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PRESENTATION
Aqueous solution for injection containing iohexol, a non-ionic, macrocyclic, trifluoro-xylostil contrast medium, and excitable in five strengths containing either 340 mg, 180 mg, 240 mg, 300 mg or 350 mg iodine per ml. INDICATIONS
Any intravascular contrast medium for use in adults and children for: angiography, phlebography, CT angiography, concomiography and I.a. DSA. Myelography. For use in body cavities. ATTDRAK, iohexol, contrast medium and imaging and use in the 6-trast. DOSAGE AND ADMINISTRATION
Adults & children: Dosage varies depending on the type of examination, age, weight, cardiac output and general condition of patient and techniques use base SPC and package leaflet. CONTRAINDICATIONS Manifest thrombocytopenia, History of serious reaction to OMNIPAQUE™. WARNINGS AND PRECAUTIONS Allergy, asthma, or previous reactions to contrast media are risk factors for developing hypersensitivity vascular, allergic and anaphylactic reactions. Necessities dosage and equipment must be available for immediate treatment, should a serious reaction occur. It is advisable always to use an indwelling catheter or catheter for quick intravenous access throughout the entire X-ray procedure. After contrast medium administration the patient should be observed closely for at least 30 minutes. The patient should be advised to avoid driving or operating machinery during this time. However, delayed reactions may occur. To prevent acute renal failure, special care should be exercised in patients with preexisting renal impairment, diabetes mellitus, pancreatitis, hemolytic anemia and Webbster's macroglobulinaemia, dialysed patients, or patients who receive concurrent treatment with nephrotoxic drugs. To prevent fecal-occults in diabetic patients treated with metformin, administration of metformin should be discontinued at the time of administration of contrast medium and withheld for 48 hours and reinstated only after renal function has been re-evaluated and found to be normal (Refer to SPC). Patients with acute cerebral pathology, cancerous or a History of epilepsy, alcoholics and drug addicts are predisposed to seizures. Adequate hydration should be assured. Young infants (age < 1 year) and especially neonates are susceptible to electrolyte disturbance and haemodynamic aberrations. Patients with previous cardiac disease and pulmonary hypertension may develop haemodynamic changes or arrhythmias. Special care should be exercised in patients with hyperthyroidism. Care should be taken to ensure the safety of the patient by inducing transient hypothyroidism in premature infants receiving contrast media. Symptoms of transient thyroiditis may be observed. Necrosis of contrast media may be rare occasions give rise to local pain, and oedema, which usually resolves without sequelae. However, inflammation and even tissue necrosis have been seen. Elevating and cooling the affected site are recommended as routine measures. Surgical decompression may be necessary in cases of compartment syndrome. Following myelography the patient should rest with the head and thorax elevated by 15° for one hour. Thereafter he/she may ambulate carefully but bending down must be avoided. The head and thorax should be kept elevated for the first 4 hours if remaining in bed. Patients suspected of having a severe allergic threshold should be observed during this period. Outpatients should not be completely alone for the first 4 hours. A few patients have experienced a temporary hearing loss or even deafness after myelography. PREGNANCY AND LACTATION The safety of OMNIPAQUE™ in human pregnancy has not been established (see SPC). Omnipaque should not be used in pregnancy unless considered essential. Breast-feeding may continue normally. UNDESIRABLE EFFECTS All routes of administration: Hypersensitivity reactions with mild respiratory or cutaneous symptoms or anaphylactic reactions with more severe manifestations. Vaginal reactions causing hypotension and bradycardia, headache, Abdominal discomfort/pain, nausea, vomiting or diarrhoea, transient metallic taste, lipothemia or iodine mumps resulting in swelling and tenderness of the salivary glands. Feeling of warmness; fever, rigors, hypotension. Intravascular use Intravascular and intravenous use. Neurological reactions including seizures or transient motor or sensory disturbances. Cortical blindness. Serious cardiac complications, including cerebral dysrhythmia, depressed cardiac function or signs of ischaemia. A transient increase in S-creatinine, followed by renal failure in rare occasions. Distal pain or heat sensation in peripheral angiography. Transient ischaemia after injection into coronary, cardiac or renal arteries. Post phlebographic thrombophlebitis and thrombosis. Arthrosis. Severe respiratory symptoms and signs. Myocarditis, bronchitis, pneumonia, non-cardiogenic pulmonary oedema, cough. Thyrotoxicosis, flushing, injection site reaction. Intrathecal use Meningitis or chemical meningitis. Phlebitis. Transient blindness, motor or sensory dysfunctions. Confusion. Paresthesia. Sedation, LEG changes. Local pain, cramping and pain in the lower limbs, neck pain, Headache, nausea, vomiting or diarrhoea. Injection site reaction. Use in body cavities: Endoscopic Retrograde Cholangiopancreatography (ERCP). Injection of amylase leak, pancreatic. Oral use: Gastrointestinal ulcer, Hysterosalpingography (HSG). Transient pain in the lower abdomen. Arthrography. Post procedural pain, Frank arthritis, keratitis. 1949 postoperative pain.

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GE Healthcare Ltd, Amersham Place, Little Chalfont, Buckinghamshire, England HP6 3NA. www.gehealthcare.com

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

Remember to e-mail your news before the deadline to:
Production Editor
Mrs Rachel Bullard
Email: deepbluedesign1@mac.com

Deadline for the twice yearly issues are:
April 1 [May issue]
October 1 [November 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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Secretary: Ms Sue Marchant
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E2 0DS.UK
susan.marchant2@btinternet.com

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 mono advertising as at May 2011. For colour advertising rates please contact the ISRRT Secretary General.

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Camera ready copy 210 x 290mm per one page advert. Digital format acceptable.

Colour advertising costs:
On application to the Secretary General
Email: isrrt.yule@btinternet.com

Production Editor: deepbluedesign1@mac.com
As the fall season begins to make its way to my part of the world, here in St. Louis, Missouri, I extend to each of you well wishes and warm greetings. Several months ago our 17th ISRRT World Congress was hosted by the Canadian Association of Medical Radiation Technologists (CAMRT). It was a wonderful meeting from beginning to end. The educational programs and lectures were superb and the activities of the Congress provided everyone with the opportunity to see old friends and to make new ones. I offer my sincere thanks to the officers, members and staff of the CAMRT for making us feel so welcomed and for all their hospitality.

The 2012 meeting of the ISRRT Council was very successful. It brought the leadership of our member societies together as a Council to carry out the important business of the ISRRT and to provide updates on the activities of our profession across the globe. Five new member societies were recognised by the Council – Argentina, Bosnia Herzegovina, Indonesia, Poland and Vietnam. We look forward to their active participation in all of the business of the ISRRT for years to come. A detailed report of the activities of the most recent Congress will be found in this issue of the “News and Views from Around the World” written by Vice President for the Americas, Rita Eyer and Regional Director for the Americas, Patricia Johnson.

It was my pleasure to meet the ISRRT Dosewise Radiographer for 2011, Sandra Pridgeon from South Africa, who was sponsored by Philips to attend the Toronto ISRRT Congress. Ms Pridgeon presented her research and work in the area of “Radiation Protection in the Operating Theatre” during the educational portion of the meeting. I am always encouraged to see professionals like Ms Pridgeon take the time to conduct research and share the findings with colleagues. She has written other articles for the South African Radiographer Journal and has presented several times at seminars in South Africa. I had the opportunity to introduce her to the first ISRRT Dosewise Radiographer (for 2010), Mr Yogesh Ja, who was attending the Congress.

Dr Michael D. Ward, Ph.D., RTR, FASRT President, International Society of Radiographers and Radiological Technologists
President’s message

The 2012 Dien Van Dijk Award was presented to my dear friend and former ISRRT President, Treasurer and Secretary General of the ISRRT, Mr. Terry West. He was unanimously recognised by the ISRRT Board as most deserving of this high honor for his lifelong work and dedication to the ISRRT and to our profession overall. Also recognised during the celebratory portion of the meeting was Mrs. Alison Yule, who received the ISRRT Honorary Membership Certificate. Alison is the wife of our CEO, who volunteers hours and hours of her time to assist our society by helping Dr. Yule in the “home” office and covers the ISRRT booth at meeting venues with a warm smile and a helping hand. Congratulations Alison – we appreciate all that you do for the ISRRT!!

We celebrate World Radiography Day with our annual poster that features the various aspects of our profession and the theme “Radiography: Guides the Clinical Pathway.” This should remind us that radiographers and the medical imaging and radiation therapist professionals play a key role in the diagnosis and treatment of disease as we “partner with others in healthcare to care for our patients and their families.” Happy 2012 World Radiography Day to everyone and a special thank you to Dr. Fozy Peer, Director of Public Relations who came up with the theme and to Kate Slean from the CAMRT who designed the 2012 poster.

The ISRRT Board will be meeting in April of 2013 for its strategic planning meeting. The meeting will be hosted by the American Society of Radiologic Technologists (ASRT) at their headquarters in Albuquerque, New Mexico which should have just completed renovations to the building. ASRT is adding on an additional wing to their building that will include additional office space and will have space for displaying the history of the ASRT and the radiologic science profession. We certainly appreciate the generosity of the ASRT for hosting our meeting once again. The agenda for the meeting will be extremely full as we implement much of the work and dedication to the ISRRT and to our profession overall. Also recognised during the celebratory portion of the meeting was Mrs. Alison Yule, who received the ISRRT Honorary Membership Certificate. Alison is the wife of our CEO, who volunteers hours and hours of her time to assist our society by helping Dr. Yule in the “home” office and covers the ISRRT booth at meeting venues with a warm smile and a helping hand. Congratulations Alison – we appreciate all that you do for the ISRRT!!

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The 18th ISRRT World Congress will be held in Helsinki, Finland in 2014. All who will attend the 2014 Congress will be treated to free transportation as registrants of the meeting, since Finland is a “green” society that looks for ways to keep down pollution and to be efficient in using the earth’s resources. Paivi Wood, CEO of the Finnish Society, provided an update of the next Congress and described how everyone should enjoy the beautiful sites and culture of Helsinki. The educational program and scientific lectures will provide us all with information that will stimulate our minds and open us up to what is new and exciting in the radiologic science profession.

The report from our CEO, Dr. Sandy Yule will provide a thorough summary of much of the ongoing activity of the ISRRT and highlights the work that is taking place with our partner organisations. I appreciate working with Sandy. He does an outstanding job for the ISRRT and does so with a high degree of professionalism and diplomacy. He and I conduct a weekly SKYPE meeting along with ongoing email communications with the entire ISRRT Board to carry out the work of the organisation.

By the time this newsletter is published, Dr. Yule, Treasurer Stewart Whitley and I would have already returned from a site visit of the venues for the 2016 World Congress that will be held in Seoul, South Korea. I will update you about this in future communications. Congratulations to the Korean Radiological Technologist Association and to their President Dr. Jooni Lee and Mr. Jame Ho of the KRTA for their hard work to prepare for this future Congress.

Once again, the Board and CEO are kept very busy carrying out the duties of our respective offices and representing the ISRRT and the profession at key meetings across the globe. Much of what we do on an ongoing basis has been placed on the ISRRT website and captured within this newsletter. The ISRRT and its Board of Directors will continue to support the Mission and Vision of the Society and to represent our profession across the globe.

Kindest Regards,
Dr. Michael D. Ward Ph.D., RTR, FASRT
President, ISRRT

Call for Applications for JMIERS Editorial Board

Come serve on the board of the Journal of Medical Imaging and Radiation Sciences (JMIERS).

We have issued a call for applications for all disciplines: radiation therapy, nuclear medicine, radiological technology, and magnetic resonance.

Applications are due December 14, 2012. Please submit your curriculum vitae and a cover letter outlining your interest and qualifications to editor@camrt.ca. For more information, visit the CAMRT volunteer webpage.

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71st Annual General Conference/71e Congrès général annuel
The first six months of 2012 was a very busy period for me with on-going preparations for the forthcoming World Congress which was held in June in Toronto, Canada. In addition to the Congress Board and Council meetings are held prior to the Congress itself. The meetings are extremely important because they give the opportunity to both Board and Council to discuss the organisation of the ISRRRT.

This World Congress was also very special because 2012 is the 50th Anniversary of the founding of the ISRRRT and it should be noted in particular that this historic occasion also took place in Canada. As part of the 50th Anniversary David Collier, CEO of the Australian Institute of Radiography (AIR) is preparing a history of the ISRRRT. He has visited the ISRRRT Archives in Manchester University on two occasions and it is hoped to publish the history in book form to celebrate the first fifty years of the ISRRRT.

A fuller report of the Council meeting is given in another section of the ISRRRT newsletter but I would especially like to record that five new member organisations were admitted to membership of the ISRRRT by Council – Argentina, Indonesia, Vietnam, Poland and Bosnia Herzegovina. I look forward to working with them during the coming years.

Many important items were discussed at Council amongst which was a motion proposed and moved by the Society and College of radiographers of the United Kingdom: “The ISRRRT recognises that image interpretation is within the scope of practice of radiographers and radiological technologists, subject to them being properly educated, trained and competent to undertake image interpretation and where this is permissible by regulation or law.”

This motion was supported by Council and further, Council asked the Board of the ISRRRT to promote wherever possible the role of radiographers and radiological technologists in image interpretation in the delivery of safe, cost-effective and high quality diagnostic imaging services.

Paivi Wood, CEO of the Finnish Society, gave an update on the World Congress 2014 which will be held in Helsinki, Finland. She thanked the ISRRRT for the honour of being given the opportunity to host the 2014 World Congress and invited everyone to come to Helsinki. Helsinki is a strong supporter of the “green issues” and free transportation will be provided for all registrants whilst attending the Congress. There is easy access to neighbouring towns and countries such as Tallin, Stockholm and St Petersburg. Hospital visits will be arranged.

The Scientific Programme will be done in conjunction with the ISRRRT Director of Education, Cynthia Cowling and the theme is “Optimising for Better Care”.

The Council meeting will be held in the headquarters of the Finnish Society which is just across the road from the Congress Centre. This will save greatly on costs.

The Congress website is now open and information can be found at www.isrrt.2014.fi

The announcement of World Congress 2016 Host and Venue was also made during the Council meeting. The ISRRRT Board considered excellent bids from three countries in the Asia/Australasia Region. The decision of the Board is to award the 2016 Congress to Seoul, Korea. A site visit has been arranged for late October/early November to view the facilities. The visitors will also attend the radiographers conference in Seoul whilst there.

Travel Fund 2012. This fund was set up late 2011 and has been very successful. It has enabled 25 persons to attend the Congress who otherwise would not. All Board members were in support of its continuance and the next time the Travel Support Fund would be required is for the 2014 World Congress. There had been 45 applications and the support given had been fairly distributed between countries. Due to visa difficulties a supplemental application opportunity had been made with another good response.

All applicants were told that they must give feedback to the ISRRRT and to their own countries. This feedback will be in the form of a report on the
areas they have learnt whilst attending the Congress and the value gained to both themselves and the profession.

I would like to add my congratulations to my wife Alison. Alison was presented with Honorary membership of the ISRRT by the President Michael Ward, and an ISRRT Silver Pin, for her services and work done for the ISRRT over many years.

I attended many meetings during 2012 but was unable to be present at the ECR in March, however the ISRRT were very ably represented by Philippe Gerson, ISRRT Regional Director, Europe/Africa and Stewart Whitley, ISRRT Treasurer.

I also met several times during the year with Stewart Whitley to discuss ISRRT matters. In particular we both met with the ISRRT portfolio manager to discuss the progress of our investments. Stewart and I have regular telephone calls and SKYPE meetings and I would like to record my thanks for his help and hard work in his role as ISRRT Treasurer.

In March I was on holiday in Australia and took the opportunity to visit the Australian Institute of Radiography headquarters in Melbourne and met with David Collier, Chief Executive.

During May I attended the International Congress of Radiology in Sao Paulo, Brazil. Also in attendance from the ISRRT Board were Michael Ward, ISRRT President and Cynthia Cowling, ISRRT Director of Education. The ISRRT organised the conference programme for technologists, presented lectures and also staffed the ISRRT booth. Immediately following the Brazil Congress I attended the World Health Organisation Assembly in Geneva. In addition to attending the Assembly I took the opportunity to meet with Maria Perez and Adriana Velazquez Berumen to discuss future co-operation between the ISRRT and WHO.

Two important items were discussed:

- The Basis Safety Standards (BSS) were endorsed by WHO during the week of the WHO General Assembly in May. Related to this Maria Perez and Adriana Berumen wish to produce a document with respect to BSS followed by a Workshop regarding the Standards and ask for our co-operation along with ISR and ICRP. The project will be to develop a joint technical document entitled, “Safe and Effective Use of Radiation Medical Devices”. This will be seen as being complimentary to the BSS with specific consideration being given to “low resource settings”, the in word for “low dose”.

- Another document WHO wish us involved in and that is “Human Resources for Medical Devices” and they very much want input from ISRRT into this document.

The United Kingdom Radiology Conference (UKRC) took place in late June in Manchester. I attended and staffed the ISRRT booth along with Alison, my wife. As usual there were many visitors both from the UK and overseas and it was a pleasure to meet with them all. In early July I attended the inauguration of the President of the Society and College of Radiographers in London. This was as usual a very pleasant event which was attended by many organisations and individuals. The College are great supporters of the ISRRT and I passed on the good wishes of the Board and Council.

The World Radiography Education Trust Fund (WRETF) held its Annual General meeting in London on the 6th of October. The ISRRT has very close connections with the WRETF and Philippe Gerson, ISRRT Vice President for Europe/Africa, is now one of the WRETF Trustees. The WRETF is a very worthy charity which deserves our support and applications for individual donations can be found within this publication.

Attending the WRETF Annual General Meeting

Once again November 8th is being celebrated as World Radiography Day which continues to be ever more recognised throughout the world. The ISRRT poster has proved very popular and is being used by many societies. Congratulations are due to all countries who participate in the International Day and records of these events are to be found on their many websites.

At the end of November I will attend the RSNA in Chicago with President Michael Ward. The name of the ISRRT is very well known at the RSNA and we are now seen to be one of the leading organisations related to radiology and radiography. A complimentary booth is provided and the ISRRT President and CEO take the opportunity to meet with registrants and company personnel during the conference. Michael will also be once again presenting a session during the Associated Sciences Consortium. The attendance at the RSNA also provides the opportunity to meet with our Sister organisations and liaise with commercial companies in
order to promote sponsorship and funding for education and learning throughout the world.

The ISRRT also meets annually with representatives from Societies attending the RSNA. In the photograph left is a group of those attending the meeting. Thanks are due to the Joint Review Committee on Education in Radiologic Technology (JRCERT) for the use of their room each year.

My final meeting of the year will be in Bonn, Germany. The event is the International Conference on Radiation Protection in Medicine-Setting the Scene for the Next Decade organised by the IAEA, December 3-7, 2012.

This is preceded by a WHO International Workshop on Radiation Risk Communication in Pediatric Imaging on Sunday 2nd December 2012, hosted by the German Ministry of Environment (BMU). The ISRRT is delighted that Donna Newman, ISRRT Director of Professional Practice is an invited speaker at the Sunday workshop. Both Donna and Stewart are also speakers at the IAEA conference.

One other item before I close - The ISRRT website has been revamped. Please take time to visit the new website www.isrrt.org and send comments back to me.

I would like to thank the ISRRT Board, Council, the Editor and all others who have helped me throughout 2012 and wish everyone a very good and fruitful 2013.

Sandy Yule
CEO, ISRRT
I’m sure glad the hole isn’t at my end of the boat!

Is your boat sinking? Let us help you!

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Mohamed Khélifi
ISRR Council Member, Tunisia

Mr Mohamed Khélifi has been appointed ISRRT Council Member of the Tunisian Association of Radiological Technologists.

Mr Mohamed Khélifi is a radiological technologist who graduated in 2001 from the Higher School of Sciences and Health Technologies of Sfax as Senior Technician in Medical Imaging and Radiotherapy.

He worked for eight years in the radiology department of the Tunisian Military Hospital after which, he went to Québec in 2011 where he received the Canadian equivalent of his diploma. Mohamed began working like a ‘technologue (t.i.m)’ in the radiology department of LaSalle Hospital in Montreal.

Mr Khelifi loves associative work and volunteering. He has served since 2008 in the office member of the Tunisian Association of Radiological Technologists, responsible for the preparation and organisation of workshops and the congress of Radiology. He is also the Editor of the ATTR’X magazine and the Director of its official page on facebook. He renewed this magazine creating animation and partnerships with other French journals like “Manip-info” and “Le Manipulateur” which impressed the readers.

Mr Khelifi is the organiser of the “Best Poster” contest in the Radiology days, ATTR. He is also interested in the education of students and organises competitions with prizes for them.

Mr Khelifi was honoured several times with prizes. Recently he started a program to study an AEC of NMR in Ahuntsic College, Québec, Canada.

Mohamed has practiced football since childhood and now he is a big fan of the football team FC Barcelona.

His personal motto: “Better Training is Better Respected!”

Kathleen Margaret Colgan
ISRR Council Member, New Zealand

Kathleen (Kathy) Margaret Colgan was born in New Zealand.

She holds qualifications in; the The Australasian Conjoint Board Diploma in Diagnostic Radiography, obtained in 1983; Computed Tomography Course from the Bachelor of Health Science Medical Imaging Programme, UNITEC Institute of Technology, Auckland in 1997, and a Clinical Supervision Course from Central Institute of Technology, Wellington, NZ in 1999.

Kathy held the position of Executive Member of the NZIMRT Board of Management holding the Education Portfolio from 2002 to 2008. She was Chairperson of the NZIMRT CPD Panel and currently serves as CPD Portfolio Assessor.

Since 2007 she has been the Chairperson of Rotokawa School Board of Trustees.

Kathy has served as Vice President, President and Immediate Past President of NZIMRT.

Kathy’s work experience is vast and since 2010 is the Charge MRT/Professional Advisor for the Lakes District Health Board.

Kathy is married and has 3 children – she enjoys gardening, cooking, reading and travelling.

She now serves as the NZIMRT Council Representative on the ISRRT.
Mr Thai Van Loc is the President of Ho Chi Minh City Association of Radiological Technologists (HART). He currently work as the director of MEDICEN (Co., Ltd) – Medical equipment company which has investigated CR, DR, CT and MRI modalities. He received his Bachelor’s Degree in Medical Imaging Technology from the University of Medicine and Pharmacy at Ho Chi Minh City in 1992. He worked in the Department of Radiology of 115 People Hospital from 1992 to 1993. Thai Van Loc then moved to work in the Medical Center at Ho Chi Minh City (MEDIC), Department of CT and MRI until now.

Mr Thai Van Loc has been a member of the Board Management of Ho Chi Minh City Association Radiology since 2005. He is very active in the radiography professional practice and has friendly relationships with many doctors and radiological technologists in Ho Chi Minh City and other regions of Vietnam. Therefore, he is the one of persons who mobilised the foundation of HART.

In December 2011, HART was found and Loc elected to become the President.

Mr Phan Van Minh currently works as a Radiological Technologist in Cho Ray Hospital, Ho Chi Minh. He received his Bachelor’s Degree in Medical Imaging Technology from the University of Medicine and Pharmacy at Ho Chi Minh City in 1992. From 1981 to 1992, he worked as a Radiological Technologist in the X-ray room at Cho Ray Hospital. From 1992 until now, he moved to work in CT and MRI rooms at the same hospital.

Mr Minh is very active and enthusiastic in Radiological Technologist Education. He has participated in training students from Medicine and Pharmacy University and other radiologic trainees who come to Cho Ray Hospital for studying.

In September 2011, Mr Minh was elected to become the Vice President of Ho Chi Minh City Association of Radiological Technologists (HART).

The brief of process of establishing HCMC Association Radiologic Technologist (HART)

29.10.2011: Meeting of discussion establishing the HART
17.12.2011: Meeting of election Executive Board
05.05.2012: The first science conference of HART was hold at HCMC.
  • Around 350 attendances
  • 12 reports (X ray, CT, MRI, Nuclear medicine and Radiation of therapy) were presented.
07.062012: HART became the member society of ISRRRT in the 17th conference in Toronto- Canada.
Chan Lai Kuan
ISRRT Council Member, Malaysia

Ms Chan Lai Kuan graduated from the School of Radiography and Radiotherapy, Kuala Lumpur in 1981 where she obtained her Certificate of Radiography from the Ministry of Health, Malaysia as well as the Diploma in Radiography, College of Radiography, London, UK.

She worked as a radiographer in the General Hospital in Kuala Terengganu for 10 years. In 1992 she obtained a scholarship from the Malaysian Government to do the B.Sc. in Medical Imaging Technology and Postgraduate Diploma in Medical Imaging at Curtin University, Perth, Australia. Ms Chan Lai Kuan returned to Malaysia at the end of 1993 and was promoted to be a tutor at the College of Radiography and Radiotherapy in 1994.

She pursued her study and received her Master of Health Science (Medical Radiation Sciences) from the University of Sydney in 2010.

Ms Chan Lai Kuan retired in March 2012 and currently she works as a part-time lecturer. Throughout her 31 years of service, she has held the positions of Radiography Program Head, Assistant Director of Student Affair, Assistant Director of Academic of Allied Health College and Director of Nursing College. She has been involved in the development of Post Basic CT course and was the core committee in developing the curriculum for Advanced Diploma in Breast Imaging.

Ms Chan Lai Kuan also participated in drafting the Allied Health Act. She was an active Malaysian Society member and served in various positions. She was elected as the Malaysian Society of Radiographers President in 2011 and since then she has been spending a lot of her time organising professional development activities for the members and take charge of all matters pertaining to the society.

She has great vision for the society and hopes that the profession will advance to a greater height in years to come.
Prince Ayodele Okhiria graduated with a Diploma from the College of Radiographers (UK) in 1979. He worked briefly as a Diagnostic Radiographer at the Lagos University Teaching Hospital before venturing into Medical equipment marketing.

He was a Medical Sales Representative/Sales Manager with Watson & Sons (GEC Medical) till 1993. Also worked as Marketing Manager/Application Specialist with SCOA/Philips Medical Systems till 1996 when he returned to school for a Masters Degree in Healthcare Management.

He returned to clinical radiography in 1999 as a Locum Radiographer at Mobil Producing Nigeria, Lagos and later to Chevron Nigeria as Staff Radiographer where he is a senior Practitioner till date.

He has delivered lectures at many National Conferences and attended many International Workshops, Conferences and World Congresses.

Prince Ayodele Okhiria is an Associate Member, International Society of Radiographers & Radiological Technologists; Member, Society of Radiographers, London; Life Member, Association of Radiographers of Nigeria (ARN).

Some positions he has held are, President of the Association of Radiographers of Nigeria, 2008-2010; Member, Board of Management, A.B.U. Teaching Hospital, Zaria, Nigeria, 2009-2011; Member, Ad Hoc Group on Africa, ISRRT 2001-2003; Chairman, Education Committee of the Association of Radiographers of Nigeria, 2002-2007; National Secretary/Council Member of the Association of Radiographers of Nigeria, 1993-2001; Member, National Universities Commission Panel on Minimum Academic Standards (Radiography) 1996-98; Session Chairman, ISRRT African Workshop on Trauma Radiography, Gaborone, Botswana 2001.

Prince Ayo Okhiria is currently Chairman of the Finance & General Purpose committee of the Council of the Association of Radiographers of Nigeria and Society Representative on the ISRRT council.
ISRRT Research Award winner 2012

Above, from left to right: Mr Anson Cheung, Mr Edward Wong, Mr Charles Chan and Mr Christopher Lai.

**Winner: Hong Kong**

“To justify the application of Bismuth eye-shield in Hong Kong during non-helical CT brain examination: iterative reconstruction projection method approach.”

Following is a summary of the project and a CV for the lead person, Dr Christopher Lai

**Introduction of research project:**
The application of the bismuth eye shield has proven can reduce both organ and effective radiation dose to the patient’s superficial structures. It is relatively inexpensive and easy to use, with minimal degrades on image quality. On the other hand, the practice of applying eye shield was inadequate in the busy X-ray department. Instead, radiographer usually tilted the gantry to exclude the orbits in the scan range for radiation protection. A potential drawback of this technique is the lack of flexibility to match nonhelical CT brain axial images with MRI axial images quickly because of the mismatch in the tilt plane. On the other hand, the potential advantage, such as streaking artifact reduction, in the implementation of new iterative reconstruction projection method together with the application of inplane eye shield was of little known. There are growing evidence showing that leaving a gap between the orbits and the Bismuth shield (Air gap technique) can reduce the side effects of the streaking artifact and sudden increase in the CT number arising from the inplane Bismuth shield. Therefore, the objective of the present study is to determine which of the two local practices in Hong Kong, either by gantry tilting or use of the bismuth eye shield, can lead to the most effectiveness in the eye dose reduction during routine CT nonhelical adult brain using the iterative reconstruction projection method. In addition, we use some polymer material to replace the gap between the orbits and the Bismuth shield and hypothesizes that these polymer materials can also reduce streaking artifact and normalize the CT number to the same extent to “air gap technique”, but at the same time reduce the lens dose more effectively.

**Introduction of Dr Christopher Lai**

Dr Lai currently is an Assistant Professor in the Department of Health Technology and Informatics at the Hong Kong Polytechnic University. Dr Lai received his BSc in Radiography with distinction in 1996. Dr Lai starts his career as a Radiographer II and Radiographer I in two large scale Hospitals for more than 14 years. In 2005, Dr Lai obtained his PhD degree at the Chinese University of Hong Kong and joined the Hong Kong Polytechnic University in 2010.

Dr Lai’s main research interests include vascular imaging, diagnosis of atherosclerosis and diabetes. Dr Lai currently is the Academic Secretary of the Hong Kong Radiographers’ Association (HKRA), and Fellow of the Hong Kong College of Radiographers and Radiation Therapists (HKCRRT). He is also serving in the Education Committee and Examination Committee of the Hong Kong Radiographers Board.
ISRRT Research Award winner 2012

Above: Hywel Rogers, Paul Brown and Shaaron Pratt,

Winner: United Kingdom
“A survey of the Information Management and Technology (IM&T) knowledge, skills and training needs of the international radiography workforce.”

International Information Management & Technology Project

Your profession needs YOUR input
Your help is needed to shape the future of Information Management and Technology (IM&T) in Clinical Imaging and Radiotherapy. How? By participating in a project being undertaken by Cardiff University and funded by the International Society of Radiographers and Radiological Technologists.

Scope of project
The project involves an online survey of the international radiographic workforce in order to identify the current and projected future IM&T knowledge and skills across the spectrum of Clinical Imaging and Radiotherapy. The survey will establish a baseline of radiographers IM&T competency and determine future IM&T needs and development.

The project team (pictured above) are Hywel Rogers, Paul Brown and Shaaron Pratt, all from the School of Healthcare Studies at Cardiff University.

How to participate
All radiographers are urged to complete the short, easy to understand questionnaire which is available from January 1st 2013 online at www.surveys.cardiff.ac.uk/isrrtimt and can also be accessed via the ISRRT web site. Electronic methods of completion are preferable for easy data analysis and for speedy collection of information to meet the data collection deadline of February 15th 2013 but if a paper copy is required contact a member of the research team on (+44) 02920687556.

Your participation in this project is vital to ensure all radiographers are equipped with the necessary skills for optimum use and development of IM&T in Clinical Imaging and Radiotherapy. We cannot move forward without YOUR help.

Any queries should be directed to the project lead Dr Shaaron Pratt pratt@cf.ac.uk / tel: 029 20687556.
If you believe research isn’t interesting and doesn’t make a difference to radiographic practice, then think again. If you had said to me a few years ago that I would be actively undertaking research and would present the results of which at a global conference, I would have laughed and told you not to be ridiculous! However, that is indeed what I have achieved alongside five other members of a research team that was started only two years ago. It is an experience that has truly inspired me.

We started our tentative steps into research via a quality group that consisted of three radiographers: Paula Evans, lead radiographer in plain film imaging, Maureen Taylor, lead radiographer in Trauma and myself; Louise Harding, Clinical Tutor. Our aims were to promote good practice, particularly focussing on the patient experience and image quality issues identified through audit and feedback from service users. Ultimately, this lead to collaborating with Andrew England, University of Liverpool lecturer and researcher, who sought to expand phantom-based research initially undertaken within the University department to the more clinically relevant hospital environment. Paul Charnock, who is a medical physics expert (Integrated Radiological Services Ltd, Liverpool) also joined our team, and he has been invaluable with his advice regarding issues surrounding radiation dose optimisation. Our final member is Anthony Manning-Stanley, a recent graduate in Radiography who has worked with us to develop his idea on the effects of patient orientation on radiation dose and image quality for pelvis examinations using ionisation chambers.

And so our initial quality group evolved into a research group, with the continuing objectives of the group being to look at imaging techniques to see if any changes could be made in order to reduce patient dose whilst maintaining adequate or improving image quality. It was decided that the relatively common and higher dose examination of pelvis/hip would be chosen as the first one to optimise.

In order to effectively disseminate our findings, we decided it was important that we both presented and published our research findings. We were fortunate enough to be successful in our application for a research grant provided by the International Society of Radiographer and Radiological Technologists (ISRRT). big thank you to Dr Sandy Yule, who has been extremely supportive and encouraging throughout this process.

And this is how we came to present at the ISRRT global conference in June this year.

This was the most exciting part of undertaking research – presenting the results of all our hard work! Not everyone’s cup of tea I know, but despite being nervous, we really wanted to share our research and what could be better than travelling to Toronto to do this.

It was decided that Paula and I would represent our team and
present at the ISRRT conference. Once again, a lot of hard work went into the presentation; but we really wanted to ensure that we didn’t let down the team or the support that we had been given by Dr Sandy Yule. Our presentation was on the Sunday, the final day of the conference, so we had the opportunity to attend many very interesting presentations and to meet some very inspirational people. These included a group of UK student radiographers who were also presenting for the first time at a conference, as well as Marianne Hardy and Bev Snaith who we have organised to meet up with since our return to UK and discuss ideas.

Paula and I presented our research to around 170 delegates and overcame our nerves the moment we began to speak. Neither of us had ever done anything like this before and I have to say we really enjoyed every moment. We felt very proud to be able to present to so many radiographers from around the world and hope that we may have given them ideas to take back to their departments. We were also pleased to have so many delegates approach us following our presentation, asking questions and wanting to share their thoughts on image optimisation. We were particularly delighted that the ISRRT president, Michael Ward came to listen to us and gave such a supportive speech when we had finished. We felt on top of the world!

And as for Toronto – it’s a beautiful city and the people are so welcoming and friendly. Paula and I enjoyed every moment of our time and crammed in as much as possible. We went up the CN Tower and took in the fabulous views. We even had the courage to stand on the glass floor and look down!

We visited Toronto Island and practiced our presentation on a beautiful beach with views over Toronto with a looming storm in the distance complete with thunder and lightning. And we couldn’t travel all that way without experiencing Niagara Falls. An unforgettable day; getting soaked on the “Maid of the Mist”, while trying to take in the sheer beauty and power of the falls; it’s an experience that we will never forget.

And so to the future: we are in the process of writing up our data and hope to have our research published. Indeed, Anthony has successfully published his initial research on patient orientation.

From our experiences so far in research, I believe there are several things that are really important that help you achieve your goals. The most important is to have a good idea: no matter how simple it may sound (and you may wonder why no one has thought of it before). If you have a good idea you can achieve something that can be put into practice and hopefully make a difference.

A supportive team is essential. We would not have progressed without the support and efforts from each member of our team: we worked together in an honest and friendly manner and never felt that you couldn’t ask a question or that your opinion wasn’t valued. I believe we have a strong team, made up of a diverse range of skills and characters which complement each other’s strengths and weaknesses. The team also needs commitment and an abundance of determination, which we drew from each other if we struggled to move our research forwards.

It is really hard at times to maintain progression due to pressures at work and time constraints: Radiography is a busy and demanding profession resulting in few opportunities during working hours to get together with the team. However we were offered support from our manager, Andrea Oxford, which enabled us to have some flexibility with our time. This helped us considerably, and although there were frustrating times when nothing seemed to happen, research when undertaken alongside your usual role requires patience and resilience.

Would we do it all again? You bet we would!!

Tuesday, September 18, 2012 saw the launch of the next campaign from Image Gently – Back to Basics — designed to help medical professionals use the lowest dose necessary to perform digital radiography (routine x-rays) in children while maintaining quality.

The Image gently website http://imagegently.org/ has been updated with new educational content supporting the Back to Basics message.

• Materials now posted on the Image Gently Web site are:
  • A full page ad for the Back to Basics campaign! A poster and safety checklist for radiologic technologists!
  • A pamphlet and frequently asked questions for parents on Digital Radiography exams!
  • Scientific articles, free power point presentations to use at your facility, and Practice Quality Improvement (PQI) projects!
  • Practical methods to standardise the approach to Digital Radiography and discussion of the Exposure Index
Preliminary Education Survey
Survey May 2012

Cynthia Cowling, Director of Education

Executive Summary and Discussion
This was a preliminary survey carried out during May 2012 following some discussion concerning the lack of recognition of radiography as a profession by the International Labour Organization (ILO). One component of the criteria used to determine these designations were based on level and quality of education (International Labour Organization, 2012). This survey and subsequent report gives a brief snapshot of the situation globally.

The survey was sent to all members of the ISRRT. It consisted of the questions seen below with five choices for a response. The questions and responses were based on the criteria listed by the ILO as well as referencing previous education surveys carried out by ISRRT in Europe and Africa. Given the short time span, it was not comprehensive in length.

The results showed a very strong trend towards degree education with 94% of the 32 countries who responded having degree programs at least as an option. Research was commonly offered in most programs and most countries required a minimum age for entry into the educational program. The largest diversity highlighted by this survey was the number of disciplines taught within a program. There is little correlation between length of program and how many disciplines a graduate can perform upon entering into the profession.

This survey has not entered into an analysis of curricula. 2 years may be 24 months of continuous learning; innovative curricular designs may prepare graduates in different ways; there is no indication of amount of clinical practice education, how it is taught and evaluated. It is also critical that programs be contextualised and meet the needs of their own environments. Any further study should therefore also include the workplace requirements for which the student are being prepared. Efforts would need to be made to ensure the greatest number of respondents for any further study.

Analysis

1. Name the country
82 ISRRT member countries were sent the survey. 32 responses were obtained representing all the ISRRT regions with a 39% response rate.
For this preliminary report the countries have not been subdivided into regions but the total for each region are as follows

<table>
<thead>
<tr>
<th>Region</th>
<th>America</th>
<th>Europe</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>60</td>
<td>40</td>
<td>12</td>
</tr>
</tbody>
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2. What are the minimal required years of primary/secondary education before a person can enter a radiography program
19 out of 32 (59%) listed 12 or 13 years of education as a requirement before entering a program. 5 indicated “graduate” although it was unclear whether this meant graduate from high school or post-secondary educational institution. 2 Countries listed 10 years of education as sufficient for entry into a radiography program. The remainder did not complete this section. One country listed separate entrance requirement for diploma and degree programs, 10 years for diploma and 12 years for degree.

3. What is the minimum age a student may enter a program
15 (47%) of respondents gave 18 or 19 as the permitted age to enter a radiography program. 11 (32%) indicated there was no limit. The UK mentioned that although educationally there are no limits, the age of the student is dictated by the minimum age requirement in order to use radiation in UK, which is 18. 3 respondents said 16 was the minimum age limit and 2 gave 17 as the minimum age.

4. What is the length of your basic radiography education which results in a competent practicing radiographer? Indicate if more than one in your country.
Length of program can vary between 1.5 years to 4 years. 14 (44%) were 3 years in length, 10 (31%) gave 4 years and 2 programs were 5 years long. In instances where a country offers both a diploma and a degree, the diploma is one year shorter. 5 countries listed diploma programs which were 2 years in length.

5. Is your program a combined program. (This is a program that includes more than one discipline)
50% of the countries indicated their programs included multiple disciplines.

6. What technologies are the graduates competent to practice in upon graduation from the basic program?
Of these 50%, in 5 programs graduates were deemed competent in diagnostic, therapy and nuclear medicine. 4 programs graduated students deemed competent in in diagnostic, therapy, nuclear medicine and ultrasound. 2 programs included diagnostic and therapy only and 2 programs included diagnostic and nuclear medicine only. One country program included diagnostic radiography and ultrasound.
In 2 programs graduates were deemed competent to practice diagnostic, therapy, nuclear medicine and MRI. 1 program included all of these disciplines plus veterinary and industrial radiography. This particular program was also the longest one (5 years). However in general there was little correlation between the length of the program and the number of disciplines included. One 3 year diploma program with only 10 years of primary and secondary education required before entry to the program, produced graduates deemed competent in diagnostic, radiation therapy, nuclear medicine and dosimetry.

7. What is the award/designation given upon graduation as a competent basic radiographer?
30 (94%) of countries submitted indicated that a degree was at least an option in their country. Of these countries 15 (53%) offered only degree programs. 2 countries offered a diploma only.

8. Is there a specific research component to the program?
25 (78%) countries identified research as a component of their curriculum. In 4 of the countries which offered both diploma and degree, research was offered only in the degree program.

References

Cynthia Cowling, Director of Education, ISRRT September 2012
With thanks to CEO Sandy Yule, Head Office ISRRT and to the countries who contributed to this survey.
New Corporate Sponsor for ISRRT

The Board is pleased to announce that on August 1, 2012 after active and friendly contact with Bob Wardley of Wardray Premise Limited (UK) that they signed up as a Silver Corporate Member of the International Society of Radiographers and Radiological Technologists.

The family business of Wardray Premise has over 100 years of trading experience. For the last 75 years it has been involved in the design and manufacture of radiation shielding and related imaging products which are distributed throughout the UK and across the World.

Started in 1909 by John Wardley, grandfather of the current chairman, Bob Wardley (RBW), the business initially concentrated on the production of high quality joinery products. It expanded with the arrival of John’s two sons Bob Senior (RJW) and Jim (FJW) and is now a well respected and established UK company offering a wide range of products and services to the Diagnostic Imaging and Radiotherapy communities.

Stewart Whitley, ISRRT Treasurer, commented that “Corporate membership plays an important function in strengthening the financial reserves of ISRRT and making projects and developments more affordable and we are delighted that Wardray Premise has joined as a Silver Member and we look forward to many happy years of valuable contact”. In particular Stewart is pleased that Wardray Premise will be contributing a series of articles on Protection Issues in Radiology Imaging in News and Views of the ISRRT.

Stewart is keen to see the list of Corporate sponsors growing as ISRRT moves forward with its educational and professional development plans across the globe in assisting colleagues in developing countries and would encourage all members to get involved in recruiting new corporate members no matter how small or large the company. If you want help in recruiting companies please contact Dr Alexander Yule, ISRRT CEO.

Stewart Whitley, ISRRT Treasurer

ISRRT Honorary Membership awarded

Mrs Alison Yule was awarded an Honorary Membership of the ISRRT and a silver pin in recognition for her tireless work and voluntary support of the ISRRT organisation for many years.

The award was presented to Alison during the ISRRT World Congress in Toronto in 2012, the year of the 50th anniversary of the ISRRT.
It was a remarkable experience to attend the ISRRT council meeting and the 17th ISRRT World Congress in Toronto, Canada in early June 2012. The opportunity to meet the ISRRT board and council members was valuable, but it was networking and engaging with the radiographer delegates at the congress from all over the world that offered the greatest experience. You meet delegates from all over the world.

While at the meeting, I once again realised the value of our society’s affiliation with the ISRRT. This connection provides a platform to engage and interact on a global level, to obtain professional networks and support where required, and it opens avenues in the profession for empowerment in terms of new policies and procedures formulated by the WHO and IEAE, to mention but a few. On the day before the council meeting the board members were introduced during an informal discussion session so that new members - like me - could be familiarised with the meeting procedures. The council meeting also gave me the opportunity to respectfully observe the hard work and commitment of the current ISRRT board members.

The 17th World Congress was jointly planned by the ISRRT and the CAMRT and offered about 80 sessions, 15 different streams, more than 200 oral presentations and close to 100 posters. Dr Michael Ward, President of the ISRRT board opened the congress during the traditional but flamboyant flag ceremony (pictured page 25).

The keynotes included the Hutchinson lecture presented by Prof Scott Bowman, the Vice Chancellor (VC) of Central Queensland University in Australia. Prof Bowman started his career as a radiographer and asked if it is not time to rebrand the profession with ‘MRT’s are the very image of care’. Dr Alex Hadad addressed the delegates on the changing experiences of patients by providing a staircase of support. The Welch memorial lecture was presented by Mr. Euclid Seeram from Canada, himself a radiographer who is about to obtain his PhD degree. Dr Benjamin Corn, Professor of Oncology from Tel Aviv talked on ‘Recapturing the wondrous moments of our profession: An image guided approach’. The fact that the venues were packed with delegates during each keynote address was a testimony of the high quality of the presentations.

On the social side the conference organizers catered for an

World Congress invaluable experience

My impressions of the ISRRT Council Meeting and 17th World Congress, Toronto, Canada

Hesta Friedrich-Nel, ISRRT Council Member, South Africa
interesting variety with the Harbour cruise as the absolute winner. In-between the session there was ‘entertainment’ disguised as the RADSAFE fashion show, a raffle fund raising event for CAMRT and a competition to collect play cards in the exhibition centre. I also enjoyed the trip to the breathtaking Niagara falls. ISRRT delegates enjoyed a beautiful sunny and summer day and being showered with water-spray from Niagara Falls! (pictured below)

To share in my remarkable experiences, please start with your preparation now to attend the 18th ISRRT world congress from June 12-15, 2014 in Helsinki, Finland. The conference theme is “optimising for better care” (www.isrrt2014.fi). Be assured that the experiences will linger long after the event has taken place.

Hesta Friedrich-Nel
ISRRT Council Member, South Africa
Pan American Health Organization Report

September 2012

Rita Eyer, ISRRT Vice President, Americas Region

The ISRRT is recognised as having a direct relationship with the World Health Organization (WHO) as a Non-Governmental Organization (NGO). Because of this direct relationship, every year, on behalf of the Governor General of the World Health Organization, the Pan American Health Organization’s (PAHO) Regional Director of the Americas has the ability to invite an ISRRT representative to attend the PAHO Directing Council and Regional Meetings as an observer. I was, once again, on behalf of the ISRRT Board of Directors, able to represent the ISRRT as the Vice President of the Americas Region at the 28th Pan American Sanitary Conference and the 64th Regional Meeting of the Americas. This conference took place in Washington, D.C. September 17-21, 2012.

The Pan American Sanitary Bureau (PASB) is the oldest international health agency in the world, and, in fact, celebrated its 110 birthday at this year’s conference. The PASB is the Secretariat of the Pan American Health Organization. In its role as an international public health agency PASB has been striving to improve the health and standards of living for the people of the Americas Regions for its entire existence. PASB serves as the Regional Office for the Americas of the World Health Organization. Representatives from thirty-eight nations, predominantly from the Americas Region, were in attendance at this year’s conference and in most cases, the country’s Minister of Health was present. France, the Kingdom of the Netherlands and the United Kingdom of Great Britain and Northern Ireland are Participating States and Portugal and Spain are Observer States. All of these countries were represented at the Conference this year as well. Interpretive services are provided throughout the meetings in Spanish, English, French and Portuguese.

These are some of the policy matters that were discussed and the last one in this list will be the one that I go into any detail. I would be happy to provide information on these other resolutions should you wish.

1. The Mid-Term Evaluation of the Health Agenda for the Americas
2. Strategy and Plan of Action for the Prevention and Control of the Non-communicable Diseases (NCDs), which are cancer, diabetes, cardiovascular diseases, and chronic respiratory diseases which result in 36 million deaths annually.
3. Strategy and Plan of Action for Integrated Child Health
4. Health Technology Assessment and Incorporation into Health Systems
5. Strategy and Plan of Action on Knowledge Management and Communication
6. Co-ordination of International Humanitarian Assistance in Health in case of Disaster
7. Bioethics: Towards the Integration of Ethics in Health
8. Expanded Textbook and Instruction Materials Program (PALTEx)
11. Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards (BSS)

Prior to the discussion regarding the Basic Safety Standard resolution, I had the opportunity to meet with Dr. Pablo Jimenez, the Regional Advisor in Radiological Health for PAHO, and Kayiba Medlen General Program Manager for RAD-AID and Radiology Consultant for PAHO. Dr. Jimenez was spearheading this agenda item so it was imperative that I had the chance to speak with him on an informal basis before being discussed in great detail at the PAHO meeting. The following is some of the background information on the International Basic Safety Standard.

The first version of the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources was published in 1962, and in 1967, 1982, and 1996 updates were published. Over the years, these standards have become the international reference on radiation safety and all Member States use them to establish their national regulations. PAHO has actively participated in the review and revision process of the latest version of the standards, together with the Nuclear Energy Agency of the Organization for Economic Co-operation and Development (NEA/OECD), the International Atomic Energy Agency (IAEA), the United Nations Food and Agriculture Organization (FAO), the International Labor Organization (ILO), the World Health Organization (WHO), the European Atomic Energy Community (EURATOM), and the United Nations Environment Program (UNEP), through a Joint Secretariat. During this review and revision period, more than 60 meetings were held. Specific technical meetings were also convened for more complex or new matters. The IAEA Board of Governors approved the new version of the standards in September 2011 and published the provisional version in Arabic, Chinese, Spanish, French, English, and Russian. This provisional version was sent to the governing bodies of each organization in order for them to precede with the corresponding ratification processes. To date, these new standards have been formally ratified by the IAEA, FAO, UNEP, the NEA/OECD, and the ILO, as well as by WHO at the 131st Session of the Executive Board, held on 28-29 May 2012 of medical exposure throughout the world. In some countries of the Region, for the first time in history, medical exposure has been higher than exposure to radiation from natural sources. The Basic Safety Standards require countries to have a national regulatory infrastructure for radiation safety and protection. However, only 22 countries of the Region have regulatory authorities in this area and, in many cases where there do exist, they do not have sufficient technical capability nor resources to be able to adequately fulfill their functions. Constant technical advances in diagnostic imaging and radiation therapy will have an impact in the future on the population radiation dose throughout the world and this is very difficult to predict. There has been a rapid increase not only in the quantity of health centers and equipment, but also in their complexity. But the number of well-trained professionals is a concern and is lacking. It has been stated that the Basic Safety Standards require that adequate preparations shall be established and maintained at local and national levels and, where agreed between
States, at the international level to respond to nuclear or radiological emergencies.

These are the changes for the new International Basic Safety Standard:

- The requirements established in the new standards are governed by the objectives, concepts, and principles of the Fundamental Safety Principles, and are based on the information obtained from the experience of the Member States in the application of the requirements of the previous safety Standards. Furthermore, they are based on broad research activities carried out by national and international scientific organizations concerning the health effects of radiation exposure and on measures and techniques for the safe design and use of radiation sources. They also take into account the conclusions of the United Nations Scientific Committee on the Effects of Atomic Radiation and the recommendations of the International Commission on Radiological Protection (ICRP). Because scientific considerations are only one part of the bases for adopting decisions with respect to protection and safety, the standards also used for value judgments related to risk management that reflect international consensus.

- The new standards are intended, above all, to be used by governments and regulatory bodies. The requirements stipulated in them can also be applied by health authorities, professional organizations, and service providers, as well as technical support organizations or providers of radiation sources.

- The new standards establish requirements for the protection of people and the environment from harmful effects of ionizing radiation and for the safety of radiation sources. They apply to all three categories of exposure--occupational exposure, public exposure, and medical exposure--and for all exposure situations, whether planned, existing, or emergency.

- Requirements for the protection of people are established without distinction of sex or race. Nevertheless, specific requirements are identified and established for special risk groups, such as the risk to the embryo or fetus due to exposure of a pregnant woman; the risk of health effects for a breast-fed infant due to ingestion of radioactive substances; radiation exposure of children and pediatric patients; or occupational exposure of apprentices or students aged 16 to 18 years. Furthermore, it is established that notification of the employer by a female worker if she suspects that she is pregnant or if she is breast-feeding shall not be considered a reason to exclude a female worker from work.

- The new standards have been developed to identify environmental protection as an issue that should be evaluated, while providing for certain flexibility to include the results of environmental assessments that are proportional to the radiological risks in decision-making processes.

- They also include criteria for protection against exposure to radon, which are based on the latest studies by WHO and on the recommendations of the ICRP.

- Concerning transportation of radioactive materials, they establish adapting to the provisions of the Regulations for the Safe Transport of Radioactive Material of the IAEA and all relevant international conventions.

- With regard to nuclear or radiological emergencies, they stipulate that the government should establish and maintain, in the territories of the State and within its jurisdiction, a disaster management system to respond for the purpose of protecting human life and health and the environment.

- Workers’ health surveillance programs will be based on the technical and ethical guidelines for occupational health established by the International Labour Organization (ILO)- the UN specialised agency which seeks the promotion of social justice and internationally recognised human and labour rights.

- Medical exposure of volunteers within the framework of a biomedical research program should be in keeping with the

Some of the representatives from the 38 countries which were represented at the 28th Pan American Sanitary Conference.
provisions of the Declaration of Helsinki and take into account the guidelines published by the Council for International Organizations of Medical Sciences (CIOMS), together with the recommendations of the ICRP in this regard.

- In regards to food subject to international trade, the radionuclide content that could be contained in the food as a result of a nuclear or radiological emergency should be governed by the guidelines published by the Joint FAO/WHO Codex Alimentarius Commission.
- To establish acceptable levels of radionuclides in drinking water, the values published by WHO should be considered.
- In regard to medical exposure, quality assurance programs must be established taking into account the principles established by WHO, PAHO, and the competent professional bodies.

This resolution intended to improve the safe use of ionizing radiation and protect patients, workers, the general public, and the environment from health hazards and implement the newly revised International Basic Safety Standards was voted in favor by the Pan American Sanitary Conference Member States. As well the nations voted in favor to include or update national regulations on aspects of radiation safety applicable to all uses and situations and strengthen (and create where they do not exist) regulatory authorities consonant with each country’s risks. Radiation disasters were also discussed under the International Health Regulations Resolution. It was a perfect opportunity for me to introduce myself to the representatives from the Caribbean, Central and South America nations and offer ISRRRT assistance in regards to information on ionizing radiation standards and training opportunities through the ISRRRT. The newly revised international Basic Safety Standard will be discussed at the European Radiology Congress (ECR) later this fall and, if approved there, all revisions will come into effect.

I was also able to speak with Dr Jimenez on the Mammography Workshop the ISRRRT has planned for the Society of Radiographers in Jamaica for November 10 & 11. PAHO is now able to provide some funding for this Mammography Workshop and at the time of writing this report there are twenty-nine technologists who are registered for this weekend event. Shirley Long, the well known Canadian Mammographer, who has published the textbook, “The Handbook of Mammography” and has lectured at many national conferences, will be one of the presenters. She will be providing her clinical expertise and image critique guidelines to those present as will Kayiba Medlen and I. She is also donating her textbooks to the Jamaican participants as well as to other Caribbean nations. Kayiba has performed Mammography Workshops previously for RAD-AID including one just a few weeks ago in India. PAHO is providing the funding for Kayiba as well as sharing some of the other workshop expenditures. It is so fantastic that the ISRRRT is able to partner once again with PAHO on an educational project. My being in Washington for the Pan American Sanitary Conference enabled the final stages of planning for this Workshop to occur. Ms. Marilyn Entwistle, the PAHO employee in Jamaica, will be assisting us in regards to the utilization of the Cancer Care building in Kingston and as well as other logistical concerns. Three presenters will ensure that very adequate clinical and didactic training can be accomplished in the two day time frame. This Mammography Workshop is being strongly supported by the Jamaican Ministry of Health, a fact that both the Acting Chief Medical Officer for the Ministry of Health and the Permanent Secretary to the Ministry, Dr. Jean Dixon attested to when I had the opportunity to meet with them in Washington. Our Mammography Workshop fits in perfectly to their strategic planning goals of cancer care and prevention. Details of this workshop will be provided in the Spring ISRRRT Newsletter.

Both Kayiba and I also met with the Haitian representatives to ensure they were aware that the ISRRRT and PAHO want to assist this nation in every possible way. Kayiba has already done some work in Haiti and will be going back in December. The ISRRRT Board of Directors is in the final stages of determining which projects and educational workshops will be approved for the 2013 calendar year. There is still so much to be done in Haiti but you can be assured that under the leadership of Cynthia Cowling, ISRRRT Director of Education, and Lori Boyd, Education Co-ordinator of the Americas Region, an excellent job will be done in the workshops that will be conducted to assist fellow Haitian radiographers.

Dr Mirta Roses Periago, completed her 10th year (2 terms) as the Director of the Pan American Sanitary Bureau. Dr Roses, from Argentina, was the fourth Latin American and the first woman to lead the world’s oldest international health agency. Her accomplishments
in that decade are so amazing! She was given so many accolades from every Minister of Health and other national representatives present during the 5 day conference. Please see the last picture of this report showing one that she received. Most notably, she was awarded Director Emeritus. As Director of the Pan American Sanitary Bureau, Dr. Roses provided her Quinquennial Report for 2001-2013 and the Report on Health in the Americas. Dr. Roses was responsible for the PAHO Millennium Development Goals (MDG’s) which are as follows:

1. Eradicate Extreme Poverty and Hunger
2. Achieve Universal Primary Education
3. Promote Gender Equality and Empower Women
4. Reduce Child Mortality
5. Improve Maternal Health
6. Combat HIV/AIDS, Malaria, and Other Diseases
7. Ensure Environmental Sustainability
8. Develop a Global Partnership for Development

The Millennium Development Goals have been described by many as the most ambitious endeavours ever pursued against human deprivation and the first to place health at the center of development. They give us an unparalleled opportunity to improve health and equity by mobilizing coordinated multi-sectoral action to fight disease and improve the social determinants of health. So much has been accomplished with Dr. Roses at the helm of the PASB that everyone was stating that her footprint is forever in the sand. Without any doubt Dr. Roses worked tirelessly to improve health and assist the most vulnerable groups including the poor, mothers and children, the elderly, and workers. She focussed on issues relating to equality for those who lack access to health and on a Panamerican approach encouraging all countries of the Americas to work together on all the issues listed above and build lasting capacities. It was very exciting to be in attendance at the Pan American Sanitary Bureau election for the new Director of the Pan American Sanitary Bureau and Regional Director of the World Health Organization for the Americas. Dr. Clarisse Etienne from Dominica is that person. She gave an excellent acceptance speech that proved the PASB is still in good hands.

Dr. Margaret Chan, Director General of the WHO, was also present for three days of the Pan American Sanitary Conference. She reminded us that we are all faced with many challenges for 21st Century and as a result the World Health Forum has come about. Conditions in the past 60 years have changed drastically many due to global climate change and more recently, the global economic crisis. An update on the WHO reform was provided during the meetings identifying major accomplishments particularly in the Americas and without health, there can be no development. Key words that were reiterated from all countries are sustainability, accountability, relevance, efficiency, effective and transparency. Work continues on the comprehensive reform process that will lead to WHO’s continued leadership role as the world’s premier authority on health. The expected outcomes of the reforms aim to refocus WHO’s core business to address the 21st century health challenges facing countries; reform its financing and management to address health challenges more effectively; transform WHO governance to improve public health allowing it to play a larger role in global health governance.

I was very fortunate to have been able to attend this Pan American Sanitary Conference and know that three of the four goals of the ISRRT Board of Management Strategic Plan were accomplished: communication, focus on developing nations, and collaboration with member societies.

Rita Eyer
The last six months have been quite busy for the Professional Practice committee. Our regional Coordinator from the Americas Sharon Warteenbe and our regional Coordinator from Africa, Boniface Yao were both able to attend the World Congress held in Toronto, Canada this past June along with myself, Donna Newman Director of Professional Practice.

I would like to highlight our committee’s perspective at the World Congress. Collectively and individually we had a very busy Congress. It was a wonderful opportunity to see old friends, network and learn about new technology from around the world. The power of these International Congresses gives us the ability to listen to an assortment of lectures given at various technical levels representing diverse practices in many countries. Boniface Yao presented a poster display titled “Practice of Diagnostic Radiology in a situation of limited resources: Report on three local initiatives undertaken in Cote d’Ivorie.” I presented a lecture under the management track titled New Technology: How to Bring a New Service on Board and Build a Business Plan (Case Study on cardiac RB PET startup).”

At the Open Forum I represented our Professional Practice Committee and presented a power point on the projects we had completed in the past two years. We highlighted our work with ICRP on the Annal’s draft report that was sent to our committee to review. We also highlighted our work with the IAEA on the draft power point presentation on Digital Radiography. I also presented our part in the IRQN Referral Guidelines that our committee along with our ISRRT board contributed to. Finally we highlighted our boards participation in the meeting regarding the Smartcard/Smart Rad Track with the IAEA.

As a committee, we attended as many lectures as possible. One lecture that stood out in my mind was the presentation on the latest technological advancement in MRI/PET scanner technology. It was informative to hear the latest advancements on how the technology has been improved to make this MR/PET move into standard of Care for radiology. I took particular interest in this topic as our hospital is considering purchasing one of these machines in the near future. Attending the World Congress was a great opportunity to hear this cutting edge information to share with my administration.

My most memorable presentation was a talk given by Dr Benjamin Corn, a Professor of Oncology from Tel Aviv University School of Medicine, titled “Recapturing the Wondrous Moments of our Profession, An Image-Guided Approach” discussing how to capture the profession’s human components. As a Radiation Oncologist, Dr Corn talked about the impact on care of the human touch and eye contact. Dr Corn emphasised that this is the most important part of our job. After listening to the lecture, I reflected on the fact that as professionals we all share the common goal of quality patient care. No matter where we live globally, or what type of equipment we work on our main goal is quality care for the patient; and part of the quality care we give is the human touch. Dr Corn demonstrated through several examples that the human touch, eye contact and tone of voice can impact quality of care. As Professionals, we struggle to impact our countries government in raising standards for the patients. We still push to change laws that allow only certain trained individuals to work on the equipment. We all know we will continue to fight for this; however, impact can be slow and insufficient for our practices. The one thing all professionals share is the complete control we have on our human interaction with the patient. The environment we create can leave the patient feeling like they have received the best care possible no matter what year the machine was installed or built. This lecture really impacted me and reminded me this is the most important part of our job. I came back from the meeting reenergized and excited to be with my patients; realizing how much we can impact their care.

We also attended the Dose-Wise Winners talk by Sandra Pridgeon called, “Radiation Protection in an Operating Theatre.” Sandra is from Welkom South Africa and gave a wonderful lecture on how to implement a reusable shield to absorb radiation backscatter from the patient in order to reduce the radiation dose to the staff. I left that talk realising we have so many innovative personnel working in our profession who can really impact quality and radiation safety.

As a Committee we took the opportunity to meet in face-to-face discussions on several projects that we had been reviewing. The draft review of the Training Materials on Radiation Protection in Diagnostic and Interventional Radiology from the IAEC was first on our agenda for review. Over all the committee felt the modules were excellent teaching tools for undergraduates, postgraduate and continuing professional development programs. The practical exercises were very well appreciated and help to understand the corresponding lectures. The committee also reviewed all the power points for feedback in both educational content and radiation protection. We also agreed with all the major changes in the excel spreadsheet that were proposed. Several detailed suggestions specific to certain slides in the power point were made for consideration. The committee asked to have the slides translated into French or other languages for better distribution globally in non English speaking countries. Some of the specific detailed comments related to the fact that US uses over 80% digital and some European areas are the same. To keep this a global document it should contain both digital and film screen. The sections that are specific to film screen should be
labeled as such. It is great that they site European and American resources both.

During our meeting our committee also reviewed a document from the World Health Organization, “Medical devices Unit/Information request Form”. The objective is to increase access to safe, appropriate, affordable and quality medical devices to populations in need. The form was divided into three sections which included expert, guideline and product information. This form will be used to standardize requests and link support from collaborating centers, professional organizations and all stakeholders who have a formal relationship with the WHO.

An opportunity to review our upcoming year with emphasis on budget requests from the Professional Practice committee for the finance committee was also discussed. As a group we decided because of the short deadlines that seem to come with each draft review we receive from around the globe from the IAECE, Annals’ report’s from the IRCP and referral guidelines for the INRQ there was no need at this time to submit for budgetary project to the finance committee for the upcoming year.

It has long been the tradition to bring a gift of appreciation to our host country to thank them for hosting the Congress. One thing that also stood out to me at the closing ceremonies was one of my fellow colleagues. Boniface Yao stated during his presentation that his country had had a civil outbreak this past year on the Ivory Coast, Africa. Boniface stated that he would always remember that his professional family, the ISRRT, did not forget him during their civil outbreak and continued to check on him during this difficult time in his country. As a global professional society our professional family can be very large.

The internet teaches us that we can become much smaller and closer to each other as we communicate with each other. It is amazing to me the dedication and support that is provided to all of our members.

Currently the Professional Practice Committee is reviewing a document along with the ISRRT board of management and several expert technologists. The World Health Organization sent a draft document titled, “Communicating radiation risk and benefits in pediatric imaging.” This document is a communication tool for health care providers which will be presented and reviewed at the preconference workshop being held in Bonn, Germany at the International Atomic Energy Agency’s conference on Radiation protection in Medicine-Setting the scene for the next Decade. I will be presenting on behalf of the ISRRT and also participating in the group panel discussion. An update will be in the next issue.

I want to thank everyone that contributed to this document and also take a moment to let you know that if you are interested in participating and reviewing these draft documents please send me your email information and your area of expertise. My email address is donna.newman@sanfordhealth.org. As a committee we welcome help and input on these documents.

Professional Practice, the Americas
Sharon Wartenbee

I have had the privilege of attending three International World Congress meetings. My first Congress was in Denver, Co where I was first appointed as the Regional Co-ordinator of the Americas in Professional Practice. The second World Congress that I attended was in Durban, South Africa. There I was able to meet and interact with radiologic science professionals from around the world and admire them for their passion of the profession. My third World Congress was in June 2012 which was held in Toronto, Canada. It was very special for me as this was the first time that I attended the “Council meeting” of the Congress. The Council includes a voting representative from each of the member countries. I attended as an interested party and was amazed as the voting members discussed the issues and were able to come to a consensus.

The opportunity to attend these meetings has been a highlight of my career. I have been able to interact with other professionals and gain knowledge of their challenges. Being able to network and meet face to face with colleagues from around the world has been a wonderful learning experience. I have made many friendships over the years which I treasure. Thank you for the opportunity to serve as your Regional Co-Ordinator of the Americas. It is indeed a privilege.

Radiation Report

During the last few years in the United States there has been several exposure hazards recorded in radiation therapy and CT. With media coverage of these events, the public and health care professionals have become aware and concerned of these excessive exposures to patients. The State of California recently passed legislation in response to these events to protect patients from over exposure to medical radiation. At this time, this legislation applies only to the state of California. Effective July, 2012 in California:

- All hospitals/clinics must capture dose for each CT scan.
- All hospitals/clinics must report any radiation incident.
- All CT providers must be accredited by the Center for Medicare and Medicaid Services (CMS) which is a federal agency of the United States Government.

California legislation gives everyone working in the field of radiologic technology the opportunity to review their radiation safety program and make the necessary changes to protect the patient.

Proactive measures include:
- Examining and standardizing protocols for exams.
- Dose monitoring on exams.

Software is available to support both dose reduction and dose monitoring from the different vendors. Do your research before you make any purchases.

Valuable resources include:
- www.acr.org
- www.aapm.org
REPORT

Executive Summary
The purpose of the brief follow-up survey was twofold. One was to determine how useful the course and CD were in practice and the second was to have feedback to improve subsequent workshops on this subject.

The respondents were universal in their approval of the workshop and the content. Although they were most interested in image interpretation, the usefulness of including QA and a discussion on professional issues was recognized.

There were requests for the workshop to be longer from two weeks to two months but most recognized the limitations and felt that the amount of detail covered was appropriate for the length of time provided. There was a request for more practical time looking at images, one for more experts, two for a substantive test at the end and one for more tips on report writing. There was one lengthy request to include CT images of the chest and one for more detailed information in order to enter into informed clinical discussions and assist with the decision making process for differential diagnosis. These requests while very important cannot be accomplished within the context of the workshop offered and they allude to the expected scope of practice of some of the radiographers in Uganda, which may exceed imaging professionals in other countries.

The CD was very appreciated by all respondents. It was very useful and comprehensive but did have some problems with the sounds. The respondents had been using it during their work time. It seemed to be simple to download. One request was for more detailed pathological differential diagnosis, but this is far beyond this CD which is essentially an atlas and not meant to form part of a radiology program.

Suggestions for future offerings included having longer sessions and ultrasound workshops. There was a request for a Diploma. This is not possible for an ISRRT workshop unless a rigorous assessment is provided at some point. (A Certificate of Participation or Achievement is the usual award provided.)

There are two more pattern Recognition/Image Interpretation workshops to be offered in Malawi in October 2012 and Zambia in June 2013. The feedback received from this follow up survey combined with the immediate evaluation taken at the end of the workshop in November will be most useful in ensuring an improved workshop and CD. One comment mentioned the varying levels of education between the 3 countries and the depth and complexity of
the workshop given. Most of the Ugandan participants had graduated with degrees or advanced diploma though an internationally well recognized educational program.

**Concluding Comment**

This was a very useful survey and should be a requirement for each ISRRT workshop. It may be useful to provide more opportunity for respondents to elaborate on exactly how the material and workshop had affected their own practice, thus emphasizing the ISRRT mandate “to improve the practice of Radiography”.

Thanks go again to Dr. Ian Cowan for his persistence in getting and collating the responses and to Stephen Bule for providing the excellent local contact.

**Original Feedback**

**Question 1. About the course**

a. What should we keep in?
   - Maintaining the training with annual refresher courses for radiographers in the community
   - Everything was perfect
   - The lectures and workstations images make it relevant and must know
   - All the course contents should be kept in.
   - Keep everything.
   - To retain the same method, with maybe some minor upgrading in learning resources (films, CDs, viewing tools)
   - Everything!

b. What should we leave out?
   - Workplace experience and QC are good to know
   - None
   - Only improvements should be made on the same.
   - Nothing!

c. Is there anything we should add?
   - Enough time for learning more - ? 2 weeks
   - Invite many specialists/experts to present their own work.
   - More time for practical film interpretation during the course.
   - Assessments and evaluation of individual participants would improve seriousness and knowledge retention.
   - I think you should add in a test at the end of the course to judge our level of understanding.
   - Add tips on how to write a descriptive report of the X-ray image patterns.
   - Yes! Research from local presenters to identify the common diseases so that they are given enough depth.
   - I think yes! CT Cross sectional images. In my view this should be in the section of the chest X-ray. The chest X-ray is the commonest examination yet its pattern recognition is still a problem to many doctors. The main problem is due to overlap of structures in a plain radiograph so many are sometimes fooled by where the pathology really is. To make matters worse, there is an increasing trend that many centers now employ people who are trained on Job even without a science background so it’s not a common practice that the “radiographer” will consider taking an additional lateral radiograph. The descriptions and explanations given on the CD are inch perfect if I may say but I still believe the beginners can find it difficult to appreciate. In my effort to try to understand the chest X-ray, I found comparative plain and tomographic images of the same pathology useful. The “holes in the lung” for example the bulla and bronchiectasis are very easy to appreciate on CT. Though CT is not available in many areas we work in, someone who has appreciated the anatomy may not find it difficult to correlate the plain radiograph, the imaginary cross sectional non overlapped image and the clinicals to come up with the diagnosis. This is my Opinion.

   d. Was there enough teaching about the CD to enable you to use it?
   - Not necessary but very comprehensive. Everyone knows about computers and internet access is OK
   - Absolutely
   - All the information on CD was superb and to me it acted as a reference source for those who do not have other reference books on imaging. The lectures were extracts from the CD. My assumption was that all was computer literate thus not a big huddle.
   - Yes although it was recorded at a low volume! I have to use head phones to hear a word clearly.
   - Give a little more time on how to use the CD especially to the Zambian who may not be so exposed to the subject matter like us in Uganda.
   - Yes
Question 2. About the CD.

a. Have you used the CD?
   - Yes (5 replies)
   - Yes and also for teaching
   - Yes, I have also copied it to my laptop and desktop at work.

b. If you answered 'yes' to 2a, does the CD help you with image interpretation?
   - Indeed, very brilliant
   - One thing I do appreciate is the simplicity of language used such that its easy to understand
   - Very much
   - Yes – a lot

c. If you answered 'yes' to 2b, can you give an example?
   - Helped me understand reading a lateral chest X-ray
   - Take the example of the lung pattern on consolidations and lung collapse
   - CD was saved in my Laptop, and his consultation directly during working is very easy
   - Assisting me in describing radiological pathology especially the MSK and Generating Differential Diagnosis
   - Guide me in clinical discussion with General Practitioner Dr for patient better outcomes with good diagnosis and Decision making on case management.
   - Assist me in further study in Bachelor or Master in profession as basic knowledge in advancing.
   - Example;
     (i) I got a case of early interstitial pneumonia that I could have missed but after going through the images I was able to give an appropriate descriptive report. Eg.
     (ii) Whenever there is reduced disc space, we were used to describing it as PID but now this has changed to degenerative disc disease.
     - Spelling, appearance of the image and how the condition is known.
     - An obese patient was brought in to the emergency department with a history of trauma (Road traffic accident) and severe left upper quadrant pain. The doctor’s interest was to rule out a ruptured spleen so I was requested to do an ultrasound scan and a chest x-ray. The scan turned out negative but given the excruciating pain, they contested the result. I was asked to rank my level of confidence on a scale of 1 to 5. Honestly I scored 3 given the difficulty of the scan mainly from the attenuation of the ultrasound beam and the patient being uncooperative. My advice to them was to do a Chest CT scan to rule out rib fractures or other chest pathology. The X-ray was out of order. The result from the radiologist was negative but with the film having a scanogram, I keenly looked at the images and it was surely negative. This is when I visited the CD. Chest anatomy and technique-techniques for analyzing possible abnormalities, where is it before what is it? The subsection which I now call the principle “following the lines”! I re visited the images and lo you were right, I used a poor search pattern! Four displaced rib fractures were there to be seen. I telephoned the radiologist who later admitted there were rib fractures but this wouldn’t change management. I informed the physician managing the patient that there were rib fractures and if the patient gets short of breath, a possibility of pneumothorax should be considered.

Question 3. Do you have any other feedback or suggestions?
   - I appreciated the online course offered for us Post training on Plain X-ray image Interpretation But:
     1. We did 2 Chapters only about Air space Diseases Pleural spaces diseases, No any other Course offered. Resend other courses for study, even in Ultrasonography
     2. Provide Certificate in form of Diploma for those who attend the course
   - Is it possible for ISRRRT to work out a way with its representatives in the respective countries to make the courses perhaps longer (like 2 months, etc.). That would give time for it to sink in, examine the participants, etc.
   - Based what we had I suggest more radiological pathology be emphasized giving differentials since many can look alike. However this always the element of time.
   - It will be very useful since it gives the radiographers confidence in providing a documentary opinion on their product.
   - The CD is a work of a technocrat. A comprehensive atlas of x-ray image interpretation
   - The audio has been a little of an issue to me. I have to use my earphones each time I visit it. In some slides, the statement is incomplete or cut off.

Dr Ian Cowan
Cynthia Cowling
For those, who like me, were privileged to attend the 17th ISRRT World Congress in conjunction with the 70 CAMRT Annual Conference and in collaboration with the OAMRT, they would have experienced a marvellous opportunity to learn, socialise and generally feel proud to be part of our profession.

Although Congresses follow a general pattern, the hosts of each Congress add their own stamp and flavour to the event. The Canadians were no exception. The designers provided several pre-congress opportunities and I was thrilled to see the international participation for each of these. The Education Summit spearheaded by Elaine Dever the CAMRT Director of Education provided a terrific forum for educators around the world to compare and contrast programs and tackle the difficult issues of curriculum development in this rapidly changing world and the role of clinical placement education (just how much is enough??). A panel discussion with educators from UK, Netherlands, USA, Canada and India was a particular highlight.

The Students Workshop was also a great success with over 150 students from Canada, USA, UK, Sweden, Ireland, South Africa, Australia and Trinidad and Tobago. It really opened their minds to the global issues, the commonalities and the differences between programs even though we ultimately end up doing a very similar job, albeit with a variety of titles and names! Caitlin Gillan was instrumental in pulling this workshop together which was an admirable model for future Congresses.

International and domestic visitors were also given a unique opportunity to advance their continuing education through 2 pre-congress workshops, Bone Mineral Densitometry and an IV contrast Workshop, both offered by the OAMRT. I visited the IV Contrast workshop and was delighted to note that of the 42 participants, 6 were international and included Danish, Japanese and Kenyan radiographers. Evelyn Kelly and her team put all the participants through their paces with a very hands-on workshop.

I did manage to attend all of the activities noted above and can speak for their success. There were also other workshops which I believe were equally successful in Leadership/Management and a joint Medical Imaging/AIEC Workshop.

These activities responded admirably to the growing requirement for continuing professional development within our profession that goes beyond attendance at a Congress. It would be very gratifying to see these types of opportunities offered in the future and a big vote of thanks must go to the Canadians for their vision and foresight and of course hard work to make all this happen.

Cynthia Cowling
Director of Education
The ISRRT 17th World Congress

June 7-10, 2012
Toronto, Canada

Report by Rita Eyer Vice President, Americas and Patricia Johnson, Regional Director, Americas

The ISRRT 17th World Congress was held June 7-10, 2012 in Toronto Canada in conjunction with the Canadian Association (CAMRT) and Ontario Association of Medical Radiation Technologists (OAMRT) Annual General Meetings. The ISRRT celebrated its major milestone of fifty years in operation and the CAMRT its 70th year.

Canada hosted the very first ISRRT World Congress in Montreal in 1962, and a World Congress was not held in Canada again till now. At this year’s World Congress there were over 1,200 delegates present representing 60 nations. Because an image can say a thousand words, Patricia and I have attempted to capture as many of the magical moments as possible in the pictures, but there were so many that became impossible.

The pictures from the World Congress help emphasize the four categorical initiatives of the ISRRT Board:
- Communication
- Collaboration with Member and Non-Member Societies
- Focus on Developing Nations
- ISRRT Governance and structure

1. Communication:

How fortunate when most of the communication can occur with 60 nations face-to-face! The first meeting prior to the ISRRT World Congress is an Open Forum conducted by the ISRRT President. Information is provided and questions answered in a less formal setting. That afternoon each of the Vice Presidents and Regional Directors hold a meeting with the nation representatives from their respective Region. On the following day the Council Meeting is held where all the formal business of the ISRRT is conducted. In an election year this Council Meeting will involve a second day. On an ongoing basis, the ISRRT Newsletter, “News and Views from Around the World,” and the ISRRT website allow each nation the ability for far reaching dissemination of information so that MRT’s from all around the world have a greater understanding of what each of the Committees and nation of the ISRRT is doing.

2. Collaboration with Member Societies and Non-Member Societies

Patricia and I were thrilled with the collaboration opportunities we had with the ISRRT nations of the Americas Region, the American Society of Radiologic Technologists (ASRT), the Society of Radiographers Trinidad and Tobago (SRTT) and the Canadian Association of Medical Radiation Technologists (CAMRT) – not only the Council Members, Connie Mitchell, Anushka Kattick-Mahabirsingh and Terry Ell, but the respective Presidents, CEO’s and many other of the MRT’s from each of those countries. All three of the Americas Regional Coordinators: Sharon Wartenbee, Lori Boyd and Sarah Baker were in Toronto and
17th World Congress
they attended all of the meetings. Abelardo Raimundo de Souza, Presidente do Conselho Regional de Tecnicos em Radiologia from Brazil was also in Toronto. The Opening Flag Ceremony allows all ISRRT nations flags to be flown. There is the wonderful tradition of the lighting of the globe to signify the commencement of the ISRRT World Congress and the start of three completely full days of learning, sharing and networking. As part of the opening ceremonies, Hutchinson lecturer, Professor Scott Bowman, shared his journey that began as a radiographer in England to his current position as Vice Chancellor and President of CQ University in Australia.

Five nations were newly approved for ISRRT membership status at the World Congress the ISRRT.

i) Argentina, ii) Indonesia, iii) Vietnam, iv) Poland, v) Bosnia Herzegovina.

Updates were provided in several forums on the excellent collaboration between the ISRRT and the:

World Health Organization (WHO): Three main issues for now are
1. A document will be jointly produced by WHO, ISRRT, the International Society of Radiologists (ISR), and the ICRP. Initial work was done via tele-conference. The project will be to develop a joint technical document entitled, “Safe and Effective Use of Radiation Medical Devices.”
2. A document entitled, “Human Resources for Medical Devices”. WHO very much want input from ISRRT into this document and have been given a copy of the draft “Index of Contents” as a guide as to proposed content. One very important item which will be in the publication is the International Labour Organisation (ILO)”International Standard Classification of Occupations” (ISCO) which is of great concern to the ISRRT. WHO have agreed to arrange a joint meeting between the ISRRT, the WHO and the ILO to discuss in more detail.
3. A draft “Information Request Form” which will be used by countries asking for help from the WHO and this will particularly apply in the field of radiography.

Pan American Health Organization (PAHO)
The VP of the Americas Region attended the 28th Pan American Sanitary Conference of PAHO and the 64th Session of the Regional Committee of the Americas of WHO at the PAHO Headquarters in Washington, September 17-21, 2012. I met with Dr Pablo Jimenez and Kayiba Medlen from RAD-AID. PAHO and RAD-AID have joined forces to improve the quality of radiology services in Latin American countries and the Caribbean. The new partnership enables RAD-AID and PAHO/WHO to collaborate in creating radiology training programs, develop radiology education materials for health personnel, coordinate international radiology assessments for technical assistance, and increase data collection for radiology’s vital role in public health outcomes. An initial joint project that will consist of an educational workshop and hands on training will take place in Haiti and this is where the Americas Region wants to assist RAD-AID. PAHO is celebrating its 110th anniversary this year and is the oldest public health organisation in the world. It works with its member countries to improve the health and quality of life for the people of the Americas. PAHO is assisting the ISRRT, specifically myself and Shirley Long, a renowned mammographer from Canada, run the Mammography Workshop to be held in Kingston, Jamaica November 9-11, 2012. The ISRRT Americas Region looks forward to our continued partnership with PAHO.

Radiology Sciences of North America (RSNA)
The ISRRT has been part of the Associated Sciences Program for the past three years and participates in the planning process for the programme. A complimentary booth is provided and the ISRRT President and CEO take the opportunity to meet with registrants and company personnel during the conference. The ISRRT has provided speakers for the last three programs and Michael Ward will be participating in a three hour session on “The Business Case for Cultural Competence” during the 2012 Associated Sciences program. The ISRRT is held in high regard by the RSNA with the ISRRT CEO being invited to the annual breakfast hosted by the RSNA CEO during which time the ISRRT is always given a specific place on the agenda.
The ISRRT also meets with member Societies who are present at the RSNA. Our peers in Central and South America can also access membership to the RSNA. Benefits would then include complimentary advanced registration to the annual scientific assembly and concurrent refresher courses held in Chicago, Illinois, late November through early December each year including early meeting and hotel annual registration privileges; discounts on RSNA educational materials and access to CME credit on InteractED.RSNA.

**International Atomic Energy Agency (IAEA)**

The ISRRT was involved in the production of a Joint Position Statement for the Smart Card/RadTrack Project. Medical imaging is a well-accepted valuable clinical tool when appropriately utilised. In recent years, individual patient exposure from radiological procedures using ionizing radiation has been increasing, including procedures in children, in part because of multiple procedures resulting in cumulative effective dose estimations exceeding 50-100 mSv in some cases. This creates increased responsibility of authorities and health professionals to develop and implement suitable solutions. One such solution is the IAEA Smart Card/SmarRadTrack project, the major purpose of which is tracking of patient exposure history. (1-3) In view of the interest of a number of organisations in patient protection, the IAEA decided to develop a joint position statement in cooperation with organizations and experts in imaging and clinical patient care. There are also new requirements in International and European Basic Safety Standards that indicate consideration of previous imaging procedures to fulfill justification. The scope of patient exposure tracking is to cover all imaging modalities which use ionizing radiation for interventional procedures and radiographic, fluoroscopic, computed tomography (CT), and nuclear diagnostic examinations. The scope also includes radiation dose recording, reporting and tracking. This statement is not intended to include tracking in radiation therapy.

**International Radiation Protection Association (IRPA)**

The Regional Directors of the Americas intend to continue to work together with the IRPA and to collaborate on initiatives that strengthen our radiation protection culture.

**International Radiology Quality Network (IRQN)**

The IRQN provides an international focus on quality assurance and quality control. which the ISRRT is a founding member, has a core group which has set up and produced a large document to be used by referring clinicians. The ISRRT Professional Practice Committee reviewed and responded to this document and informed the IRQN that information on CD and DR was missing. IRQN agreed that this should be incorporated in the document and despite there being only a two week window the ISRRT responded. Napapong Pongnapang wrote a chapter. Donna Newman, ISRRT Professional Practice Director, will be attending the IRQN Conference in Bonn, Germany, December 3-7, 2012.

**International Society of Radiologists (ISR)**

Dr Jan Labuscagne is now the President of ISR and has asked the ISRRT, for a second year, to attend the meeting of the Executive Directors of the ISR. The ISRRT was once again involved in the programme for radiographers during the International Congress of Radiology (ICR) in Sao Paulo, Brazil this year. The ISRRT have worked with ISR in the following ICR events: Cancun, Montreal, Cape town and Shanghai and has been asked to be involved in the 2014 ICR in Egypt. Cynthia Cowling (CC) will be involved in the program planning. The ISRRT does not have any member countries in that Region and this may be an opportunity to make contact.

**European Congress of Radiology (ECR)**

Treasurer Stewart Whitley attended the ECR along with Philippe Gerson, VP of Europe/Africa. The annual meeting between ESR, EFRS and ISRRT was also attended by Stewart Whitley on behalf of ISRRT. It was confirmed that the ESR wishes more radiographers to become involved in order to increase attendance at ECR.
World Radiography Education Trust Fund (WRETF)
The ISRRT originally established this as a Book Fund and it then became an independent charity WRETF. The ISRRT Board appoints each new Trustee. There are seven Trustees and by their Statutes they have to be situated throughout the world. The WRETF Statutes have just been amended which means that their term as Trustees is now limited to a specific time frame.

Sponsors
Without the generous financial support and ongoing collaboration of our sponsors with the ISRRT, World Congresses would be so different. There were more than 50 exhibits and displays featured, and nearly 100 poster presentations. The Exhibit Hall was a vibrant hub of activity throughout the congress. Our sincere and utmost appreciation is extended to all our vendor partners.

3. Focus on Developing Nations
One very noteworthy event that has taken place through the ISRRT and is of such tremendous assistance to MRT’s from developing nations is the ISRRT Travel Fund. Patricia Johnson was the ISRRT representative on the selection committee for the Travel Fund for the 2012 World Congress. Other members on the Committee were Liana Watson of the American Society of Radiologic Technologists (ASRT), Chuck Shields of the Canadian Association of Medical Radiation Technologists (CAMRT) and Richard Evans of the Society and College of Radiographers United Kingdom (SCoR), for their due diligence. There were 45 applications to this fund, clearly demonstrating interest. All applicants were asked whether or not they were receiving support from other areas and were told that they must give feedback to the ISRRT and to their own countries. 80% of the applicants were ISRRT Council Members and/or Congress presenters who would not have been able to be there without this monetary assistance. Applicants agreed to the criteria that they will send in information relating to their attendance and will hopefully write an article for the ISRRT Newsletter about their experiences. Just under $45,000.00 US was donated and utilised for the 26 individuals who came to the 17th ISRRT World Congress. The Societies – the ASRT, SCoR, CAMRT and ISRRT – who donated to this fund cannot be thanked enough for their generosity and their hard work in selecting the individuals. It is hoped that the ISRRT Travel Fund will be able to continue with this high level of support for all future World Congresses.

4. ISRRT Governance and Structure
The ISRRT Board of Management held a very constructive meeting in Toronto prior to the World Congress and the next Board of Management Meeting will take place April 9-13, 2013 in Albuquerque, New Mexico. The ASRT once again allowing us the use of their facility at no cost for our April meetings. We are so grateful to the ASRT for all that they continually provide to the ISRRT. The ISRRT Board of Management honoured Mr Terry West, winner of the prestigious ISRRT Dien Van Dijk Award for his complete dedication to the ISRRT. President Ward also bestowed Honorary Membership Certificate to Mrs Alison Yule who devotes endless volunteer hours- always smiling as she does so-to the ISRRT. Thank you!

On Sunday, June 10 after more than 80 sessions across 14 streams and featuring more than 215 presenters, the 17th World Congress came to a close. After receiving gifts from participating ISRRT Societies, given in appreciation of Canada’s role as host country of the 2012 World Congress, CAMRT President, Ms Bolderston, passed the ISRRT flag to the organisers of the 2014, 18th ISRRT World Congress. Then ISRRT President, Dr Michael Ward, turned off the globe – a very emotionally sad moment for all as we say our goodbyes to our ISRRT family. Throughout this World Congress the camaraderie experienced was so incredible! Ms Paivi Wood and her group of volunteers will be organising the 18th World Congress that will be held in Helsinki Finland, June 12-15, 2014. An event that will have unforgettable new educational opportunities and a real appreciation for all that Finland has to offer.

South Korea will be hosting the 2016 World Congress and already have amazing plans and ideas to inspire us. Sure hope to see you at all future ISRRT World Congresses!
Associate Membership of the ISRRT

Report by Fozy Peer Director of Public Relations

Introduction
The International Society of Radiographers and Radiological Technologists (ISRRT) is an international body representing radiographers and radiation therapists worldwide. The ISRRT was founded in 1962 as a non-profit organization with fifteen national societies which has expanded to over 80 at this time. We are associated with the United Nations; have official affiliate status with the World Health Organization (WHO); and are officially recognized as a non-government organization (NGO).

ISRRT is dedicated to the advancement of the medical imaging and radiation therapy professions and has a vision “to be the leading international organization representing the practice of medical imaging and radiation therapy technology by promoting the highest achievable standards of patient care and professional practice”. The core values of the ISRRT are defined as professionalism, excellence, dedication, compassion and integrity. We are the only organisation representing all disciplines of medical radiation technologists internationally and act as the advocate for the profession on the global stage. The ISRRT improves the standards of delivery and practice of our professions by acting as the international liaison organization for medical radiation technology and by promoting quality patient care, education and research in the radiation medicine sciences. Our principal objectives are to advance the science and practice of radiography and allied subjects by the promotion of improved standards of education and research in the technical aspects of radiation medicine and radiation protection; to make the results of research and experience in radiation medicine and radiation protection available to practitioners throughout the world; to create and hold funds which shall be available for furthering the objects of the society whilst at the same time being a charitable organization and to do all such other lawful things as shall become necessary for the attainment of these objectives.

The improvement of medical radiation technology education and life long learning, is achieved through workshops, seminars and meetings that are held on a regular basis in developing countries. A biannual ISRRT World Congress is held to bring together a wide range of participants for the purpose of exchanging ideas and experiences. To ensure a broad sustainable connection with our global community, each region has the opportunity to hold a world congress on a rotational basis.

Membership
The ISRRT offers membership to national societies, corporate members and associate members. To date (2012) the ISRRT has a membership of over 80 member societies representing over 300,000 society members and in excess of 17,000 associate members.

Associate members play a valuable role in promoting the aims of the ISRRT not only in their own country but also worldwide. Individuals who support the aims of the ISRRT and the use of improved diagnostic and therapeutic techniques in medical imaging, radiation therapy, and associated sciences are welcome to join as associate members. The ISRRT’s newsletter is issued twice yearly and is free to all associate members. It contains worldwide news from member countries, articles of international interest to the profession, and details of conferences, workshops in developing countries and other meetings. As an associate member you will be exposed to a wide network of contacts in many different countries and will have opportunities to share ideas. Associate members often form a core support cohort in the administration of the workshops delivered by the ISRRT. Increasingly the ISRRT will be using electronic surveying to assess the needs of the professions and associate members, together with the professional organizations are our primary source of information. In the quest to constantly improve standards and expand capacity and capability, the ISRRT needs increased support. We would like to invite you to join the ISRRT as an associate member. A copy of the ‘Application for Associate Membership’ is available in this edition of the ISRRT Newsletter. You may also download it from: www.isrrt.org/membership

Radiographers and Technologists may register as associate members of the Radiological Society of North America and the European Society of Radiology provided that either their society is a member of the ISRRT or they are themselves an associate member of the ISRRT.

Benefits of the RSNA membership include:
• on-line subscription to the monthly scientific journal, Radiology
• online subscription to the bimonthly pictorial journal, RadioGraphics
• subscription to the official newsletter, RSNA News
• complimentary advanced registration to the annual scientific assembly and concurrent refresher courses
• early meeting and hotel annual registration privileges
• discounts on RSNA educational materials
• access to CME credit on InteractED

We look forward to enrolling YOU as an associate member of the ISRRT.

Fozy Peer
Director of Public Relations

ISRRRT WEBSITE

The ISRRT website carries up-to-date addresses of all member societies. Visit the ISRRT website at: www.isrrt.org

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@mac.com
A review of the impact of radiographers’ role in radiographic interpretation

Josephine .S. Tityiwe1 and Dr Gillian Crofts2

The study sought to establish the impact of role extension by radiographers into interpreting plain x-ray images. The main objectives are of the study were to review evidence on radiographers role development in radiographic reporting and to synthesise the evidence on the impact of radiographer reporting on Radiology services.

The justification of this study was based on the chronic shortage of radiologists in hospitals and the high workloads faced by the available few, making it necessary for radiographers to develop their skills this way to fill in the gap. The evidence from this study will be used as a trustworthy base to assess the feasibility of establishing radiographers’ role development in this pathway in Zimbabwe.

A research question was used to extract studies from electronic databases. A standardised appraisal of study quality was made and the studies of acceptable quality were systematically analysed. A multiple search method was done to extract studies from Medline Ovid, Pyscinfo, Allied Complementary Medicine and CINAHL databases from 1950-2008.

Full text for some of the studies was extracted from Science Direct, Scopus and Pubmed electronic sources. Keywords like, “radiographers, plain x-ray trauma films, image interpretation and role extension,” were used to select 177 studies of which 20 were selected and finally 11 studies were analysed in the study. An evaluation tool adapted from Long (2003) was modified in some ways and made more suitable for assessing the validity of the studies to be included in the review as advocated for by Brealey and Scally (2008). The method for each study was considered rigorous provided that the checklist questions from the evaluation tool were adequately answered.

The results for this study were analysed under 3 subheadings which were formulated around the main objectives of the study were used to quantify similar studies together to make the analysis easier. The subheadings for analysis of the results were thus: 1) Radiographers’ competence in reporting plain x-ray trauma films, 2) Impact of radiographers’ role in reporting plain x-ray trauma films on future patient management by clinicians and 3) Radiographers’ role development in plain x-ray images interpretation.

Only 4 out of the 11 studies applied stratified randomised sampling and systematic sampling of the population of plain x-ray trauma films. Almost half of the studies did not do so; this means that selection bias could not be ruled out in most of the results. However the validity of diagnostic performance studies was stronger for at least 3 of the 5 studies ruled out on selection bias.

One out of the 3 studies measuring the impact of the role of radiographers in reporting applied all the critical quality factors in the methodology, though this could have allowed selection bias in the other two studies, practicable evidence of a saving of US$576 per annum was recovered for the radiology department which allowed the introduction of the intervention.

In this review only 3 out of the 11 studies applied blinding of observers during the conduct of the studies, thus 8 studies failed to rule out on Performance and measurement bias. According to Khan et al (2003), blinding protects against performance bias and measurement bias as the study will not be open to manipulation by researchers and observers as well. This was another weakness in the review, though practical evidence for radiographers’ competence in reporting was extracted.

Also in all the three studies which focussed on the impact of the role of radiographers reporting, no statistically significant results indicated the negative impact of this role on patient management. According to a study done in 2005, only 2 accident and emergency reports affected patient outcome leading to re-attendance due to missed fractures. The findings of this review were discussed under the three main subheadings formulated from the overall aims of the selected studies thus:

1) Radiographers’ competence in reporting plain x-ray trauma films

Among the included studies 6 focussed more on the diagnostic performance by radiographers in the role of reporting plain x-ray trauma films.

A study by Brealey et al (2003) compared the performance of radiographers to radiologists and another study by Hardy and Barret (2004) compared radiographers and nurses respectively.

A comparison of radiographers and nurses displayed a potential talent for development in both professionals though radiographers’ competence in accuracy and sensitivity was higher compared to nurses. This could be contributed to the fact that they spend more time viewing radiographs compared to nurses.

The study also suggested the potential talent of nurses in requesting x-ray examinations for patients from accident and emergency departments. The findings trustworthy to both populations of radiographers and nurses though the methodology used (cross-sectional survey) was weaker for it lacked randomisation of the sample and blinding of observers during the study allowing the presence of bias in the study. The study also stressed on the need for more establishment of hot reporting by radiographers so as to reduce patient waiting times for the reports.

Another study conducted by Brealey et al (2004) also provided representative evidence that Radiographers are equally competent as radiologists in reporting plain x-ray trauma films especially after careful selection and training. The methodology was more rigorous, as it included a reference standard, independent arbiter, blinding of observers as well as stratified randomisation of study sample. The second outcome also assessed in this study by an independent arbiter was the impact of reports from both the radiographers and radiologists on the future management of the patients by clinicians. A minor difference in

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sensitivity between radiographers and radiologists was noted to have a potential impact on future patient management.

A study done by Willis and Sur (2007) showed the evidence that the detection of x-ray films abnormalities by accident and emergency doctors actually improved following initial triaging by radiographers. Before the intervention was introduced the accident and emergency doctors missed about 2% clinically important injuries in patients. The study also demonstrated the possibility of enhancing the role of radiographers in reporting since they spend more time viewing films compared to six months for senior house officers. The limitation to the study was that 6months was too short a time and did not produce a measurable impact of improvement in performance by senior house officers before the next cohort arrived. The methodology was generally rigorous for systematic sampling was utilised in choosing subjects, as well as the use of a reference standard though there was no mentioning of blinding for the observers or the presence of an arbiter.

A study conducted by Piper et al (2003) provided both the evidence on the positive advantages of radiographers’ role development into reporting especially following postgraduate training as well as a significant improvement in performance following a lapse training period of 8 months. The main implications in the study were more research and continuation of postgraduate training, allowing the development of this role in radiographers.

2) Diagnostic outcome studies.

Three of the studies focused on the impact of the reporting role by radiographers. One study showed that before the introduction of the intervention not all examinations were reported leading to an increased delay in the availability of reports from the radiologists, Brealey and Scuffham (2005), however the introduction of the intervention the time for the availability of reports to patients was highly reduced. This in turn enabled the radiologists to report on more examinations from general practice than before.

A study on the impact of radiographic reporting Brealey et al (2005) highlighted the positive effects on improving A&E patient management, due to the significant reduction in time taken to produce reports to the patients.

Most importantly the incurred savings of £1 461 per annum was recovered in the 4 NHS trusts involved in the study proving the new role of radiographers to be profitable.

A study conducted by James et a l (1991) provided the evidence that red dotting by radiographers needed to be implemented in more centres since this tended to reduce the detection of false positive abnormalities by accident and emergency department doctors. The other important aspect from this study was that hot reporting by radiographers needed to be implemented in most hospitals in order to reduce patient waiting times for reports.

3) Role development studies.

Training, whether formal or informal has a significant impact on the successful outcomes of radiographers reporting plain x-ray trauma films (McConnell and Webster 2000).

A more recent study showed 19 out of 25 centres were already offering the training in the UK (Hardy and Snaith 2007). Whilst Hargreaves and Mackay (2003) results were not significant, the impact of role development by radiographers was reflected in the increased detection of abnormalities by Senior House officers following radiographers’ red dots and the reduced number of misdiagnoses of clinically significant injuries.

The included studies all focussed on studying the same phenomena. The theoretical framework informing the studies was the same for all the studies thus:

a) The shortage of radiologists resulting in higher workload for them thus reducing their reporting speed and the waiting time by patients for the reports also increased,
b) Prior studies and debates around this role extension by radiographers into reporting plain x-ray trauma films prompted the researchers in the included studies to conduct their respective research studies.

In conclusion, according to the study findings of Hardy and Snaith (2007), there is enough published evidence of this role extension by radiographers into reporting and the intervention has proved successful and feasible in most centres in the UK. The cross sectional survey study showed that 19 out of 25 higher education institutes for radiography studies in the UK were already offering the clinical reporting course as a postgraduate qualification to radiographers. This new development could still be successfully introduced in other countries especially African countries like Zimbabwe. If radiographers in Zimbabwe were to be trained and take up this role development this would result improved patient management while the waiting time by patients for reports will be greatly reduced.

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continued on page 45
The World Radiography Educational Trust Fund

By Hon Secretary Sue Marchant

Activities
Finalising the Fundraising Portfolio, finding a new location to house our book store when the British Institute of Radiology, which had kindly allowed them to be held there, moved to a new home, and finding a new location for its Trustees’ meetings – they were formerly held at The British Institute of Radiology – have been the main thrust of our activities. This autumn the Trust is also supporting a workshop in Cameroon, by providing some textbooks as prizes.

Following the meeting held on October 6 in the seminar room of the Neuroradiology department at The National Hospital for Neurology and Neurosurgery, Queen Square, London, an agreement was reached for future Trustees’ meetings to be held there. The WRETF is very grateful for the kind offer to host our meetings.

Twinning
Kay Collett – Trustee based in Australia - has taken over the Twinning Programme. If anyone wants to participate in this worthwhile activity please get in touch with Kay at: kayc@bigpond.net.au

You can be sure that any journals you send or contact you have will be really appreciated in the countries in which we work.

Ambassadors
The role of Ambassador continues to develop. There are now 4 ambassadors each one working closely with a Trustee and covering the continents of Africa and South America and the Pacific Rim.

Change of Trustees
Ann Paris, a longstanding Trustee stepped down in October. She was appointed as a Trustee in December 2002 and was the Honorary Secretary before that. Her most recent role was as Honorary Treasurer. She has been replaced as a Trustee by Mary Lovegrove, known to many of us, and who, along with Philippe Gerson, will bring more experience of the environment in Developing Countries in which we work. Alan Budge has agreed to take on the role of Honorary Treasurer, a role he also held when a Trustee of the BIR.

Website
Lizzie Zukiewicz continues work on the current website, which is no longer flexible enough to meet today’s website needs. The Trustees’ meeting in October reviewed options of website hosts to enable a more efficient and effective operational environment.

For more information about the Trust visit the website at: www.wretf.com

Statistics
Since the last report only 3 applications for support have been received. These were from Rwanda, Zambia and Nepal. All were supported, with textbooks and journals being sent from both the UK and the USA where one of our trustees also holds a supply of books. Books continue to be donated to the Trust by individuals.

Now that the Trust holds a more up-to-date stocks of books – many new ones donated by the British Institute of Radiology prior to its move – we are seeking new recipients – either from...
departments or schools of radiography in Developing Countries. Please contact the Honorary Secretary or visit the website for an application form.

**MED Project**

As reported in the last issue, this initiative continues to develop.

If you are interested in applying to be a project site for this study, please contact Jonathan Mazal at: jmazal@rad-aid.org

**Donations**

At the recent meeting in Auckland, New Zealand, the ambassador there, made flower brooches which she sold on behalf of the Trust. A small amount of money was made which the Trust will use to further its aims.

Books and journals, if fairly recent issues are also welcomed and can be sent to the Hon Secretary of the WRET  c/o The Society and College of Radiographers, 207 Providence Square, Mill Street, London SE1 2EW. UK.

Monetary donations can be sent to the Hon Treasurer Alan Budge at:

108, Clares Green Road, Spencers Wood, Reading, RG7 1DU, UK.

**continued from page 43**


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ARTICLE

Radiation Protection: Things you need to know

Part 1. Building materials for radiation shielding

X-rays are a highly intensive form of radiation used as an effective diagnostic tool in various forms. However, it is essential that exposure is limited to the absolute minimum, necessary to obtain a correct diagnosis.

This has to be put into perspective but there is no fixed rule which can accurately calculate if any particular dose is safe or dangerous.

The principal of providing shielding to x-ray departments is to consider the safety of:

1. The patient
2. Radiographers
3. Radiologists
4. Nursing staff present during examinations
5. Other staff within the area of the x-ray facilities
6. Staff working in areas adjacent to the x-ray department

What stops radiation? Density
A wide selection of building materials is available to provide barriers for radiation shielding but their effectiveness will depend on several factors.

Radiation levels, site conditions, overall cost and the requirement to provide a safe environment and a convenient, functional x-ray facility.

Basic Materials
- Sand
- Bricks
- Barium Plaster
- Lead
- Lead Acrylic
- Steel
- Concrete
- Barium based compounds
- Lead Glass
- Lead/PVC

Comparison of the shielding characteristics
Following the necessary assessment of each individual site by a nominated Radiation Protection Advisor (RPA) their report will identify the potential dangers, confirm the level of shielding required, advise on work practices and recommend any other related precautions. The contents of such reports may have a significant effect on the selection of the most appropriate materials.

The level of shielding is often expressed as a ‘lead equivalent’. Lead is generally considered to be the most suitable and convenient material to be used, particularly in new buildings.

For convenience, based on the general level of shielding for diagnostic x-ray rooms, a nominal lead thickness based on a British Standard Code 5 equivalent to 2.24mm has been used to provide a broad comparison with the other products. This can only be regarded as a very approximate guide as the density of many of the materials will depend on their specific manufacturing process.

Sand
Difficult to assess and dependent on the accurate compacting of the material on site. It is of limited use and only within cavity walls.

Steel
Approximately 15mm. It offers strength to a structure but is difficult to cut and work.

Bricks
Two courses or thicknesses totalling approximately 230mm but this will depend on their overall composition. Inexpensive but as their installation is considered a ‘wet trade’, they are not generally considered to be an option for new buildings. A cost effective solution if brick walls already exist, although the condition of the bricks and that of the mortar needs to be very carefully assessed.

Concrete
Approximately 150mm but this assumes a density in the order of 2350kg per cubic metre. Floor and ceiling slabs as part of the overall structure can often provide all the required protection. However, a waffle type construction is sometimes used in which case the thinner sections may need to be confirmed as being of a sufficient thickness. Concrete walls although unusual offer similar advantages to brick construction.

Barium Plaster
Approximately 20mm. It is difficult to apply being a ‘wet trade’ requiring specialist plastering skills and can only be used for walls.

Barium based building boards
Recently introduced as a ‘lead free’ product, four layers are required to achieve the comparative lead thickness.

A barium based paste has to be applied to all panel joints as each layer is fitted. This system may not be a cost effective alternative, in terms of the material and installation costs and can only be used for walls.

Lead
2.24mm (BS Code 5). A versatile product which can be adapted for use in the shielding of walls, ceilings, floors, partitions, screens and doorsets

While acknowledged as an efficient shielding material, its very
density does present handling issues and care must be taken during the production of the various products, delivery and final installation. The sample thickness quoted weighs approximately 26kg per sq metre.

It is also important to be aware of the potential dangers of traces of lead being absorbed into the body. Protective clothing should be worn. Eating, drinking and smoking should not be allowed whilst it is being handled.

In addition, as it is a malleable material, to maintain a consistent thickness and for ease of installation, it is normally bonded to a building board such as plasterboard or plywood. It may also be integrated within pre-finished laminated panels for freestanding x-ray screens.

Examples of the approximate weights of typically used products.
• Code 5 lead bonded to plasterboard 3000mm x 600mm 62kg
• Code 5 lead bonded to 12mm plywood 3000mm x 600mm 55kg
• Code 5 lead lined door 2050mm x 900mm approx 87kg
• Code 5 lead lined door frame for the above door 60kg

**Lead Glass**
9mm. Expensive but a necessary component in x-ray screens and windows. It is similar in appearance to plate glass but is specially formulated with a high lead and barium content to provide its shielding properties. It is distinctly softer than normal glass, being easily scratched, chipped or broken. In addition it should be cleaned with non-abrasive materials and carefully dried with a soft cloth.

It is commonly used in x-ray screens, viewing windows, doorsets etc in sheets generally no larger than 2000mm x 1000mm although larger plates are available to special order.

The manual handling issues already mentioned for lead also apply to lead glass as the following table will illustrate.

<table>
<thead>
<tr>
<th>Physical thickness</th>
<th>Lead equivalent</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6.5mm</td>
<td>1.50mm Pb</td>
<td>29kg sqm</td>
</tr>
<tr>
<td>7-8.5mm</td>
<td>2.00mm Pb</td>
<td>38kg sqm</td>
</tr>
<tr>
<td>8.5–10mm</td>
<td>2.60mm Pb</td>
<td>45kg sqm</td>
</tr>
<tr>
<td>11-13mm</td>
<td>3.20mm Pb</td>
<td>58kg sqm</td>
</tr>
</tbody>
</table>

Used within windows and screens, the RPA needs to confirm the glass thickness to be used with that specified for the lead.

**Lead Acrylic**
46mm. It is very expensive and not considered a practical option where a lead equivalent in the order of 2mm is required.

It is a lead bonded acrylic copolymer resin and although often compared with lead glass, has its own distinctive application. It is more durable than lead glass, being much easier to machine, but softer and easily scratched.

In low kV environments such as mammography, it is a more cost effective solution but for conventional x-ray rooms lead glass is a less expensive option.

Due to its durability it is the preferred material for vision panels in ceiling suspension units.

The maximum sheet size is 1830mm x 2440mm reducing to 1220mm x 2440mm for the thicker materials as again manual handling issues need to be taken into consideration.

<table>
<thead>
<tr>
<th>Physical thickness</th>
<th>Lead equivalent</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>8mm</td>
<td>0.30mm Pb</td>
<td>12kg sqm</td>
</tr>
<tr>
<td>12mm</td>
<td>0.50mm Pb</td>
<td>19kg sqm</td>
</tr>
<tr>
<td>18mm</td>
<td>0.80mm Pb</td>
<td>29kg sqm</td>
</tr>
<tr>
<td>22mm</td>
<td>1.10mm Pb</td>
<td>35kg sqm</td>
</tr>
<tr>
<td>35mm</td>
<td>1.50mm Pb</td>
<td>56kg sqm</td>
</tr>
<tr>
<td>46mm</td>
<td>2.20mm Pb</td>
<td>74kg sqm</td>
</tr>
</tbody>
</table>

**Lead/PVC**
10mm. An expensive option and generally used where a lesser degree of shielding is acceptable e.g. protective curtains or aprons. It is manufactured as an unsupported material typically in thickness of 0.125mm Pb and 0.175mm Pb, for use in multiple layers within x-ray aprons and curtains.

A supported material up to 0.50mm Pb is also produced and used, for example, as security flaps for baggage inspection units at airports.
Radiation Protection: Things you need to know

Part 2. Radiation shielding products within the structure of a building

This section explains the use of those materials detailed in Part 1 that are commonly used within the construction of finished radiation shielding products.

This generally relates to work undertaken in new hospitals or clinics. Similar procedures will be needed for existing buildings although the walls may already provide sufficient protection. Advice needs to be taken from the local Radiation Protection Advisor (RPA).

Walls
For new buildings internal walls tend to be of a dry line construction and historically lead has been the preferred material. It is usually bonded to plasterboard providing one layer of the standard dry lined wall. Panels can be produced in any reasonable sizes but 3000mm x 600mm is typical. It is installed in a vertical position, its width being compatible with the standard 600mm stud centres used in the UK. Additional panels above 3000mm can be provided if specified by the RPA.

Applying panels to walls is, however, not providing sufficient overall protection. There is potential leakage through panel joints, and fixing screws. In addition provision has to be made for installation of services [power sockets, waste pipes and wall fixings such as cupboards, apron hanger racks, x-ray viewers etc]

Panel joints are shielded by applying either lead tape or leaded battens to the face or within the studwork before fitting the panels.

Protection to services is provided by securely fitting sections of lead bonded to plywood, usually 25mm thick, behind the panels in specified positions.

For existing walls, where additional shielding is required, a similar system may be used by applying the lead plasterboard panels to leaded wall battens. They not only provide structural support but also protection to the panel joints.

Ceilings
Although most ceilings provide sufficient shielding within their necessary structural thickness, in some instances additional protection will be required.

A similar system to that used for walls is adopted although for strength and stability lead is bonded to plywood and the panel sizes are reduced in size, for easier installation.

Floors
As for ceilings there is generally little need for any additional shielding.

When required, lead plywood is used to provide strength and a resilient top surface. The edges of each panel are rebated and lead tape fitted to protect the panel joints. This provides a flush finish to receive the final floor covering.

Doors
All entrances to x-ray rooms have to be protected and to date no alternative to lead has been considered practical. Protection must cover the total structural opening with lead in the doors overlapping the lead necessary in the door stops, frames or linings and architraves; ensuring sealed joints with the wall protection.

Doors should be of a solid core construction, lipped on at least the long edges and supported on heavy duty hinges or suitable sliding door gear.

Shielded doorsets are generally custom made to suit specific site requirements such as opening size, wall thickness, frame profile and door finish.

Doorsets may be constructed to provide 30min or 60min fire rating to BS 476 Part 22:1997 and may include lead glass windows, blinds or similar privacy units.

Viewing Windows
These are normally provided for areas handling special procedures, where the radiographer is operating the equipment in a separate room. As for doorsets a lead lined frame, complete with leaded architraves, stops etc is required using lead glass of a similar lead equivalent to provide safe and clear vision.

Part 3 in this series will be published in the May 2013 issue of the ISRRT News and Views.
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News from member countries

ASIA/ AUSTRALASIA

AUSTRALIA

The Australian Institute of Radiography continues to grow membership numbers strongly, averaging over 11% a year. This is very encouraging as it is taking place against the background of momentous changes in the medical imaging and radiation sciences world in Australia.

There is now national registration for all practitioners in Australia and there would appear to be 12,991 registered with the national board as at the start of August 2012. Of these 900 are nuclear medicine technologists, which would suggest that 9,600 are radiographers and 2,400 are radiation therapists. The key benefit of national registration is that practitioners will now be able to easily move and practice between states and territories in Australia.

The AIR has recently awarded a new Professional Indemnity Insurance group policy to AON which will provide all members with $20,000,000 unlimited life run off cover. There will shortly be a further range of member benefits released to members as well and the Australian policy also covers AIR members working in certain countries around the world.

The peer reviewed journal published by the AIR is changing with the appointment of new publishers – Wiley Blackwell. The Journal is now a joint journal with New Zealand and the name is changing to “The Journal of Medical Radiation Sciences” – JMRS. This will be a quarterly publication and will strongly encourage regional and global interest in submitting manuscripts for publication.

In June, the AIR President Mr Bruce Harvey, and the Chief Executive Officer Mr David Collier and myself, as well as a number of AIR members and their spouses attended the 17th ISRRT World Congress in Toronto, Canada. The Congress proved to be a great celebration of the 50th anniversary of the ISRRT and the 70th CAMRT Annual Meeting.

Australia is helping to support the regional conference in Thailand in January of next year and would also like to invite interested members of the ISRRT to attend the Annual Scientific Meeting of Medical Imaging and Radiation Therapy (ASMMIRT) in Hobart, Tasmania March 8-10, 2013.

On behalf of all AIR members I would like to send our best wishes to our colleagues around the world and look forward to seeing many of you in 2013 Pamela Rowntree Councillor for Australia

HONG KONG

Hong Kong Radiographers’ Association has just revamped their website (www.hkra.org.hk) after months of preparation, targeting to bring our professional community closer together.

Members can now manage their own electronic record of Continuous Professional Development activities. Hot news items are constantly updated to offer all interested parties the latest information about our profession. This goes hand in hand with “Knowledge Gateway”, which captures knowledge links from different sources. In addition, online enrolment of HKRA events is also enabled.

HKRA is now joining hands with HKCRRT (Hong Kong College of Radiographers and Radiation Therapists) and HKART (Hong Kong Association of Radiation Therapists) to organise a scientific conference in the coming year. The event will take place at the Hong Kong Academy of Medicine on 7-9 June 2013, with lectures, workshops, and hospital visit amongst other social activities. Delegates from neighbouring regional societies are welcome to participate. The first announcement will be released in mid-September through our website and our co-organizing bodies.

Derek Kwan
Chairman, HKRA

NEW ZEALAND

The New Zealand Institute of Medical Radiation Technology (NZIMRT) enjoyed another successful Annual Conference, “Quality Counts”, hosted by the Auckland Branch. The Conference facilitated a broad range of speakers and papers from both imaging and therapy professionals with concurrent sessions being offered.

The 2012 Annual General Meeting (AGM) held at the Annual Conference, heralded the change in structure for the governance of the NZIMRT. The governance group are now recognised as the Board of Directors and consist of one elected member representing each of the six regional Branches within New Zealand, the elected ISRRT representative and the Education Convenor (elected). It is hoped that with regional representation on the Board there will be more effective communication to and from the membership.

Delia Dephoff spoke briefly at the Annual Conference about her role as Ambassador for the World Radiography Educational Trust Fund. Delia sold brightly coloured flower brooches as a fundraiser for the Trust, following in the Pacifica theme of the Conference.

The NZIMRT will again be encouraging Branches and workplaces to advertise and support World Radiography Day on November 8. This is a wonderful opportunity for all to be proud of their profession and also to recognise radiography worldwide.

On behalf of the NZIMRT I would like to extend best wishes to colleagues around the world as we quickly approach a New Year.

Please visit the NZIMRT website for further information www.nzimrt.co.nz

Kathy Colgan
ISRRT Council Member

NEPAL

I am highly overwhelmed to announce that Nepal Radiological Society has celebrated its 7th National Convention on September 8, 2012 with the Theme “Achieving Excellence in Radiography Profession Practice”. On this opportune moment, following the footsteps of the preceding years, the society has published its periodical Scientific Radiological Journal “SOUVENIR”.

The use of x-rays in Nepal has been in use since 1923 (1980 B.S). Later on central hospital and other places soon came up with the x-ray plants. Some of the people...
were sent to neighbouring countries for the formal radiography training while the others had no formal education and merely learned to operate the buttons of the machinery. This scenario persisted up to 1990 till the establishment of Nepal Radiological Society and even longer in some places. The rapid evolution of development in the field of radiography and imaging and the continued need to maintain the international standards in the most scientific basis, compelled the need of initialising the bachelor level courses in Nepal. The Institute of Medicine and BPKIHS commenced this course in 2000 with four and six seats respectively and this trend continued to the start of the Master level course (M.SC Medical Imaging Technology) with 2 seats every year.

Nepal Radiological Society is a common forum for Radiologists, Radiotherapists, Radiographers, Radiological Technologists, Medical Physicists, Nuclear Medicine professionals and Radiopharmacists in Nepal. For the past 22 years the Society carried out good works for the welfare of radiation workers throughout Nepal. As a result, several changes and tremendous development of Radiological Services has occurred. With the enthusiasm and commitment the 6th Executive committee of Nepal Radiological Society was all set up three years back. Since then the executive committee have had a hard time in working for the welfare for the society members and comprehensive professional development. During our tenure, we have taken strong initiatives not to start courses of Radiography below certificate level, creating new posts of Radiological Technologists in the Government sector, establishing Radiological Council, developing Radiation Law with Coordination with other professional organisations and review of Government Health policies under Radiography and upgrading the career ladder. Against all odds faced during the process the team displayed the marvelous sense of dedication to the task it had take up with commitment.

ISRRT which is formed by more than 75 member countries, ensures that we can learn much from the wide range of educational backgrounds, training programs and daily work practices of member societies. Our council member Mr Ganesh Bdr Pokhrel attended ISRRT World congress held in Ontario, Canada. It was the first participation of Nepal in the world arena in terms of Radiological Technology where Nepal was selected for mobile Electrobic Device (MED) Project. The device is loaded with a small library of textbooks, PDF documents and educational/clinical apps ranging from patient positioning guides to anatomic references, as well as resources on radiation safety, radiation biology and basic image interpretation. As our experiences so far, the device is proving to be helpflul for looking up and resolving doubts and quick references for both professors and students.

We are all fortunate to be part of a wonderful profession and to be part of a team, which has the opportunity to make a difference in the delivery of Healthcare to our communities.

Long live Nepal Radiological Society.
Neyaj Ahmed
General Secretary
Nepal Radiological Society

Top: Nepal General Secretary, Mr Neyaj Ahmed delivery speech. Above: Nepal President of Nrs receiving Token of Love from Council Member.

SRI LANKA

The Society of Radiological Technologists – Sri Lanka (SRT-SL) held the Annual academic session 2012 and the 37th Annual General Meeting on July 21, 2012 at the Auditorium of the Postal department headquarters, Colombo, Sri Lanka. About 200 radiological technologists/radiographers participated in the program and two guest speakers delivered two valuable lectures.

The first lecture was on the “new challenges on human resource development & administration in medical institutes” delivered by Dr Vibash Wijeratne, Medical administrator, Allied Health Sciences, Durdans Hospital.

The second lecture on “New developments and dose reduction techniques in CT imaging” was delivered by Mr Kolo Pelesikoti from Toshiba Medical Systems, Japan.

It was followed by a Presentation by Mr VG Wimalasena, President of the SRTSL.
The house discussed about the activities for the coming year. Several proposals were made and the council of management pledged to take them up in time to come.

VG Wimalasena
President, SRTSL
Council Member ISRR

CAMRT is pleased to report on some of the highlights of our seventieth anniversary year, which has been challenging and productive to date.

We have made significant progress on the ambitious objectives of the new strategic plan, and also had the opportunity to engage with hundreds of CAMRT members at spring provincial association conferences personally and virtually, through our series of CAMRT Update webinars. And of course, it was our tremendous pleasure to have hosted the world; 1200 delegates, from over 60 countries, who came to Toronto, learned together and from each other, and went home with great memories of an incomparable experience. A number of reports elsewhere in this newsletter vividly describe the events and activities at the World Congress. For those unable to attend the congress, we invite you to experience virtually on the website, where you will find video and power point presentations of many education programs, along with a photo gallery that shows the richness of this international experience.

Strategically speaking, here are a few of the ways that CAMRT continues to invest in the future of our profession.

Work is proceeding on several initiatives that address our vision of the MRT of the future. A major undertaking is the revision of the competency profiles, which involves extensive consultation with education programs and regulators. At this time, stakeholder feedback has been incorporated into the latest draft, while further consultation on topics such as content, examinable competencies, weighting based on competency level required and competency assessment environment is ongoing.

Parallel activities addressing the potential for advanced practice (AP) for those members of our profession who see their careers progressing in this direction are well underway. A draft AP framework that defines educational requirements, roles and responsibilities and core competencies is soon to be shared with key stakeholders for comment and further refinement.

Meanwhile, working groups are developing a standards-based certification process for radiation therapists in Canada who are already practicing at an advanced level. One group has created a competency profile for this role, and a second will now proceed to link competencies to recommendations for specific assessment methods for certification.

The new Best Practice Guidelines (BPGs) are now live on the web at www.camrt.ca/bpg/. The first BPGs deal with patient management, safety and quality of care as well as occupational health and safety. A very successful launch took place in conjunction with the world congress/AGC in June, where many members took the time to visit the interactive BPG kiosk and provide feedback on the approach and utility of the online tools. New core and discipline specific BPGs will be added regularly over the next year.

Keeping our eye on the future involves anticipating unimagined innovation in the rapidly advancing technologies that support our practices — long before they arrive in our departments. Thus we have established a Future Technologies Advisory Council, to keep CAMRT and its partner organizations abreast of technological changes in the medical imaging and radiation therapy fields. The Council’s purpose is to forecast future trends and innovations and to identify developments that will impact MRT practice. The council is chaired by Susan Delaney who is the Director, Diagnostic Imaging at Capital District Health Authority in Halifax. Members will work together, and sometimes with other key stakeholders, to assist MRTs to step confidently into a world that is yet to be invented.

One of the strategic plan objectives is to position MRTs as respected, caring professionals who are recognized within
the healthcare system for their high level of expertise and sought after for discussions and decisions in the health sector.

The Image of Care (IOC) rebranding campaign continues with an emphasis on what members can do individually and collectively to raise awareness of the campaign and of their professional brand. CAMRT staff has worked with several provincial associations to support integration of the IOC approach into other activities and continue to reposition MRT Week as a flagship event in the campaign. A rebranding session on “living your professional brand” is in development for online delivery using the webinar technology during MRT week, and an online media advertising campaign has just begun. Look for our ads on Facebook, and on selected health care websites soon. Our flagship rebranding activity is MRT Week, November 4-10, and we share the celebration worldwide with ISRRT colleagues on November 8. CAMRT was proud to have our communications coordinator, Kate Slean, assist with the graphic design of the 2012 World Radiography Day poster that was launched at the World Congress in Toronto.

An important objective for CAMRT is “Recognition as the authoritative voice sought after for expert commentary on all relevant issues by government, media and other key stakeholders” – easy to say, less than easy to do. However, progress is measurable in this area, and we can take pride in our leadership on several fronts. CAMRT led the planning for the first Medical Imaging Team Day, which was held on May 17. CAMRT staff involvement included developing the Medical Imaging Team website at www.imagingteam.ca, co-authoring a paper on Appropriate Use of Medical Imaging in Canada, media outreach and collaboration with MP Pat Davidson on a media conference on Parliament Hill. Leacy O’Callaghan-O’Brien and board member Brenda Badiuk represented CAMRT at the May 7 provider summit on the Continuum of Care, hosted by Canadian Medical Association(CMA), Canadian Nurses Association, (CNA) and the Health Action Lobby (HEAL).

CAMRT has been successful in advocating Canadian decision makers to consider how sharing best practices and innovation in appropriate imaging across provincial healthcare borders advances improvements in patient care and health system efficiencies. CAMRT has recently been involved in discussions related to the health innovations work of the Council of the Federation (COF), the name given to all the Canadian provinces when they work together. The focus of the COF work is on clinical practice guidelines, scopes of practice and health human resources. This summer, CAMRT collaborated with the Canadian Association of Radiologists (CAR) to draw attention to the issues on appropriateness identified in the Imaging Team Day paper with Dan Florizone, one of the lead deputy ministers supporting the Health Care Innovation working group. This led to fruitful collaboration with the CAR on a briefing paper for the CoF, calling for inclusion of diagnostic imaging as a topic for the second phase. The CoF accepted this recommendation, and at this time, we are awaiting further information about our potential involvement with the innovation working group in its next phase of work.

Promoting a culture of professionalism among our members is another strategic objective, and a range of new programs and services are in development. Once again this year, we are welcoming fourteen future leaders to Ottawa to participate in the annual Leadership Development Institute, where they’ll learn about their own leadership style, and how they can contribute as volunteers. New Maintenance of Competence/Continuing Professional Development (CPD) guidelines that discuss self-assessment, reflective practice, development and maintenance of a professional portfolio, developing categories for assessment of CPD activities, timeframe suggestions, and audit processes will be released this fall. Samples of templates/forms to help record activities are included with the guidelines. To support those who have embraced the professional’s characteristic commitment to lifelong learning, we continue to offer a rich menu of courses, specialty certificate programs and quick self studies, with new additions and improvements every year. Latest additions include the IR Specialty Certificate program, new QSS on the Basics of Clinical Trials and Research in Cancer and Beyond; SPECT/CT; and, several nuclear medicine topics developed by Covidien in collaboration with CAMRT.

We also continue to expand the outreach of the Journal of Medical Imaging and Radiation Sciences, and welcome submissions from new authors from around the world; this greatly adds to the international flavor of our publication and our profile as a leading journal in the profession.

**Staff update:**

CEO Chuck Shields left CAMRT at the end of August, to begin a new chapter in his career, as the first Executive Director of the International Urogynecological Association (IUGA). The board and staff wish Chuck the very best of luck in this exciting new career opportunity, and extend appreciation for his dedicated leadership over the past six and a half years.

Terry Eli Council Member

**AMERICA**

**Major Expansion and Renovation of ASRT Office**

The expansion and renovation project at the ASRT office in Albuquerque, NM, is progressing at a rapid pace. The four-story expansion will add close to 30,000 square feet to the existing building, allowing ASRT to accommodate its steady growth. In addition, the expansion also will include a museum that will chronicle the history of the radiologic technology profession, the first of its kind in the United States. The renovation project consists of additions and renovations to existing space in the building.

The expansion and renovation project is expected to be completed in the northern spring of 2013. Following the completion of the expansion and renovation, ASRT will start the planning process for the museum. The ISRRT Board of Managers will tour the construction site during its February 2013 board meeting at the ASRT office.

**New Membership options available**

The ASRT introduced two new membership options in May that allow radiologic technologists to customise their relationship with the association. The digital option allows members to access electronic versions of ASRT’s peer-reviewed scientific journals, Radiologic Technology and Radiation Therapist, and its member news magazine, ASRT Scanner. When members choose the Digital option, they will no longer receive printed copies of the publications.

The Premium membership option offers RTs the opportunity to take advantage of exclusive benefits, including:

- A subscription to the ASRT Insider, a biweekly newsletter that contains information related to the radiologic science profession.
- Advance notice of all new ASRT research, product and program announcements.
- Priority routing of telephone calls to the Member Services Department.
- Premium membership card, collectible lapel pin and ASRT decal.
- 25 percent off selected items in the...
ASRT Store.
- 10 percent off all National Radiologic Technology Week® merchandise.
- 10 percent off the ASRT Educational Symposium registration fee.

To learn more visit www.asrt.org/membership.

ASRT eclipses 147,000 membership mark
In September, ASRT surpassed the 147,000-member mark. The association’s net annual growth rate is about 3.54 percent and its net annual retention rate is about 87.4 percent. ASRT expects to reach the 150,000-member milestone in January or February of 2013.

Delegates Tackle Issues at ASRT Annual Governance and House of Delegates Meeting
More than 400 ASRT delegates and members were in Las Vegas June 29-July 1 to manage governance business at the 2012 Annual Governance and House of Delegates Meeting.

The House adopted two new advisory opinion statements addressing specific practices for RTs administering medications. Also passing was a third opinion statement, which covers the placement of personal radiation monitoring devices.

In addition, the House adopted the first-ever Quality Management Professional Practice Standards, acknowledging this specialty’s arrival as a standalone practice area.

A late motion to allow campaigning in the ASRT Communities was submitted during the Commission Hearing June 30. Members debated the role of social media in building member participation, the appropriateness of negative campaigning and generational differences in communicating among RTs. The House passed the motion two days later without debate.

Two Bills in Motion on Capitol Hill
The Consistency, Accuracy, Responsibility and Excellence (CARE) in Medical Imaging and Radiation Therapy bill, HR 2104, now has more than 130 bipartisan cosponsors in the US House of Representatives. In addition, US Sen. Mike Enzi, R-Wyo., and Sen. Tom Harkin, D-Iowa, introduced a Senate version of the bill, S. 3338, in January.

The CARE bill would set federal minimum education and certification standards in the Medicare program for the technical personnel providing, planning and delivering all medical imaging examinations and radiation therapy treatments.

In addition to the CARE bill, ASRT is working with the American College of Radiology, Society for Radiation Physician Extenders and the American Registry of Radiologic Technologists on the Medical Access to Radiology Care Act, HR 3032. The legislation would allow facilities to bill the US Medicare system for medical imaging services performed by qualified radiologist assistants under the direction of a supervising radiologist.

Learn more about the bills at www.asrt.org/main/standards-regulations/asrt-advocacy-and-you.

ASRT Participates in Medical Imaging Safety Summit

Titled “Safe Use in Medical Imaging: Developing a Systematic and Patient Centered Approach,” the summit focused on developing the initial steps public and private organizations can collectively take to improve safety in medical imaging procedures.

The invitation-only event featured more than 50 attendees from multidisciplinary backgrounds including representatives from health care providers, manufacturers, professional organisations, government agencies, quality measurement and review organizations, and patient and consumer groups.

Chief Executive Officer Sal Martino, Ed.D., RT(R), FASRT, CAE, served as ASRT’s representative. He provided information about ASRT’s ongoing radiation safety initiatives, legislative efforts and the role of radiologic technologists on the health care team.

Participants developed a preliminary goal for safe medical imaging procedures and identified gaps that prevent organizations from achieving the goal. In addition, attendees produced a consensus-based map of the current health care system as it pertains to radiation exposure during medical imaging procedures.

The ABRF plans to meet with stakeholders again in 2013 to review the status of interim activities and discuss next steps.

New Continuing Education products available
The ASRT launched two new educational series in 2012. They’re part of ASRT’s ongoing efforts to provide radiologic technologists with continuing education products focusing on different radiologic technology disciplines and specialties.

In August, the association launched Breast Imaging Basics: The Series. The 10-module interactive series provides medical imaging professionals and students with a comprehensive overview of the fundamentals of breast imaging.

In addition, the Society released its new magnetic resonance educational program, MR Basics: The Series, in May. The series also features 10 interactive modules and provides medical imaging professionals with comprehensive information about this rapidly growing practice area.

Look for several new products in 2013 including a series focusing on sectional anatomy and courses on radiation therapy. Also, keep an eye out for modules that highlight the role of computed tomography in pathology and information about PET/CT.

ASRT Education and Research Foundation Awarded more than US$200,000 in Scholarships in 2012
In June 2012, the ASRT Education and Research Foundation awarded more than US$200,000 in scholarships to 54 radiologic sciences professionals and students for the 2012-2013 academic year.

Scholarship recipients submitted applications and were selected based on evidence of commitment, leadership, achievement and financial need. The Foundation’s Scholarship Review Committee evaluated scholarship applications and provided recommendations to the Board of Trustees. The Board of Trustees then approved recipients.

You can find information about the Foundation’s scholarships and awards at www.asrtfoundation.org/Content/Scholarships_and_Awards/

Rita Eyer

AFRICA

SOUTH AFRICA

SORSA-RSSA Congress 2013
It is with great pleasure that the SORSA-RSSA 2013 Imaging Congress committee is ready to welcome you to our next congress. The joint congress of the Society of Radiographers of SA and Radiological Society of SA is scheduled to be held August 23-25, 2013 at the International Convention Centre (ICC) in Durban. The scientific committee has promised an academically enriched program comprising: an Emergency Room Imaging Course and Neonatal...
Ultrasound Course. Free papers will include Advanced Imaging and Therapy, Professional Ethical Practice and the Law, Education & Training, Current Trends in Management and an interactive workshop to test your pattern recognition skills. Please prepare your abstracts as the closing date for submission is April 19, 2013. Check the latest updates on the website www.2013sorsarssa.co.za from September 25, 2012.

Why should you plan to attend the congress?

• Enjoy a vast variety of learning sessions over three days
• Score CPD points
• Access to companies showcasing their latest products & services
• Network with friends and colleagues
• ICC Durban has been voted Africa’s Leading Conference Centre for six consecutive years by World Travel Awards. Conveniently situated and highly accessible, Durban is less than an hour’s flying time from Johannesburg and once you arrive, everything you need is within easy reach.

The SORSA Website (www.sorsa.org.za)
The SORSA website is in the process of being revamped – so please pardon our dust! There will be a separate section that may be accessed by members only. At present each of the 7 SORSA branches based nationally – administer their own members. The membership database will now be handled totally electronically – and will be a composite database for all members from all 7 SORSA branches. Currently all collection of membership fees are handled at branch level – many payments still being in the form of cash to the treasurer or by cash deposits. The Society incurs huge bank charges for the handling of cash. In future we hope to collect all membership fees electronically via the website.

A survey on the administration of pharmaceuticals by radiographers
The placement of needles in patients or vena puncture has been part of the scope of radiographers in South Africa for a number of years. However training institutions offering radiography education in South Africa have not yet developed modules accredited by the Health Professions Council of South Africa to provide training for radiographers in injecting pharmaceuticals. This matter is always on an agenda at an open meeting or discussion forum and therefore a panel discussion on the topic was presented at the SORSA RSSA conference in Durban 2011. The panel discussion created a lively debate and SORSA consequently compiled a survey to determine the opinion of SORSA members in South Africa on the need for accredited training to administer pharmaceuticals. The survey was completed online and although the response rate was relatively low, the way forward is not. An article to publish the results of the survey will be available in the SA Radiographer in the near future.

Sorsa attended a meeting of the Council on Higher Education
The Council on Higher Education in South Africa (CHE) recently invited SORSA to discuss the submission of new qualifications in the four categories in radiography. At the meeting the radiography profession was explained to the CHE members as well as how the four categories differ. The names of the new proposed radiography qualifications in South Africa were discussed and clarified. The CHE acknowledged with appreciation the role of the SORSA representative at the meeting (Barbara van Dyk) and valued the fact that our association cares enough to be represented at the meeting.

Bellville Branch (Cape Town) bids farewell to a long standing member
The Bellville Branch had to take leave of the member who was first registered at the inauguration of the branch, Mrs Marie Smet. She was a leader in radiography and a tutor for many students. She will be sorely missed by students and colleagues as she moves to Gauteng.

Mrs B Van Dyk visits Uganda and Kenya
On May 20, 2012 Barbara van Dyk, from the University of Johannesburg (UJ) visited the Makerere University in Kampala, Uganda, as the external examiner for the final year radiography students. The university in Kampala is associated with the Mulago Hospital where she was warmly received by Dr Sam Bugeza, the radiologist in charge of the Department of Radiology, and lecturers in the radiography programme. She also visited Stephen Bule’s home in the countryside, a UJ alumnus currently enrolled for his doctoral studies in Uganda.

Pictured top right is: On far left Stephen Bule (UJ alumnus) with Dr Sam Bugeza (HOD Radiology) second from right.

Planned celebrations for 2012 World Radiography Day
The Bloemfontein Branch will enjoy an afternoon of fun with ‘boeresport’ to bring together radiographers, students and radiologists. After the prize giving ceremony
the Pretoria Branch have decided to show the public the difference between the four disciplines of Radiography via a poster display made up of photographs that we will pose for, depicting what each discipline is about and have a representative from each discipline present at the display to answer any questions that anyone might have.

The KwaZulu-Natal (KZN) Branch hosted 2 fruitful seminars during 2012 in two different cities. Both seminars were a great success. In April over 200 delegates attended the first seminar in Durban and in August 150 delegates attended the Orthopedic seminar hosted in Pietermaritzburg.

SORSA KZN is hosting another seminar on 17 November. This World Radiography Day seminar will be held in Durban at the Elangeni Hotel. The theme is in keeping with ISRT’s World Radiography Day theme: Radiography: Guiding the Clinical Pathway. All four radiography categories will be presented at the seminar. KZN radiographers look forward to hosting you.

Most KZN hospitals educate the public on Radiography in honour of World Radiography Day, by putting up a display in their foyer with information about Radiography. This information is distributed to all present at the hospital on WRD. Pictured bottom above is a photo of radiographers and student radiographers who in the past purchased t-shirts from SORSA and wore them on WRD.

**Europe**

**Norway**

Nordic republishing agreement reached

An agreement has been reached on exchanging professional content in the individual Nordic Society of Radiographers’ member journals (NSR journals).

Articles with topics from the profession originally published in one of the Nordic countries are assumed to interest radiographers in neighboring Nordic countries. To increase the number of available profession-articles, the societies agreed upon free exchange of content and republishing between our NSR journals and websites.

This agreement will increase the awareness and availability of radiographic research and publications to radiographers in the Nordic region. It may also enhance the professional quality and status of our NSR journals.

**Norwegian Clinical Specialists and Reporting Radiographers**

A milestone in the process of role development for Norwegian Radiographers has been reached. After piloting a three year educational program for five radiation therapists, The Norwegian Society of Radiographers has qualified the first clinical specialists in radiation therapy. The society’s clinical specialist qualification program will be further developed in 2013 to include other professional areas to become clinical specialists.

The first three reporting radiographers in skeletal imaging have qualified, and several hospitals are planning to increase the number of radiographers educated in this field.

**The Nordic Congress 2013 conducted in English**

Norway is the host of the biannual Nordic Congress from the 22nd to the 24th of May 2013 in the west-coast city of Bergen. The Nordic Congress will be conducted in English, so all international professionals are welcome to enjoy the fantastic program and the beautiful city of Bergen in spring!

For more information, please visit the website: www.nordiccongress.org

**Successful Norwegian Congress**

A joint Norwegian congress (www.varmote.no) is arranged every second year in collaboration with the radiologists, medical physicists, the National Radiation Protection Agency, the Norwegian Directorate of Health and the Forum for leaders in medical imaging. The congress is conducted in Norwegian and offers several sessions covering a wide range of professional issues, and the societies are particularly pleased with succeeding in having radiographers, radiologists and medical physicists lecturing within the same session topics. The most recent congress was held in Norway’s capital city of Oslo last April, and the average evaluation score was 5 on a scale to 6.

**Professional courses in Norway**

The Norwegian Society of Radiographers offers a wide range of activities to the members and others (www.radiograf.no). 12 professional courses for radiographers, radiation therapists, radiologists, medical physicists, medical technologists and professionals working within nuclear medicine, are on offer each year. A seminar on the use of radiographers and sonographers in ultrasound imaging was successfully held in September.

The range of annual professional courses on offer each year cover all fields of diagnostic imaging such as angiography and intervention, CT and MR imaging, mammography, radiation protection, skeletal, paediatric and trauma imaging, radiation therapy, nuclear imaging, ultrasound imaging and courses for managers and leaders within medical imaging. Most courses run over a period of three days, with around 20 hours of lectures each and an exam at the end qualifying for a course diploma.

The society’s courses also receive a high average score, and are both attractive and popular to attend by professionals from all over the country. Joint efforts from the society’s administration and a team of professionals from all parts of the country ensures that courses has the highest level of quality.

Our courses receives positive attention from radiographers in neighbouring countries, and we experience an increasing number of Nordic participants, particular from Denmark and Sweden, but also from Iceland and even the Faroe Islands.

**France**

Our national congress place in Lyon in May, 2012, the next one is in Dijon in March, 2013, main topic new technologies.

Our special congress dedicated to MRI took place in Lille with 1000 radiographers. The next one will take place in St Etienne in April 2013 with limit of 780 participants, and in Bruxelles in April 2014.

As every year, the JFR (International Radiological Congress for french speaking countries) will take place in Paris in October with more than 1800 radiographers.

We will start a congress devoted to CT in February 2014 in Toulouse.

A big change in our professional education: This year we started a university program, our national diploma will move to Licence Degree. For the new promotion, which started in September 2012, they will qualify in June 2015. Texts were officialy approved in August.

Our collaboration with Quebec gives the opportunity for 10-15 radiographers to move to this country.

We started a program of DPC (Continuous professional development). Informations available at www.afppe.net/. Be informed by social sites Facebook and Twitter as soon as we propose news information on our website.

Agnés Antoine
memberships

➢ Membership

Full membership of societies is open to national societies of radiographers or radiological technologists with similar objectives to the ISRRT. These are: “to advance the science and practice of radiography and allied sciences by the promotion of improved standards of education and research in the technical aspects of radiation medicine and protection.”

➢ Corporate Membership

Corporate membership is open to all organisations wishing to support the work of the ISRRT and who would otherwise not be eligible for full membership. This includes commercial companies, regional or local professional organisations, governments, hospitals, universities and colleges. Corporate members receive certain benefits including preferred space at ISRRT organised technical exhibitions, priority opportunity to participate in ISRRT sponsored educational activities, preferential advertising opportunities in ISRRT publications and official recognition in the ISRRT Newsletter. In addition, hospitals, universities and professional associations can apply to host ISRRT organised seminars and workshops. Details of Corporate membership are available from the Secretary General. We express our appreciation for the continued support of our Corporate members and invite other industry and professional leaders to offer their support to the advancement of international radiation medicine. Current Corporate members are:

- Agfa-Gevaert N.V.
- American Registry of Radiologic Technologists
- Association of Educators in Radiological Sciences Inc.
- Toshiba (Australia) Pty. Limited, Medical Division
- Technikon Natal
- American Registry of Diagnostic Medical
- Sonographers
- Shimadzu
- Dubai Dept. of Tourism, Commerce and marketing

➢ Associate Membership

Associate membership provides the opportunity for individual radiographers to learn more of the activities of the ISRRT. They do this by receiving a copy of the Newsletter that contains reports on all ISRRT activities and upcoming events. Associate members also receive advance notice of Conferences and Congresses and receive a small rebate on registration fees at these ISRRT meetings. In addition many of our member societies allow ISRRT Associate Members to register for their national conferences at the same preferred members rate if they reside outside the country of the Conference.

Application for Associate Membership

Please complete in block letters and return to:
Secretary General, 143 Bryn Pinwydden, Pentwyn, Cardiff, Wales CF23 7DG, United Kingdom

Title (please tick)  Mr  Mrs  Ms  Miss  Dr  Other

Family Name(s): 

Given Name(s): 

Address: 

I wish to support the work and objectives of the ISRRT and hereby apply for Associate Membership 

I enclose payment of 

Euro  Pounds Sterling  US Dollars  Canadian Dollars

☑ 1 year  10 Euro  ☑ 1 year  £ 6.00  ☑ 1 year  $10.00 US  ☑ 1 year  $13.00 Cdn 

☐ 3 years  28 Euro  ☑ 3 years  £16.00  ☑ 3 years  $28.00 US  ☑ 3 years  $36.00 Cdn 

Signature: 

Date: 

My specialty is (please tick one or more): 

☐ Imaging  ☐ Therapy  ☐ Nuclear Medicine  ☐ Education  ☐ Management

I am a member of my national society which is: 

Please make payment by cheque, bank draft or money order, payable to “ISRRT”. I would like to support: 

☐ ISRRT Development Fund and include a donation in the amount of: 

☐ World Radiography Educational Trust Fund and include a donation in the amount of: 

Name: 

Address: 

Signature: 

Date: 

Donations to Secretary General ISRRT, Mr Alexander Yule 143 Bryn Pinwydden Pentwyn, Cardiff Wales CF23 7DG United Kingdom
<table>
<thead>
<tr>
<th>Country</th>
<th>Name and Address</th>
<th>Website</th>
<th>Council Member</th>
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<tbody>
<tr>
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<td>Dr Alfredo Buzzi</td>
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<tr>
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<td>Terry Ell, Foothills Medical Centre, Department of Nuclear Medicine,</td>
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<tr>
<td>Botswana</td>
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