that could answer the diagnostic question but involve less or no radiation?

Table 1: (ref 'British Institute of Radiology, Society and College of Radiographers and The Royal College of Radiologists. A guide to understanding the implications of Ionising Radiation (Medical Exposure) Regulations in diagnostic and interventional radiology' London: The Royal College of Radiologists, 2015. Ref No BFCR (15)2**).**

example will the exposure contribute to or change the individual's healthcare management, what previous imaging is available and are there alternative techniques that will answer the question but do not involve ionizing radiation?

Justification is an intellectual activity and is the primary role of the radiological medical practitioner. When justifying an exposure, appropriate weight must be given to matters outlined in table 1.

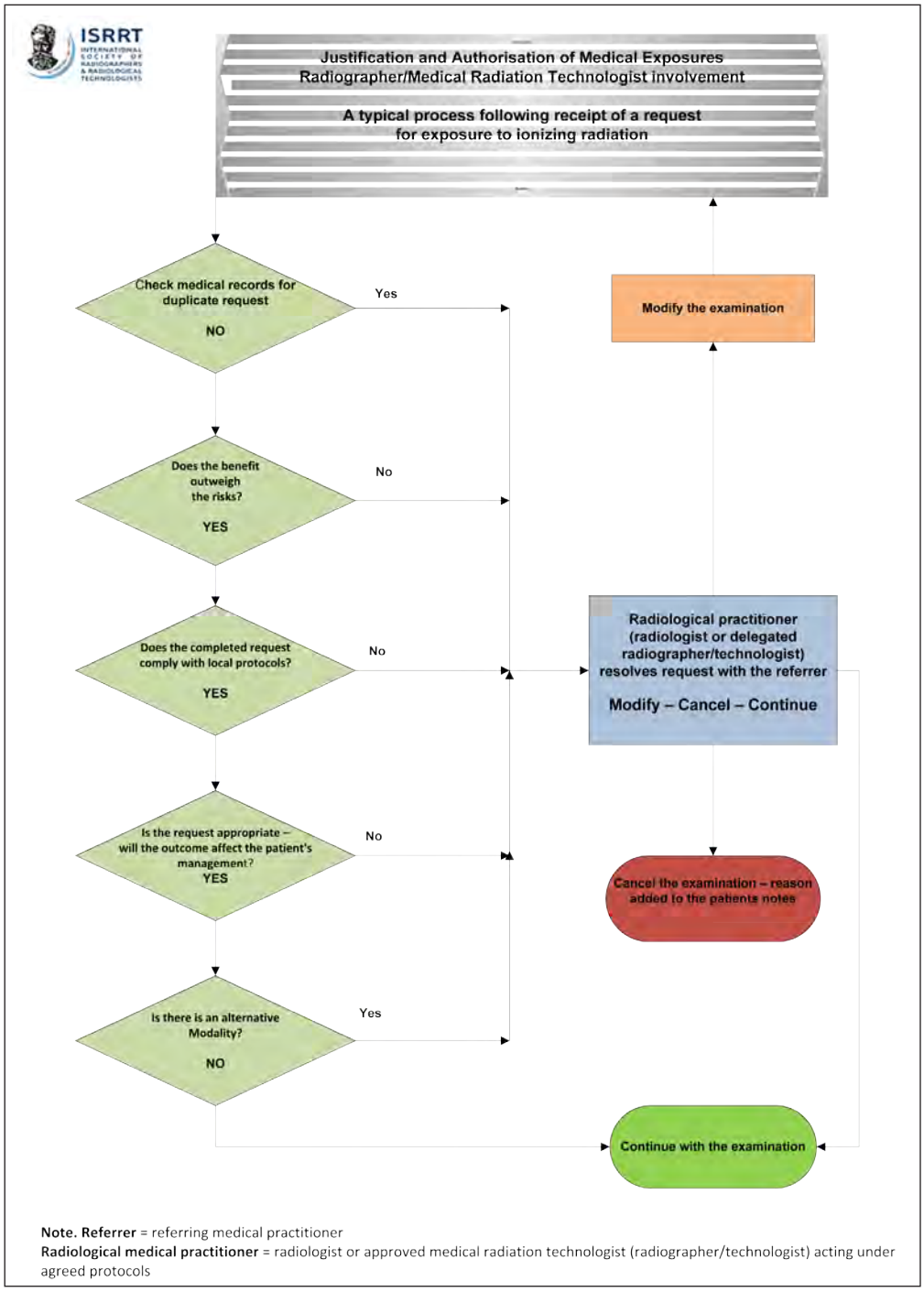
Authorisation is the documentation that the intellectual activity of justification has taken place.

Authorisation may be carried out by either the radiological medical practitioner (radiologist) or a MRT/ Radiographer working in accordance with the guidelines issued by the practitioner. Authorisation may be demonstrated by signing or initialling the referral in a predetermined place or by entering an electronic password. The employer's procedure should describe clearly how authorisation is to be demonstrated.

When operating such guidelines it is important to include the actions necessary when there are issues which conflict with the general principles in determining justification. This will normally involve the Radiological practitioner (radiologist or delegated radiographer/technologist) resolving such issues with the referrer. This process will either result with continuation, modification or cancellation of the examination. If the examination is cancelled details of the reasons should be inserted in the patient's notes.

It is recognised that, in addition to radiologists, in some countries the MRT/radiographer is permitted to act as practitioners for a specific range of diagnostic procedures. In every country, the MRT/Radiographer has a responsibility to contribute to the imaging team to ensure that patients do not receive additional exposure due to duplicate procedures or inappropriate procedures. However, it is not feasible for a radiologist, acting as a practitioner, to review every imaging request and therefore appropriately entitled MRTs/radiographers can authorise an exposure using written guidelines that a practitioner has written. While adopting this approach, the practitioner remains responsible for the justification element for authorisation and following the guidelines.

Authorisation guidelines are normally produced by the lead radiologist who assumes the responsibility as the practitioner and is therefore responsible for any exposure authorised using these guidelines.



Note. Referrer = referring medical practitioner
Radiological medical practitioner = radiologist or approved medical radiation technologist (radiographer/technologist) acting under agreed protocols

Such guidelines, including specific examination referral guidelines, should reflect the most current accepted practice, reflect service provisions, and be reviewed on a regular basis.

It is important to remember that in developing and implementing protocols and improvements in practice for Justification that these should be tested against the 3A's, i.e. Awareness, Appropriateness and Audit (Clinical).

A summary of the action relating to the process of authorisation and justification of medical exposures to ionising radiation is given above.

ISRRT Public Relations Report

Sharon Wartenbee, Regional Co Ordinator for the Americas

The Society of Radiographers Trinidad and Tobago held their annual conference 2015 on October 3 and 4 at the Cara Suites Hotel in Trinidad, West Indies. The theme of the Conference was "Improving Standards for the Positive Change." The conference was open to all radiographers, Allied Health Professionals, retired and student Radiographers.

The Society is also in the planning stages of hosting the 2018 World Congress of the ISRRT. Mark your calendars to attend this exciting and educational event.

The **39th ASRT Radiation Therapy Conferenc**e was held October 18-20, 2015 in San Antonio, Texas, USA. This conference offered an opportunity to learn from highly respected sources and network with Oncology professionals from around the world. The conference offered dozens of credit courses based on treatment innovations, trends and workplace issues specifically for radiation therapists and medical dosimetrists who care for patients with cancer and other diseases. The event was held in conjunction with the American Society for Radiation Oncology and the Society for Radiation Oncology Administrators.

National Radiologic Technology week was celebrated in the USA, November 8-14, 2015. During this week colleagues are recognised for their compassionate and caring work in the health care sciences. Also, "World Radiography Day" is celebrated on November 8. If you have any photos of your World Radiography Day Celebration please send them to Terry Ell so they can be shared on the website. Terry.Ell@albertahealthservices.ca

Each year, the **Radiologic Society of North America (RSNA)** is host to the world's largest scientific and educational meeting for Radiologic Science professionals. This meeting is held annually the week after Thanksgiving in Chicago, Illinois, USA. Approximately 55,000 radiologists, technologists, radiation therapists, nurses, and other radiology professionals come from around the world to attend and learn from the world's leading radiology experts. This allows professionals to connect with their peers and view the latest research in medical imaging. The meeting features approximately 1,800 educational exhibits.

The ASRT will provide a day and a half of continuing education on a variety of excellent topics. Each course has been approved for 1 category A+ CE credit and is specifically targeted for technologists and radiation therapists. Jonathan Mazal, MS, RRA, RTR, MR, who is the ISRRT Regional Director of the Americas will be among the presenters. His lecture is Interventional Cardiovascular Magnetic Resonance: Clinical and Pre Clinical Applications.

The ISRRT hosted a session on global health at the RSNA meeting. The session was on Monday, November 30 at 8:30am. Invited speakers included:

- Melissa Culp, MEd, RTR, MR – RAD-AID International
- Miriam Mikhail, MD – World Health Organization (Who)
- Jonathan Mazal, MS, RRA, RTR, MR – ISRRT

Attending these interesting and educational sessions gives you an opportunity to network with your colleagues from around the world.

Diary Dates

2016

May 9-13
IRPA World Congress
Cape Town, South Africa

June 9-12
CAMRT 74th Annual General Conference (AGC)
World Trade and Convention Centre in Halifax, Nova Scotia

September 20-24
ICR World Congress
Buenos Aires, Argentina

October 20-22
19th ISRRT World Congress
Seoul, South Korea
For more information contact: www.isrrt2016.kr

The America's Report

Terry Ell, ISRRT Vice President, Americas Region
Jonathan Mazal, ISRRT Regional Director, Americas Region

We are pleased to report that the Americas region has been as busy as ever advocating for the radiographers and radiologic technologists in the Americas. Below is a short synopsis of our recent activities over the past three months and you will see that we have stayed true to our primary focus of building greater communication within our region.

3rd ISRRT Americas Regional Web-Conference

With special gratitude for the technical support of the Canadian Association for Radiologic Technologists, on Sept. 28, 2015 we held yet another successful meeting of medical imaging leaders within our region. The meeting consisted of brief yet informative 5 minute presentations from organisational representatives, highlighting educational, professional practice, and public relations efforts currently underway as related to radiology within our region. The following organisations and countries were represented:

ISRRT: Donna Newman (Director of Professional Practice, USA); Alain Cromp (Director for Public Relations, Canada); Sharon Wartenbee (Regional Coordinator for Public Relations, USA); Robin Hessler (Regional Coordinator for Education, Canada), Terry Ell (Regional VP, Canada); Jonathan Mazal (Regional Director, USA).

American Society of Radiologic Technologists:
Donna Thaler-Long (Council Member, USA)

Barbados Association of Radiographers:
Ian Withers (President, Barbados)

Belize Ministry of Health:
Timothy Afowoyo (Senior Radiographer, Belize)

Canadian Association of Medical Radiation Technologists:
Marcia Smoke (ISRRT Council Member, Canada)

Guyana Ministry of Health:
Donna Bowman (Senior Radiographer, Guyana)

Jamaica Society of Radiographers:
Carlene Rankin (Council Member, Jamaica)

Society of Radiographers Trinidad & Tobago:
Aneesa Ali (President, Trinidad)

World Radiography Educational Trust Foundation:
Christopher Steelman (Regional Coordinator for Professional Practice, USA)

Being our 3rd web-conference, this completed our 1st year of regional communication and we are very thankful to all those who have participated thus far, and excited to see the triannual meeting grow and establish itself as the primary form of regional communication for radiographer leaders in the Americas.

ISRRT Americas Regional List-Serve

To ensure continued communication between our triannual web-conference calls, we have also established an ISRRT Americas Regional List-Serve for email communication amongst our growing regional network of radiographer leaders.

If you belong to an organisation not listed above that you feel deserves representation during the web-conference as well as inclusion with the ISRRT Regional List-Serve, please do not hesitate to contact us directly to discuss a potential invite to join.

Meeting Attendance: We also believe in the importance of face to face networking and would like to take a moment to highlight some conferences that we have and will be attending. Terry attended the 5th National Congress and 2nd International Interchange of the Professionals of the Radiological Techniques in Brazil (October 30-November 1) as well as the Barbados Association of Radiographers and Barbados Health Information Management Association biennial conference on November 20-22. Jonathan attended an expert consultation meeting on Quality Assurance Standards for Mammography in Latin America and the Caribbean hosted by the Pan American Health Organizations (PAHO) in Washington DC, USA from October 27th-29th (a detailed report is provided elsewhere in the *News & Views*) as well as the RAD-AID International meeting on Nov 7, 2015, also in Washington, DC. Jonathan will also be attending the Radiology Society of North America and speaking during the Associated Sciences Track on Nov. 30, in Chicago, IL. Of course, we strongly encourage you to contact either of us if you plan on attending any of the same meetings. We also encourage you to review the member country reports in this issue of *News & Views* for details of other upcoming society meeting worth attending.

Educational Workshops: We are excited to share that the ISRRT sponsored PAHO educational workshop on digital radiography in Managua, Nicaragua was a success, and have prepared a special report (elsewhere in the News and Vies) detailing the four days of learning provided. We also would like to share that we are hard at work collaborating with the International Society of Radiologists (ISR) to offer a custom radiographers session during the ICR World Congress to be held in September 2016 in Buenos Aires, Argentina.

As always we welcome any and all correspondence regarding ISSRT efforts to advocate for radiographers/radiologic technologists within the Americas region, and invite you to contact us directly with questions, suggestions, ideas, needs for support, etc. There is plenty of work to be done, and volunteer support is always welcome! Also, as we continue to branch out our work into Latin America, ad contacts that can be shared would be greatly appreciated. Emails in Spanish are welcome!

Terry Ell Terry.Ell@albertahealthservices.ca
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World Radiography Educational Trust Foundation

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THE TRUST IS ADMINISTERED BY THE FOLLOWING TRUSTEES

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Michael Ong (Singapore)

Marie-Dominique Galy (France)

Chris Steelman (USA)

Cynthia Cowling (Australia)

Noreen Sinclair (UK)

www.wretf.com

News

As reported previously, Alan Budge has been Chairman of the Board of Trustees, since 2011 and before that chaired some of the Trustees' meetings on an ad hoc basis. Cynthia Cowling succeeded him as Chairman at the Trustees' autumn meeting in October. Trustees warmly welcomed Cynthia to her new role and thanked Alan for his support and contribution to the work of the Trust during his time as Chairman. He is continuing in the role position of Honorary Treasurer and Communications lead.

In August Trustee Michael Ong attended the 20th Asia- Australasia Conference of Radiologic Technologists (20th AACRT) In Singapore. He was able to have a small booth in the exhibition area to promote the work of the WRETF. Ambassador Edward Chan of Hong Kong also attended and helped Michael by meeting and talking to delegates. Pictured right.

Also in August, Alan Budge and Sue Marchant (officers of the WRETF) met with Sandy Yule and Stewart Whitley to discuss areas of mutual benefit to both organisations and to exchange ideas of future collaboration.

Support

Requests for textbooks and journals have been sadly lacking this year with no applications received since early summer.

Book parcels were successfully received in Nepal and Benin by staff and students.

Twinning

Review and development of the "twinning" program is ongoing.

Ambassadors

Trustee Chris Steelman has been engaging with the current ambassadors via a letter and survey document that will inform Trustees how best to develop this programme.

Bursary Scheme

Two applicants were awarded a travel bursary – one to present at a conference in New Zealand in July and the other one to make an educational visit to Tata Memorial Hospital in Mumbai to learn about new radiotherapy treatments. This visit took place in August. Sadly the other recipient who was to attend the conference in New Zealand was unable to travel due to insufficient financial sponsorship even with the assistance of the travel bursary from WRETF. The next closing date for applications was 20th September 2015. This was extended to 15th October due to lack of applications and with the assistance of announcements on the websites of the ISRRT and the Society and College of Radiographers in the UK, more applications were received. These are being assessed at the time of writing this report.

Donations

The Jennie Reeves Radiographers Agency donated £500 to fund a bursary. Trustees are most grateful for this donation which enable us to continue providing bursaries beyond the initial commitment.

The Trust was also the recipient of a percentage of a legacy left by the Chesney sisters to the ISRRT. This unexpected and most welcome donation means that the Trust is now in a more stable financial position and can look to the future development of its work.

Michael Ong, Trustee (left) with Edward Chan, Ambassador 20th AACRT August 2015, Singapore.

News from member countries

AUSTRALASIA

AUSTRALIA

Much has happened in Australia since our last message. We have another Prime Minister, which is already seeing a change in the manner of political leadership here. This may benefit the health sector but that is yet to be seen. Professionally the differences between the professional bodies and the national regulators are becoming clear and the impact these differences will have on the role of professional bodies will be significant.

The AIR is in the process of changing name and the constitution to better acknowledge these changes and to be more inclusive of all those who work in Medical Radiation Sciences. These changes will be finalised at the Annual General Meeting in late April next year when the membership get to vote on the proposals. There have been a number of suggestions for a new name and the membership is considering the various options.

It is not only a name change but also the constitution which will be amended. Much has happened in Australia in the last ten years and with changes in the nature and scope of the technology we all use the membership criteria will be put to the membership for approval. This may well see a broadening of the membership base. It would be good to recognise the full extent of medical radiation and imaging sciences and to fully reflect that in the membership of the association.

The Singapore Conference was fantastic and I hope our discussion regarding assisting with education within the region has been well received. By working together we can make a positive difference for our profession. In 2016 the Annual Conference is in Brisbane 22nd to 24th April and we would welcome all who might like to attend – it promises to be a dynamic and exciting event with a great range of papers and student papers. In Australia students from the 10 universities teaching Medical Radiation Sciences are encouraged to attend the student day which is part of the main conference. Overseas access to Brisbane is good so the conference would welcome any members of the profession from overseas. Visit asmmirt.com/2016 to find out more.

Chris Whennan
Council Member

NEW ZEALAND

New Zealand radiographers were looking forward to celebrating the discovery of x-rays, keeping the ISRRT theme of our professional role in justification of imaging to the forefront. Fundraising activities were focussed on supporting opportunities for our Pacific and Asian neighbours and their ability to attend the World Congress in Seoul next year – 2016. The NZIMRT and AIR were delighted to have the company of Dr Napapong Pongnapang (pictured below with Kathy Colgan) at the joint Annual Conference held in Wellington, New Zealand in July. Napapong presented "Radiographer's and Radiological Technologist's Roles in Patient Dose Reduction: ISRRT Perspectives", providing some insight into the ISRRT and projects in the process. Our members enjoyed the opportunity to meet Napapong and hear first-hand about radiographers around the world.

I would like to thank Tan Chek Wee and the Singapore Society of Radiographers (SSR) for a wonderfully warm welcome to the Asia-Australasia Conference of Radiological Technologists (AACRT) in Singapore in August. The Conference provided some very interesting papers and a great opportunity to network with colleagues within Asia/Australasia. This was the first time that New Zealand had had a representative at the Asia/Australasia Regional Council meeting outside of the World Congress and I believe that ongoing support of these meetings is vital to support the collegial development of the profession within our region.

Dr Napapong Pongnapang and Kathy Colgan.

AACRT Welcome Ceremony.

Linda Whitehead NZIMRT EO at Trade stand.

The NZIMRT continue to promote the activities of ISRRT through our newsletter and on the website. For more information on our activities please see the website nzimrt@nzimrt.co.nz

On behalf of the NZIMRT I wish everyone a safe and happy New Year.

Kathy Colgan
NZIMRT ISRRT Director

THE AMERICAS

AMERICA

ASRT Membership Update
As of August 2015, ASRT's total membership stood at 153,416. The association's annual net retention rate is 88.45 percent and its annual net growth rate is 0.34 percent.

ASRT Time Capsule Sealed Until 2065
A 664-page directory listing the names of ASRT's more than 153,000 members was just one of dozens of items sealed in a time capsule for the next half century and installed in the ASRT Museum and Archives on Friday, September 18, 2015. The time capsule was dedicated in a ceremony in the museum attended by the ASRT Board of Directors and executive staff. Also in attendance was Sheri Holub, R.T.(R)(M), of Carson, Iowa, winner of the ASRT "Be a Part of History" contest. Sheri's name was drawn from a list of all ASRT members to attend the dedication ceremony. Pictured below.

The time capsule is the newest addition to the museum, which opened during the ASRT Annual Governance and House of Delegates Meeting in June 2015. The museum features state-of-the-art exhibits and interactive displays that showcase the profession's past, present and future.

ASRT Receives National Advocacy Award
The ASRT has been named an ASAE 2015 Power of A Silver Award winner for its ACE campaign. An American Society of Association Executives program, the Power of A awards recognize the association community's valuable contributions on the local, national and global level. The ACE campaign helps R.T.s educate patients about their role as registered radiologic technologists.

The core component of the campaign is an easy-to-remember acronym that reminds R.T.s to "Announce your name," "Communicate your credentials" and "Explain what you're going to do." In addition, the campaign includes informational posters and patient education cards, and a Click To Commit call-to-action at www.asrt.org/ace that asks RTs to pledge that they'll use the ACE principles in their daily patient interactions. "The ACE campaign is a great example of how associations can educate the public about the value their members add to society," said ASRT Chief Executive Officer Sal Martino. "The ACE campaign is an important initiative as it helps patients understand that they're being cared for by registered radiologic technologists who are educated and highly qualified to perform medical imaging and radiation therapy procedures."

2015 ASRT Radiation Therapy Conference
From October 18-20, San Antonio, Texas, was the home of the 2015 ASRT Radiation Therapy Conference. The three day event offered face-to-face continuing education courses for radiation therapists, medical dosimetrists, program directors, clinical instructors, managers and students. In addition to earning CE, attendees connected with leading experts in radiation oncology, networked with like-minded radiologic science professionals from around the world and met with exhibitors. The event is held in conjunction with the annual meetings of the American Society for Radiation Oncology and the Society for Radiation Oncology Administrators and included access to the ASTRO exhibit hall.

ASRT Foundation Marks Two Million Dollar Milestone
The ASRT Foundation's 30th anniversary celebration campaign reached a major

milestone in September 2015 with more than $2 million in commitments from individuals and organisations. The funds raised for this multimillion dollar campaign will be used to ensure the future of scholarships, research grants and community outreach programs for radiologic technology educators, students and clinical personnel.

Launched in June 2014, the Positioning for a Brighter Tomorrow campaign provides the Foundation, the philanthropic arm of the oximately 20,000 radiologists and technologists) who co-hosted Collaborative Care – Imaging and Treatment, a bilingual joint congress held in Montreal, Quebec, May 28-30.The congress partners were:

- The Canadian Association of Medical Radiation Technologists (CAMRT)
- The Canadian Association of Radiologists (CAR)
- L'Ordre des technologues en imagerie médicale, en radio-oncologie et en électrophysiologie médicale du Québec (OTIMROEPMQ)
- La Société canadienne-française de radiologie (SCFR)

Over 1,200 people attended the Joint Congress. The international audience included participants from Australia, Trinidad and Tobago, Turkey, Guadeloupe, New Zealand, Cameroon, France, and Singapore as well as delegates from across Canada and the United States.

A Scientific Committee comprised of technologists and radiologists developed a rigorous, bilingual scientific program that included over 185 education sessions and 215 speakers.

The Joint Congress opened on May 28 with a welcoming video message from Federal Health Minister Rona Ambrose. Joining the Congress to address the group was Quebec's Minister of Health and Social Services Gaétan Barrette, a radiologist from Montreal.

The opening plenary session was delivered by Mr André Néron, from the Université de Montréal, on the topic of Partnering with patients for their care: what it changes on a daily basis. Mr Néron spoke of his own experience as a patient, and how that has shaped his work promoting the value and benefit of involving patients in their own care. On Friday May 29, Dr Gerard Farrell from Memorial University shared his perspectives on Social media and the digital professional speaking about the professional use of social media. Closing the Joint Congress was a presentation on Comparative and Cost Effectiveness Related to Diagnostic Testing given by Dr. George Wells from the University of Ottawa Heart Institute.

CANADA

CAMRT ACTRM

Journal of Medical Imaging and Radiation Sciences

JMIRS has announced calls for papers for two special editions for 2016. Firstly, a student supplement showcasing the research and scholarly activities of our future clinicians is planned, and top authors will be recognized. Papers are due February 1, s2016. We also have a call-for-papers for our next special edition on the topic, "The Patient Experience," due May 1, 2016. We will be targeting articles from multi-disciplinary perspectives from all over the globe. Examples of relevant subjects for this issue include: supportive care/services; psychosocial; person-centered care, patients as partners; education curriculum inclusive of the patient experience; families, etc. Please send your ideas or questions to the Managing Editor at editor@camrt.ca

CAMRT CPD Online

The CAMRT continues to provide many continuing education courses and certificate programs. All CAMRT CPD courses are available at competitive rates in distance learning formats to any graduate of a medical radiation technology program, regardless of the country of education. All courses are approved for Category A credit, accepted by the ARRT and others. Browse the course catalogue at www.camrt.ca/professional-development/

The CAMRT is working to transition all of its CPD courses to an online delivery format in the next few years. This transition will allow for an even more interactive learning experience.

CAMRT Virtual CPD Programming

VIRTUAL CONFERENCE

The CAMRT recently introduced a range of new online continuing professional development (CPD) opportunities to MRTs www.camrt.ca/professional-development/virtual-programming/

The Virtual Conference series is designed to bring high-quality professional development directly to you, on your schedule. It makes educational opportunities accessible to more MRTs, by eliminating the barriers of time and money. Registrants view the recording and submit a post quiz to obtain CPD credits from the comfort of the home or workplace.

The Practice Insights webinar series is designed to provide insight and education to practicing MRTs on topics of clinical and professional interest. Engaging speakers provide a glimpse into various aspects of our ever-changing fields of practice. Live or recorded, a webinar is a convenient and cost-effective way to pursue your professional development. CPD credit is obtained by registering for the live or recorded webinar.

PRACTICE INSIGHTS CAMRT ACTRM WEBINAR SERIES

#MedRadJClub

An international online journal club was introduced in early March 2015, a collaboration between the three relevant professional journals based in Canada, Australia, and the UK. Monthly chats provide an opportunity for radiographers worldwide to harness the power of social media to facilitate discussion of current topics, explore international collaboration and to promote evidence based practice. A special edition of the journal club promoting World Radiography Day was held on November 9, incorporating four articles related to dose optimisation. Please see the website https://medradjclub.wordpress.com/ for details on upcoming chats, blogs about upcoming sessions, and transcripts from past chats. We hope you join us!

Advanced Practice in Medical Radiation Technology

Work continues on the delivery of a certification process for Advanced Practice Certification in Radiation Therapy.

Three candidates were accepted into a pilot of the process in the summer and are working through the first phase of the process at the moment. The pilot will continue through its other phases in 2016 with a study of outcomes to follow.

CAMRT is also working to create awareness of the potential for advanced practice MRT roles with key stakeholders. The CAMRT Advanced Practice Framework was published in the spring of 2014, and projects are underway to investigate possible opportunities for advanced practice roles in medical imaging.

Radioisotope supply

CAMRT continues to play an active role in a pan-Canadian working group working to identify mitigation strategies in case of potential future Tc-99m shortages. There is no planned shortage in the foreseeable

future and the situation is being monitored closely.

2022 World Federation of Nuclear Medicine meeting
CAMRT continues to support the Canadian Association of Nuclear Medicine's bid to organise the 2022 World Federation of Nuclear Medicine meeting in Canada. Vote for the congress location will occur at next year's European Association of Nuclear Medicine meeting.

Support for those interested in working in Canada
CAMRT has produced two learning modules for Internationally Educated Medical Radiation Technologists (IEMRTs) interested in working in Canada. Both are available in the certification section of the CAMRT website.

The first module on describes practice/ employment in Canada for IEMRTs with information on radiation safety and protection, cultural competence, occupational health and safety, errors and incident reporting and many other topics related to work in a Canadian healthcare environment.

The second is a module providing education on "How to Write a Competency Based Exam".

2016 CAMRT Conference
The CAMRT 74th Annual General Conference (AGC) will be taking place from June 9-12, 2016 at the World Trade and Convention Centre in Halifax, Nova Scotia. This event offers excellent opportunities for learning and networking experiences among radiologists, technologists, and other health-care professions. A strong program track for nuclear medicine technologists is on offer, along with a series of plenary sessions on topical issues.

EUROPE

FRANCE

In France the path to a University formation for all radiographers is moving forward. More and more accords are signed between the universities, the formations institutes and the regional centres. The French radiographer society AFPPE is the fulcrom upon which this entire process is evolving, as it represented for many decades the radiography profession in France.

In June 2015, before the summer pause, French radiographers had the opportunity to extend their knowledge in the particularly sensible area of woman imaging. From CT to MRI, through mammography and hysterography, all important themes were approached. The pelvic MRI and its relevance in dosimetry presentation was even rewarded with a price.

As I write these very lines there are 1,800 radiographers travelling to Paris to participate in the next radiology congress, alongside with radiologists. This year Italian radiographers are also invited to give a speech. More about it in the next newsletter from France!

Benoit Billebaut
Council Member

UNITED KINGDOM

President inaugurated
Sheila Hassan is the 2015/16 President of the Society and College of Radiographers following her inauguration.

Sheila's appointment is the culmination of a distinguished career, dating back to 1978 when she qualified from the School of Radiography at Guy's and St Thomas's Hospital in London.

Since returning in 1999 from a 19 year break from the profession to raise her family, Sheila has earned the respect and acclaim of her peers and colleagues. She is now the sanctioning lead radiographer in oncology and haematology at Guy's.

Dr Sarah Harris, consultant clinical oncologist at Guy's and long-time friend and colleague of Sheila said, "We are enormously proud of her."

Speaking at the inauguration, Sheila reflected on her career so far and said that attaining the SCoR presidency was the result of a five-year plan that she started following a neuro-linguistic programming course that she took in 2011. She took the opportunity to reflect on the importance of the members who she represents. She said: "We are a membership organisation, and the SCoR is only as strong as its members. Without active members we do not have a voice. Being part of the professional body has such

Sheila Hassan, the Society's 2015/16 president (centre) with Dr Sheila Harris and Richard Evans, the SCoR chief executive officer.

benefits both personally and professionally, something which I know first hand."

Sheila succeeds Karen Smith, who is now chair of the Society's UK Council.

Members embrace CPD Now

The Society has seen significant growth in radiographers signing up to CPD Now, the online learning resource members use to plan, record and evaluate their continuing professional development.

To practice in the UK, health professionals must carry out and record their CPD activities as part of the requirements to maintain registration with the regulator.

CPD Now provides a number of useful facilities such as planned pathways and an audit tool which enables the user to send a fully formatted report to the regulator.

Charlotte Beardmore, the director of professional policy at the SCoR said: "Reflective learning and recording of this learning, together with the impact upon service delivery and patient care using the customised CPD Now tool, is important for all the radiography workforce and essential for College of Radiographers accreditation at advanced, consultant and assistant levels of practice."

Imaging & Oncology 2015 is available

The College of Radiographers' annual publication for imaging and therapy professionals, *Imaging and Oncology,* has been published and is available to download at www.sor.org/learning/library-and-publications/imaging-oncology

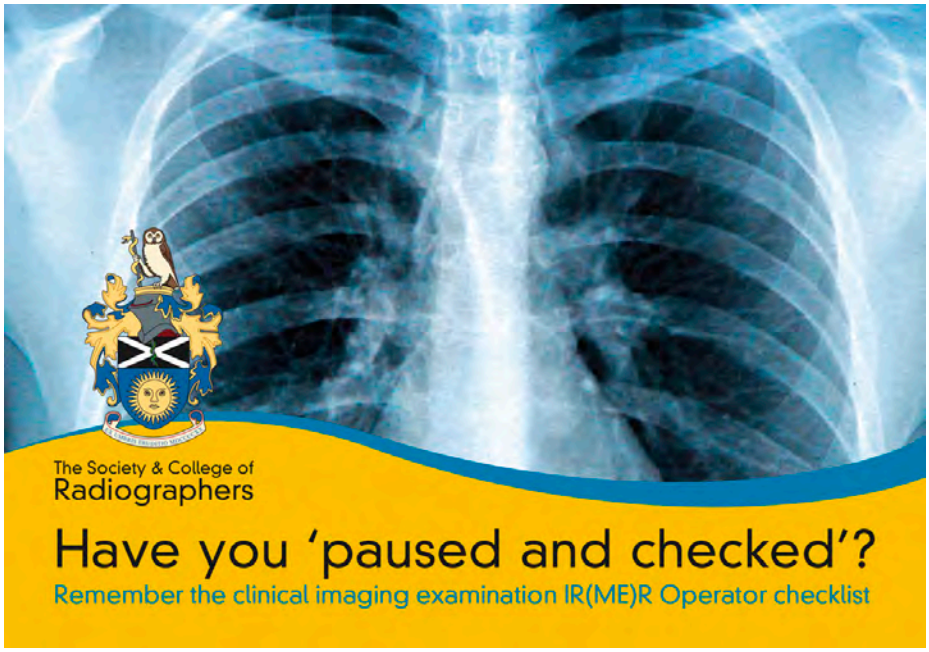
The 2015 edition features contributions from a diverse range of health professionals, including radiographers, radiologists, nurses and obstetricians.

Topics covered include: Patient safety initiatives in radiotherapy; the impact of free fetal DNA on ultrasound departments; prescribing medicines in radiography; PET-CT in diagnosing dementia; new ultrasound techniques; and the effectiveness of radiology assistants.

Authors who write for the publication are encouraged to 'speculate, lead and anticipate' the future of radiography and healthcare.

Radiography journal to increase frequency

Hot on the heels of the publication of *Imaging & Oncology* came the news that the Radiography journal will be published more frequently from 2016.



The steady growth in influence worldwide of the peer-reviewed title means that the number of authors wanting to see their work published in its pages has also risen.

"Radiography is the premier English language journal of radiographic imaging and radiation therapy and is a key benefit of membership of the Society and College," Charlotte Beardmore, the SCoR's director of professional policy, said.

"Because of the publication's increasing popularity and the strong demand from the profession for high quality clinical, scientific and educational papers, we looked at the option of either increasing the number of pages in each of the four issues currently produced each year, or whether to extend the frequency of publication," she continued.

"The Society's UK Council decided to ask Elsevier, who publish the title on behalf of the SCoR, to deliver five editions per annum from 2016."

Julie Nightingale, Radiography's editor-in-chief said: "The journal is at a very exciting stage in its development. We are developing new relationships both within the UK and overseas which will bring new authors and readers to the journal.

"We have seen a significant increase in submissions from authors and we are delighted to have recently heard that Radiography will be covered in a new Web of Science product from Thomson Reuters from the end of 2015," she continued.

"The move to five issues a year will help accommodate the growing amount of content, as well as reduce significantly the print turnaround times. We shall continue to publish special editions in addition to the regular issues."

Have you 'paused and checked'?

As a result of a survey and feedback from radiographers, the Society has developed 'Have you paused and checked?' posters and a prompt card to support radiation protection specialists in clinical imaging services.

Society members are encouraged to display the posters in imaging departments and the prompt card acts as an aide memoire at work stations. The 25-point checklist featured on the posters covers a range of topics aiming to maximise patient safety before and after exposure.

They include: Check the exam is justified; confirm patient ID; confirm pregnancy status; check radiation safety measures for staff/carers; select correct imaging protocol/technique; record dose; evaluate images; and tell patients how to get results.

A statement at the foot of the posters reminds radiographers that they have a legal responsibility to ensure that the checks are carried out.

The free posters and card can be downloaded from www.sor.org/news/free-have-you-paused-and-checked-posters-and-card

Richard Evans
SCoR Chief Executive Officer

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