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NEWSLETTER

Volume 46. No. 1 – 2010

International Society of Radiographers and Radiological Technologists

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Intrathecal use: Meningism or chemical meningitis. Photophobia. Transient blindness, motor or sensory dysfunction. Confusion. Paraesthesia. Seizures. EEG changes. Local pain, cramping and pain in the lower limbs, neck pain. Headache, nausea, vomiting or dizziness. Injection site reaction. Use in Body Cavities: Endoscopic Retrograde Cholangiopancreatography (ERCP): Elevation of amylase levels, pancreatitis. Oral use: Gastrointestinal upset. Hysterosalpingography (HSG): Transient pain in the lower abdomen. Arthrography: Post procedural pain, Fronk arthritis. Herniography: Mild postprocedural pain. **INSTRUCTIONS FOR USE AND HANDLING** Like all parenteral products, OMNIPAQUE should be inspected visually for particulate contamination, discolouration and the integrity of the container prior to use. The product should be drawn into the syringe immediately before use. Containers are intended for single use only; any unused portions must be discarded. OMNIPAQUE may be warmed to body temperature (37°C) before administration. **MARKETING AUTHORISATION HOLDER** GE Healthcare AS, Nycoveien 1-2, P.O. Box 4220 Nydalen, N-0401 Oslo, Norway. **CLASSIFICATION FOR SUPPLY** Subject to medical prescription (POM). **MARKETING AUTHORISATION NUMBER** PL 00637/0034-0038. **DATE OF REVISION OF TEXT** 15 February 2007. **UK PRICE** 10 x 50 ml 350 mgI/ml £208.01.

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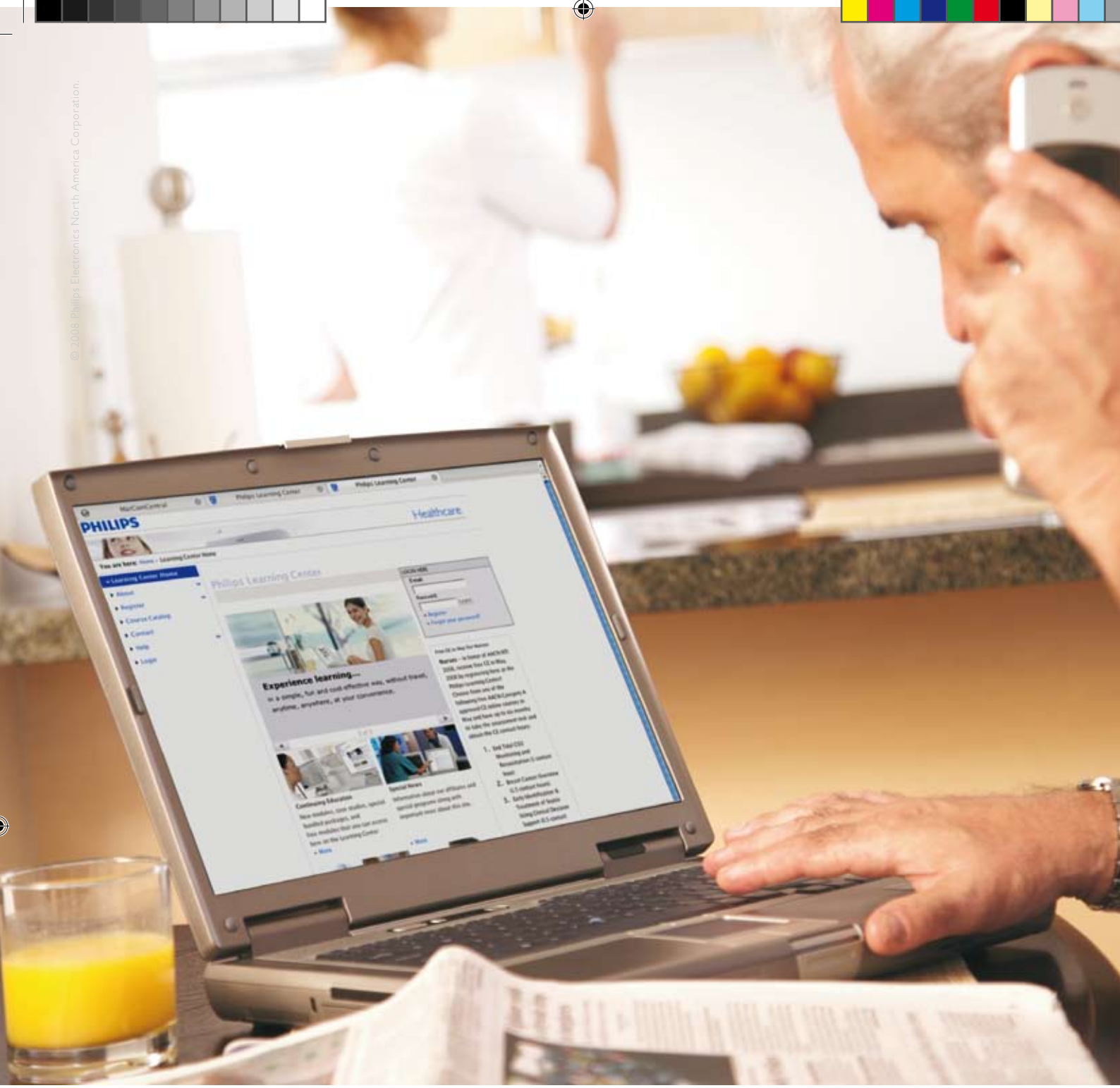

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President's Message

AS I write this message it occurs to me that this will be my last President's Message, as September will bring our World Congress and associated Council Meeting at which a new ISRRT Board of Management will be elected.

Colleagues from other Professions have been surprised when I have told them that we elect our Board for four year terms, but when the subject of the range of activities and relationships we need to establish and maintain arises they can understand the need for such a time frame.

Our present Board has representatives from 12 Countries who need to learn to work together to support the objectives of ISRRT – this cannot happen within a short timeframe given their wide ranging backgrounds and experience. This is certainly my experience having served on three ISRRT Boards. As we move from 2009 through 2010 and look to the future, my overwhelming feeling is how the ISRRT has gained in respect and involvement at an International level while still being involved at "grassroots" radiography when that was appropriate and a need.

As an example, I was telling a colleague recently how Cynthia Cowling, our Director of Education, had, within just a few months moved from running an ISRRT workshop in Fiji on Q/A in general radiography to being an invited speaker at a World Health Forum on minimising dose for Children in Pediatric Radiography in Chiba, Japan.

Similarly, I was recently invited to represent ISRRT as part of an important World Health Forum on establishing International Imaging Guidelines. ISRRT was the only invited Technologist's group along with more than 25 other Professional Bodies. While at this meeting, I was also able to offer the WHO Regional Director from Central America, the ongoing support of ISRRT to the residents of Haiti to assist in the re-establishment of medical imaging services to that earthquake-torn Country. This aid will need to be sourced from our Members Societies but I know they will readily help ISRRT to provide aid in this and other areas of need.

Our 2010 World Congress, enthusiastically hosted this time by our colleagues from Australia with the support from the New Zealand society, will be another opportunity for us to mix with and share professional experiences with those from our many Member Societies around the world. At these times, we learn that despite our cultural differences and diverse backgrounds, we have a unique bond through our daily contribution to the healthcare of our various communities. This is a true privilege and above all a serious responsibility which we should not take for granted.

In very recent times we have seen and heard many stories of incorrect and inappropriate procedures and examinations resulting in increased radiation doses to patients. This has caused many patients to seriously question the examinations for which they have been referred to our departments and indeed to question us about these examinations and procedures and the risks to which they might be exposed.

We all need to ensure that we are able to answer their questions with knowledge and authority, at the same time respecting their concerns. We have undertaken to ensure that the forthcoming ISRRT World Congress will provide the opportunity to increase the knowledge and awareness of those attending in these areas.

At the conclusion of the Congress in September I will have the opportunity to publicly thank my ISRRT Board colleagues for their support and contribution to ISRRT on your behalf, but I would like now to take this opportunity to do that in this Newsletter Forum.

To the ISRRT Board Members, Regional Representatives and other individuals who have aided me and the Board on special projects, to the Council members and various National Society Presidents, Officers and CEO's who have been so courteous, helpful and generous with their time and friendship I express my sincere thanks and gratitude.
I also thank those members of the various International Professional Societies and Companies who have treated ISRRT with so much respect and involvement and given us their support.

Continued on the next page

Continued from the previous page

To Sandy Yule our tireless, conscientious, humorous and totally committed and dedicated CEO my very special thanks, both at an ISRRT and personal level. To Alison his delightful wife, my thanks as well in recognition of her never ending support to Sandy and, through him to ISRRT.

I must also thank my wife Jan, who has always supported and encouraged my professional life and has not only lived with radiography for the last 45 years but still has at a few more to contend with as we have two adult children who are also radiographers.

I will wish the new Board (when they are elected), all the very best and be very envious as they will be embarking on one of the best experiences of their lives.

Rob George
President ISRRT

JORNADA PANAMERICANA TECNOLOGIA MEDICA

Santiago, Chile **July 15-17, 2010**
Grand Hyatt

Call for presentations

The Chilean College of Medical Technologists, in lieu of the commemoration of its XV National Congress and the Bicentennial of our country, has the honor of conveying all peer organisations from America to the V Pan-American Congress of Health Professionals.

Previous meetings were held in Arica (1992), where the Pan-American Association of Medical Technologists was founded. Talca (1994), Santiago (1998) y Valdivia (2000) brought forth important agreements in the Latin-American area, both in the academic and the clinical practice area of the profession; generating understanding of the common problems and possible solutions to this; sharing of technological and scientific developments which each organization provides do the profession development in their respective countries; exchange of experiences which favors progress and upgrading knowledge of each specialty.

This meeting will be inserted in the Medical Technology Congress so participants will have access to academic, scientific, social and guild activities, developed in a agreeable socialization and natural camaraderie. We are counting with your attendance, which we are sure will give our event glamour and your presentations will enlighten our mutual interests.

Marcelo Zenteno
Juan Carlos Araya
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The fifth Radiotherapy in Practice and second Advanced Practice (Radiotherapy and Oncology) Conferences will be held in a joint event at Sheffield Hallam University in October 2010.

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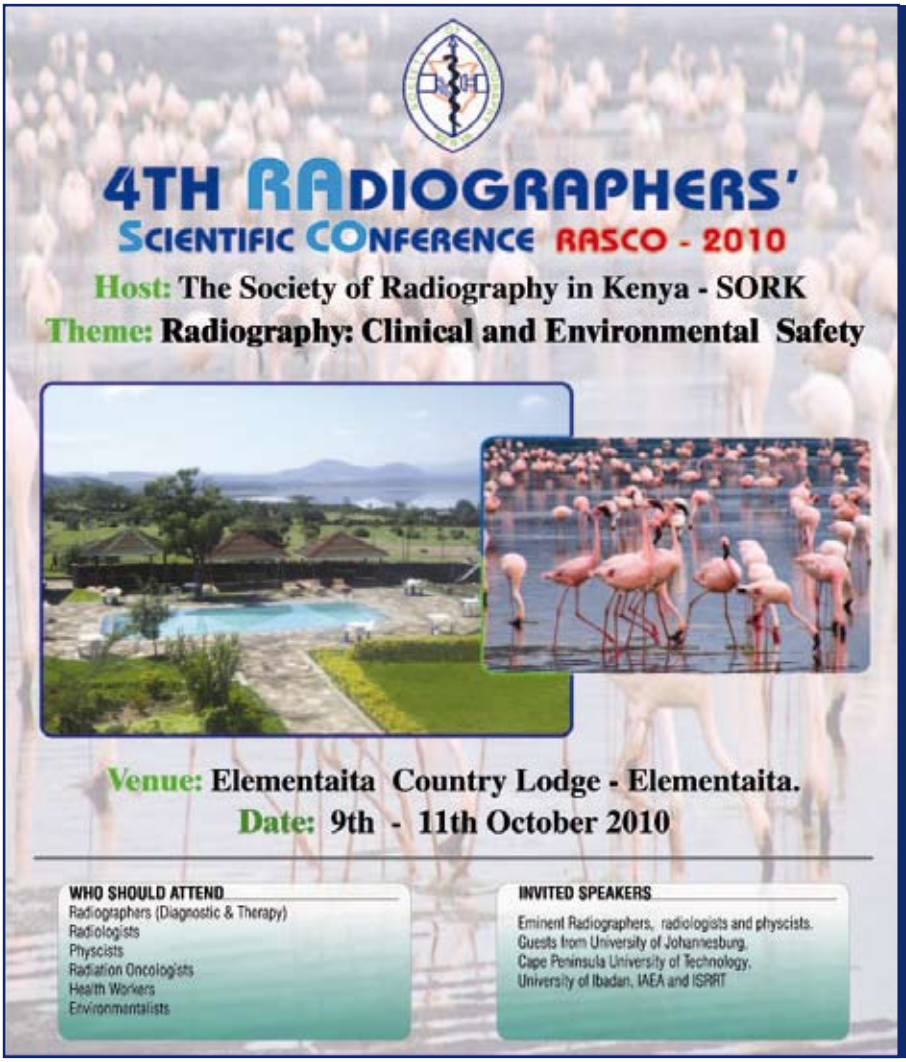

For Registration go to www.radiography.or.ke

Contacts
www.kenyaradiographers@yahoo.com
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Submission of abstracts
- Deadline June 15, 2010
- Notification of abstracts acceptance July 15, 2010
- Early registration deadline July 30, 2010

Registration fee

SORK members	KES 6,000.00 (USD 150)
Students	KES 3,500.00 (USD 100)
Others	KES 10,000.00 (USD 200)

Any payment after the deadline shall attract an Administrative fee of 1,000.00.

ISRRT Newsletter publication dates

The dates of publication for the *ISRRT Newsletter*.

From 2009 the newsletter will be published in May and November.

The deadlines will be April 1 (May issue) and October 1 (November issue).

Any queries please contact:

The Secretary General, Dr Alexander Yule:
isrrt.yule@btinternet.com OR

Production Editor, Rachel Bullard:
deepbluedesign1@mac.com

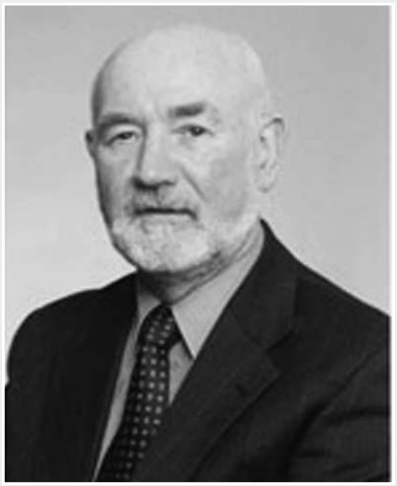
Secretary General

I ATTENDED the Radiological Society of North America (RSNA) at the end of November 2009 with Robert George and this was the second time ISRRT had participated as part of the Associated Sciences group. The ISRRT once again shared a large booth with the other Associated Sciences members which include the American Society of Radiologic Technologists (ASRT) and the Canadian Society of Medical Radiation Technologists (CAMRT). This complimentary booth gives the ISRRT the opportunity to promote worldwide activities and to distribute literature. As reported last year the ISRRT is now fully participating in the educational program at this event and lectures were presented by Robert George, Cynthia Cowling and Lori Boyd. The Regional Director of the Americas, Michael Ward represented the ISRRT at the program planning session for 2010 and it was agreed that the session involving Cynthia Cowling and Lori Boyd should be repeated at RSNA 2010.

The European Congress of Radiology in Vienna in March 2010 was once again a significant meeting for the ISRRT. Relationships were maintained with the ECR and the IAEA and important meetings were held with those organisations and also with the President and officers of the European Society of Radiology (ESR).The meeting with ESR was in conjunction with the European Federation of Radiographic Societies and it was agreed that joint participation would be a feature of future Radiographic sessions at ECR. These contacts are extremely important if the participation of the ISRRT in medical radiation protection issues is to continue at its present high level.

Last month, April, I took part in an extremely successful radiography program at the International Congress of Radiology in Shanghai which was facilitated by Maria Law and Cynthia Cowling. In addition to the scientific program I also had the opportunity to meet with the President of the Chinese Radiographic Society and it is hoped that this meeting will help to promote future contact with radiographers in China.

April is also the month in which the General Assembly of the World Health Organisation (WHO) is held and I will be participating in this annual event. ISRRT is a Non Governmental Organisation (NGO) and it is extremely important that this status is maintained. This status is not an automatic right for any organisation and every two years the Executive of WHO meet to decide if an organisation merits to continue as an NGO. At the beginning of 2010 the Executive, having taken into consideration the world wide work of the ISRRT once again renewed its NGO status.



In May I will be doing a site visit in Toronto prior to the 2012 ISRRT World Congress. While in Canada I will take the opportunity to attend the CAMRT Conference in Quebec.

The next few months will be extremely busy as I prepare for the 2010 World Congress in Australia. Most of the work has been done by the local Organising Committee in Australia and I would like to thank them for the magnificent job they have done. In addition to the Congress there will also be a Board and Council meetings. This year elections will be held for Board positions and also the results of the ISRRT survey undertaken last year will be discussed.

Once again I would like to thank all Board members, Council members and members for the help and support given and my wife Alison for her help during the year.

I would also like to thank Robert George for all his work and support during his period as President and for him and Jan welcoming us into their home in Adelaide.

Sandy Yule
CEO, ISRRT

➢ *Editorial Submissions & Deadlines*

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

Mrs Rachel Bullard
Email: deepbluedesign1@mac.com

Deadline for the twice yearly issues are:
April 1 (May issue) and October 1 (November issue) each year

All material must be sent electronically, advertisements, images as high resolution PDF, TIF, EPS 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 Secretary General:

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➢ *ISRRT World Radiography Educational Trust Fund (WRETF)*

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Spring House, 17 Spring Village, Horsehay, Telford, UK TF42LU
Tel: +44 0 1952 502966; Email: spring.house@talktalk.net

ISRRT 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.

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RSNA

Imaging Through a Cross-cultural Lens: A Global Perspective on Values, Norms, Mystiques and Fears

November 2009

Report by **Cynthia Cowling,** ISRRT Director of Education

MY main purpose was to deliver a presentation entitled "Imaging Through a Cross-cultural Lens: A Global Perspective on Values, Norms, Mystiques and Fears."

This 90 minute presentation was part of the Associated Sciences Refresher course section. I presented with my colleague Lori Boyd from Toronto. The RSNA provides a comprehensive feedback system and the speakers and session received a very respectable 4.14 average out of 5 in all sections. There were also some very useful constructive criticisms which will help us to improve the session should we be asked to repeat it. Most encouragingly many attendees expressed interest in the huge disparities between the have and have not nations, a message ISRRT only is able to send.

I would like to devise a survey for our council members so that we can have some more sound research presented. I have included the abstract and objectives for your information at the end of the report. I also attended several meetings.

1. Informal meeting with CEOs and Presidents of UK, Canada and USA as well as accrediting agencies. ISRRT hosts this meeting and it provides an opportunity for the countries represented to see what the ISRRT is doing. I reported on the Educational focus and re-enforced some items brought up at our Hong Kong meeting concerning future endeavours.

There was considerable discussion on the survey and how the Board will respond. It was emphasised that the survey was done at the request of the Council and ISRRT must be cautious to meet their needs. There was a perception among some that it appeared little was happening as result of the survey but were reassured when it was explained that there had been considerable discussion at the Board meeting with some provisional strategies, tabled until the Council could provide input. The ISRRT President proposed a compromise whereby the original working group provide some feedback re future strategies based on results. This is currently under discussion with ISRRT board members.

JCERT, the accrediting agency in USA was very keen to work with ISRRT on our Accreditation project.

2. Image Gently, the Alliance formed to assist in Pediatric Dose reduction provided a helpful information session. I would like to strongly recommend that all Board members go to their website www.imagegently.org and specifically look at the excellent free modules on how to reduce Pediatric Doses in CT, developed by ASRT. I would like these to be highlighted in our website and also in the education section. I used some of the material learnt from this and also some lectures I attended when I represented ISRRT at a WHO meeting in Japan.

3. WHIA. I met with representatives from this group (which has changed somewhat since our first discussions). They are still interested in having ISRRT assist with education process associated with the installation of simple digital units in Guatemala. Philippe Gerson has provided an excellent reference person with both Spanish and Digital expertise. My concern continues to be that one train of thought by this group is to take any persons from the hospital environment and train them as digital users in a very short period. Since we know there are many qualified radiographers already in Guatemala, my very firm stance is that these radiographers should be upgraded to digital skills. We are still waiting on dates for installation. Things move slowly in Guatemala!

Thank you for providing me the opportunity to attend the RSNA. It proved a very enriching experience. ❖

Abstract

Imaging Through a Cross-cultural Lens: A Global Perspective on Values, Norms, Mystiques and Fears

At its core, radiography is the acquisition of radiographic images to help diagnose and treat patients within clinical practice. There are however, many factors which impact on

the success of procedures and resultant quality of images. The operatorclient relationship is often influenced by cultural values and norms which can vary considerably. Optimal images are dependent both on operator skill and client compliance which comes with a sense of trust critical to the fiduciary relationship. This can be difficult to achieve within the physical environment of a radiology department and can also be impeded by cultural expectations and cultural conflict.

Western societies that stress individual rights tend to focus on health practices that are embedded in this worldview such as the requirement for informed consent and maintenance of confidentiality of patient information. In contrast, more hierarchical cultures often defer to elders for decision-making whereas communal cultures may involve community leaders in a shared decision-making process. Gender and religious issues can also affect the provision of high quality procedures with same gender care being a requirement within some cultural groups and gowning procedures that maintain cultural values frequently being an expectation. In addition, in many countries in the developing world, radiation still has mystique and fear associated with it, affecting participation in screening programs and recruitment to medical radiation technology educational programs. This presentation will present findings that will help to contextualise these issues through a cross-cultural imaging lens.

Objectives

1. To discuss the concept of culture in relation to the healthcare environment of North America.
2. To contextualise cultural issues with regard to patient and technologist perspectives within a North American healthcare environment.
3. To discuss the impact culture has on patient health outcomes.
4. To describe the concept of a culturally competent health practitioner.
5. To consider the impact of global differences in ethical codes, scopes of practice and professional practice expectations.
6. To identify and discuss issues that arise from globalisation of education and accreditation.
7. To consider the possibility of harmonisation of educational standards, codes of ethics and accreditation requirements for medical radiation technology.

TWSRT holds successful meeting

Taiwan
February 16-17, 2010

Report by Miss Lee

ON February 16-17, 2010 the 43rd Annual Meeting of Taiwan Society of Radiological Technologists (TWSRT)and the 14th East Asia Conference of Radiological Technologists (EACRT) hosted by the Taiwan Society of Radiological Technologists proved to be a success with over 1,500 members of TWSRT attending. A number of outstanding international experts and participants in all fields attended this years conference. At the conference we welcomed the President of ISRRT, Mr Robert George, Dr Napapong Pongnapang from Thailand, Ms Tan Chek Wee from Singapore, the President of Korean Radiological Technologist Association, Mr Cho Nam-Soo, and the President of Japan Association of Radiological Technologists, Mr Kitamura Yoshiak. ❖

Right: More than 1,500 members collected in this workshop.

Presidents and representatives.

TWSRT invites you to join the

18th Asian/Australasian Conference of Radiological Technologists (AACRT)
March 25-27, 2011 in southern of Taiwan, Kaohsiung

The theme of conference is **IMAGING YOUR IMAGINATION**
It reflects the reality of our career.

Poster and oral submission are welcomed before the deadline.
Please visit the website **www.twsrt.org.tw** for more information on registration, tourism, sepcial program, special speakers, venue, accommodation and transportation.

WHO Global Initiative on Radiation Safety in Health Care Settings Workshop on Second NIRS KIDS WORKSHOP –

WHO Satellite Meeting Radiation Risk Assessment in Pediatric Healthcare

NIRS HQ, Chiba, Japan
December 15-17, 2009

Report by **Cynthia Cowling,** ISRRT Director of Education

I WAS delighted to be able to represent ISRRT at this session which covered all aspects of radiation risks to children. I gave a presentation on the Role of the Radiographer in dose reduction and have attached my presentation for your interest and/or use.

Attendees and presenters included radiation scientists, epidemiologists, radiologists, pediatricians, radiation oncologists, medical physicists and one radiographer.

The final day consisted of a satellite hook up with representatives from IAEA and WHO in Vienna where the main discussion revolved around how to move forward on the Global Initiative. It was agreed by all that the multi-disciplinary approach was critical. I was pleased that the WHO representatives made special mention of the importance of including radiographers and technologists and indicated that ISRRT was the best and most appropriate source for this connection. Dr Perez, who heads this Initiative, has some funds to develop improved communications at all levels and this will include ISRRT. It is important for us to continue representation at these activities. WHO paid for all my expenses and I was made most welcome by all and was able to make some excellent contacts.

A workshop summary is in progress and I will circulate when it is finalised. ❖

Cameroon Society of Medical Radiographers and Radiotherapist 8th Congress Report Meeting

When Medical Imaging and Radiotherapy take off – Image Digitalisation and Innovative Diagnostic Modalities

Djeuga Palace Hotel, Yaounde, Cameroon February 12-13, 2010

Report by **Nwedjiwe Nana Narcissse Fidele,** National Prsident of CSMRR

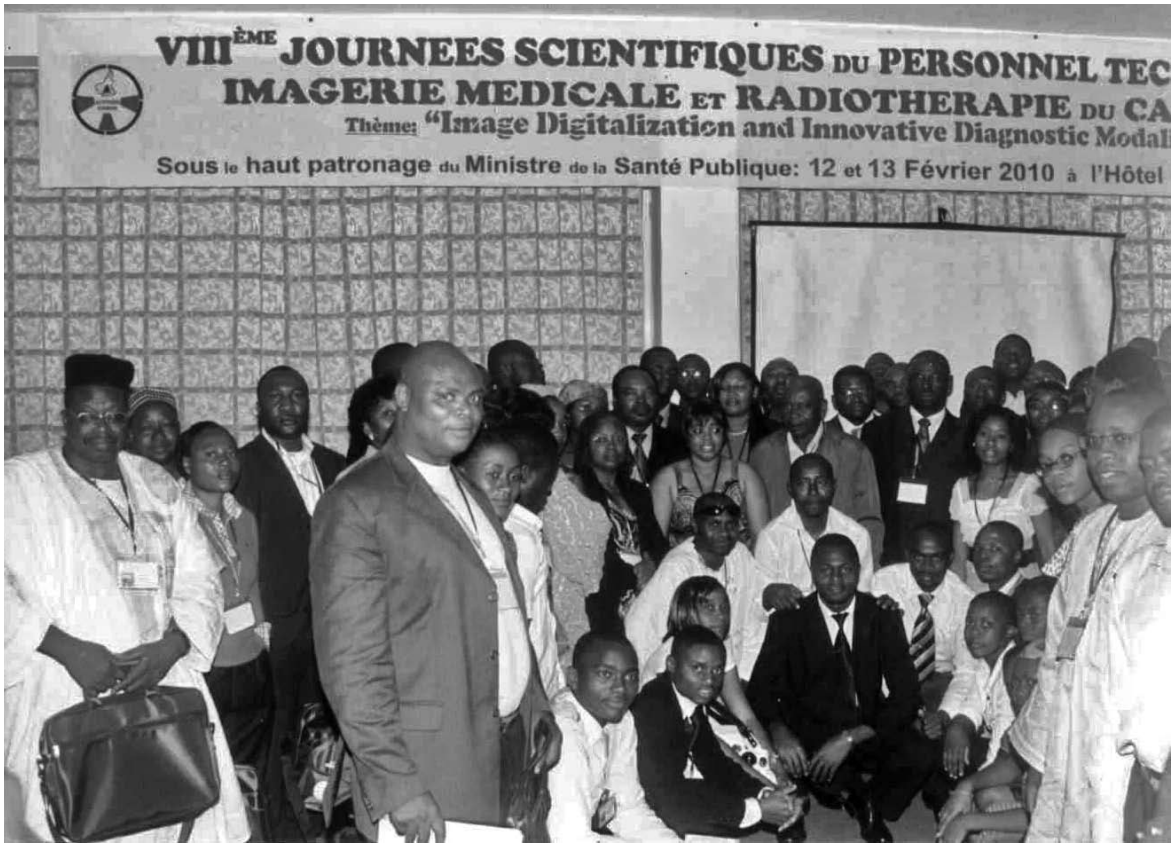
THE Cameroon Society of Medical Radiographers and Radiotherapists (CSMRR/ACPTIMR) 8th Congress was organised under the high patronage of the Ministry of Public Health. It took place in the premises of the Djeuga Palace Hotel, in Yaounde February 12-13, 2010; with the Theme being "IMAGE DIGITALIZATION AND INNOVATIVE DIAGNOSTIC MODALITIES".

The aim of this congress was to update and brief participants of the innovations in Medical Imaging (CT Scanner, MRI, and Digital Radiography) and to estimate the number of professionals in medical imaging in our country while setting recommendations for the future so as to reduce variability in our daily practices. This Scientific workshop also served as an in-service training.

This workshop and in service training garthered a large number of professionals in Medical imaging and radiotherapy in Cameroon and Gabon. The were 95 participations, among which we had 36 students and 59 confirmed professionals (Professors, radiologists, Engineers and Technicians in medical imaging). During the congress, we had the participation of the President of the Cameroon Society of Radiologist and Radiotherapist in Medical Imaging (SCRRIM) Pr. Gonsu F. Joseph and Professors Juimo and Tagny. Their participation showed the importance they attach being experts in medical imaging in Cameroon and in our profession which holds its place in the Health care system

The first day was dedicated to scientific sessions and presentations (a general session and a CT SCAN/MRI session) and free presentations and debates interrupted by three other workshops.

The second day had scientific sessions and presentations



in the morning, and the afternoon was devoted to the General Assembly of our association.

The Scientific sessions and presentations had 20 presentations presented by Radiography Professors Radiologists, Neurologists and Medical Imaging Technicians all of these divided into three workshops.

Just to note a very important moment in the morning of the second day; the inauguration of our web site: www.acptimr.org.

The afternoon of the second day was dedicated to the general assembly of our association with the following agenda:

1. The speech of the president of the CSMRR/ACPTIMR
2. The activity report.
3. Strategies and planning(The way Forward)
4. Renewal of the Members of Executive.

In the first point: the president of CSMRR in his speech thanked the participants in an emotional tribute for their spirit of conviviality and discipline during the congress.

In the second point: Reports were presented by the General Secretary and the Treasurer.

This was then followed by a constructive debate and what should be done for the way forward.

We thought it important to retain the following points.

1. The Fight against job insecurity in our Profession
2. The Implementation of rules and principles in radioprotection in our services and the training of competent personnel in radioprotection
3. To Stop the proliferation of x-ray centers, that employ untrained and unqualified personnel.
4. To Fight against the illegal practice of the profession.
5. The Designation of regional delegates of our association. Then we proceeded to the election of the executive members.

The outgoing staff was unanimously renewed by the assembly for another term of office (two years):

1. President: Mr Nwedjiwe Nana Narcisse Fidèle.
2. Vice-president: Mr Kamgang Jean Bernard,
3. General Secretary: Miss Ekongolo Ange Emma.
4. Assistant General Secretary: Mr Enone Denis.
5. Treasurer: Mrs. Gale Tinetcheu Espouse Dzogang Ninon Fride.
6. Auditor: Mrs Mvee Cecile.

We couldn't have held this congress without the unconditional support of: BAYER SCHERING PHARMA, CARIM, UCB Pharma, HITACHI, STEPHANIX, MEMOPHARMA, and CEMRIO, to whom we address our sincere thanks.

Participants left the Congress at the end all delighted and accepted to meet in Douala in July 2010 for an in-service training in CT Scanning, December 2010 for a days training in radioprotection and in February 2011 for the 9th Congress of our association which will take place in LIMBE (seaside town of the Southwest of Cameroon). ❖

A balancing act: potential benefits versus possible risks of radiation exposure

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Abstract

Non-invasive imaging, that leads to early more precise and much less morbid diagnosis, has revolutionized patient management. There is a significant increase in radiation dose from medical procedures using non-invasive imaging, such as computed tomography and nuclear medicine. Minimising radiation dose without compromising diagnostic quality is obviously key. Self-referral, the fear of litigation, image quality, training, equipment, and to some extent advanced technology, are identified as factors that contribute to increased radiation dose. There is a need to control and minimize health risks, while maximizing the benefits of radiation in medicine as the inappropriate handling of radiation can result in potential health hazards both for patients and staff.[1,2]

Keywords: computed tomography, nuclear medicine, milli-Siever

Introduction

MEDICAL imaging has revolutionised medicine and is undoubtedly saving and extending lives.[1] Ionizing radiation is used worldwide in over 4000 million diagnostic procedures and up to eight million radiotherapy treatments per annum.[2] Medical care is hence the largest source of human exposure to ionizing radiation outside of nature. Exposure to radiation is on the increase due to advances in medical imaging systems. The associated increase in radiation dose from increased imaging and therapy to achieve improved health care leads to concerns about possible over-utilisation of these examinations.[1] As the number of imaging and therapeutic radiation studies increases it is important to maintain a balance between the potential benefits and possible risks from radiation exposure.

A March 2009 report from the National Council for Radiation Protection (NCRP) indicates that the increase in radiation exposure is due mainly to a higher utilization of computed tomography (CT) and nuclear medicine. In the population of the United States of America (USA) , CT and nuclear medicine contribute 36% of the total radiation exposure and 75% of medical radiation

Procedure	Effective dose per individual – 1980s (mSv)	Effective dose per individual – 2006 (mSv)
CT	0.016	1.47
Radiography & fluoroscopy	0.36	0.33
Interventional fluoroscopy	0.018	0.43
Nuclear medicine	0.14	0.77
Total	0.53	3.00

Data does not include radiation dose from radiation therapy, PET/CT, SPECT/CT, CT/fluoroscopy, and interventional applications.

Table 1: Data from the National Council on Radiation Protection and Measurements, "Ionizing Radiation Exposure of the Population of the United States," March 3, 2009.[3]

exposure.[3] This is attributed to a more than a sevenfold increase in exposure to medical ionising radiation from the early 1980s to 2006. In Table 1 it is evident that the effective dose per individual in the early 1980s increased from 0.53mSv to 3mSv per individual in 2006.

Although the use of CT grew very rapidly in the late 1990s and early 2000s, it is expected to continue to increase for at least the next decade. The radiation from in-vivo diagnostic nuclear medicine studies increased by some 460% and the collective effective dose increased by 620% from 1982 to 2006.[3] Cardiac interventional studies across modalities comprise 28% of the total imaging procedures yet the collective effective dose is 53% of the total for all interventional procedures.[3]

Dr M Rehani, a radiation safety specialist from the International Atomic Energy Agency (IAEA), during a presentation at the European Congress of Radiology held in 2009, stressed the importance of knowing the radiation dose given to an individual so as to optimise radiation protection.[4] He elaborated that there is a need to assess and optimise patient doses without compromising image quality. He requested that stakeholders become familiar with programs and actions that can help in patient dose management and to consolidate knowledge of radiation protection.[4]

There is no doubt that patient management has been revolutionised by non-invasive imaging that leads to early, more precise and much less morbid diagnosis.[5] This increased non-invasive imaging, especially by CT and nuclear medicine, has resulted in a significant increase in the medical radiation dose. Minimising radiation dose without compromising diagnostic quality is obviously key hence certain important issues that impact on increased dose need consideration. Self-referral, the fear of litigation, image quality, training, equipment and, to some extent, advanced technology, need to be addressed.

Self referral

Every user of ionising radiation should be bound by ethical and legal rules and regulations on the use of ionising radiation. However there appears to be some practitioners that could be motivated to overuse certain imaging modalities as it results in increased income for them.[6] According to the Government Accountability Office report in the USA imaging utilisation is significantly increased when physicians refer patients to facilities at which that they have financial interests.[1,3] In the medicare system in the USA, the number of self-referred CT, magnetic resonance imaging (MRI) and nuclear medicine studies grew at triple the rate as compared to the same examinations performed in all settings during the period 1998 to 2005.[1] According to private insurance studies more than half of the self-referred imaging was unnecssary.[1] Some practitioners opt for advanced imaging procedures in lieu of less expensive diagnostic procedures as this could mean higher revenues for the practitioner without any commensurate improvement in the outcomes.[5]

Litigation

Fear of litigation, advanced technology and patient demand are also cited as possible reasons for increased radiation dose.[1,3] The commentary on the NCRP Report no 160 indicates that most of the physicians surveyed, reported that they practiced 'defensive medicine'.[5] Approximately a third of the CT scans requested by obstetrics/gynaecologists, emergency physicians and family practitioners were not motivated by medical need.[5] McDonald in his editorial[6] states that practitioners experience 'pressure' not to underuse radiological imaging as when faced with legal action, radiographic images may help defend their actions in a court of law.[1]

Image quality

In a multinational survey performed by the IAEA , it was found that 53% of the x-ray images evaluated in developing countries were of poor quality and hence impacted on diagnostic information. Patients often have to have repeat examinations so that the images are of useful diagnostic quality.[7,8] This contributes not only to unecessary radiation dose but also to loss of diagnostic information and increased social costs. After implementing quality control measures, the number of repeat examinations were reduced and there was a significant improvement in image quality and reduction in radiation dose.[8]

Training

Variations in the levels of training health professionals, choice of radiographic technique, and radiation protection measures, impact on the final patient dose.[8] It is important to educate all stakeholders in the appropriate utilization of imaging and in the principles of radiation safety. Persons performing examinations should be certified; referring physicians need to be educated on the most appropriate imaging study for given indications.[1] Most non-radiologist providers receive little, if any, imaging or radiation physics training. Government should regulate all providers that perform studies using radiation.[1] The requests for repeat studies due to previous records not being available should be minimised.

An important aspect of training is that of the development of protocols for the various examinations. The additional rotation of the x-ray tube at each end of the scan length to

Continued on following page

allow for the first and last slices to be reconstucted, that is, over-scanning in CT examinations contributes significantly to patient dose.[9] it is essential that CT protocols are checked and appropriate beam collimation, pitch and reconstruction slice width are selected especially in paediatric patients where non-optimised scan protocols contribute cosiderably to radiation dose.

Radiographers need to go back to basics and be encouraged, where possible, to increase tube voltage and reduce mAs. Parameters should be selected according to patient size, age, gender and the clinical question. In CT, reducing scan length and minimising the number of scans would help optimise radiation dose.[9]

Equipment

Radiation dose can vary by up to a factor of ten between institutions.[9] This may be partly attributed to different imaging systems. Some countries are ill-equipped to manage radiation exposures because of poor equipment.[2] Often developing countries are given secondhand or refurbished equipment that lacks software to control patient radiation dose.[2] During the IAEA survey, the poor quality of images was also attributed to equipment performance and malfunction.[8] Imaging equipment requires regular surveillance by medical physicists to ensure optimal function.[1] Repair and optimisation of x-ray equipment, new intensifying screens and improving film processors all contributed to the improved quality of images and hence reduced patient dose.[8]

Technique

In a presentation at the American College of Cardiology meeting in 2009, it was reported that sequential scanning during coronary CT angiography reduces the radiation dose significantly without compromising image quality when compared to standard spiral data acquisition.[10] In interventional CT, 3-D navigational tools may help reduce the need for repeated scanning.[11]

Paediatric imaging

Although imaging is an invaluable diagnostic and management planning tool for health-care providers treating children, patients are often ignorant of the possible risks and radiation dose associated with radiation imaging and therapy. In their attempts to get a rapid diagnosis and treatment, parents may contribute to the increasing demand for imaging techniques, like CT, without actually understanding the potential risks. It is important to discuss the potential radiation risks with caregivers so that they may make informed decisions. Parents have a right to participate in decisions about the benefits and risks of their child's medical management.[12]

Figure 1. One size does <u>not</u> fit all... Courtesy of: http://www.pedrad.org/associations/5364/ig

The Alliance for Radiation Safety in Pediatric Imaging launched the 'Image Gently' campaign that encompasses 34 medical organisations worldwide.[3] They have developed some educational tools on potential radiation risks for patients and parents.[12] The goal of Image Gently is 'to change practice by increasing awareness of the opportunities to lower radiation dose in the imaging of children'.[12] Radiation dose needs to be tailored for children ; protocols need to be especially developed for children. Imaging studies on children should not just be 'adapted' from adult protocols, hence the slogan on Figure 1 that one size does not fit all. The campaign recommends that 'when CT is the right thing to do: Child size the kVp and mA ; one scan (single phase) is often enough , and scan only the indicated area'.[13]

Much is known about the quantitative effects of exposure to ionizing radiation however considerable uncertainties remain about the health effects of low doses. Hence it is important to perform CT examinations that are medically justified using the protocols incorporating the lowest dose scanning parameters that provide quality diagnostic images or where possible to substitute with non-radiation modalities.

In nuclear medicine radiopharmaceutical dosimetry varies from institution to institution as universal standards for pediatric radiopharmaceutical doses do not exist.[14] Doses are usually based on adult doses. Although it is generally agreed that pediatric doses should be the lowest possible to result in a satisfactory examination, there needs to be standards for pediatric radiopharmaceutical doses administered to pediatric patients.[14] There is also a need to explore instrumentation, new technology and reconstruction software as a means of reducing radiation dose in the pediatric population. For example, use of the OSEM-3D data reconstruction software as compared to filtered back-projection software in the reconstruction of single photon

emission computed tomography (SPECT) renal images allows the total administered radiopharmaceutical activity to be reduced by a factor of two without compromising image quality. [14,15]

Researchers at Brown University at Rhode Island Hospital found that the number of CT scans in pregnant women had increased some 25% over the period 1997-2006. In certain conditions, CT scans may be necessary for life threatening conditions[16] however as CT exposes the fetus to radiation, albeit low levels of radiation, caution needs to be exercised when scanning pregnant women.

Optimise radiation dose

In the quest to maintain a balance between maximising the benefit and reasonably minimising the risks associated with ionising radiation, health professionals would need to ensure that they practice according to the 'as low as reasonably achievable' (ALARA) principles. This would not only benefit the general public and patients but also enhance the well-being of persons occupationally exposed to ionising radiation.[17]

It is the responsibility of every radiographer, technologist, radiologist, oncologist and nuclear medicine physician, as the key roleplayers in the imaging industry, to ensure that every study is appropriately indicated. Radiation healthcare practitioners need to increase awareness for the need to decrease radiation dose especially in children. Protocols should be reviewed and amended accordingly.[18,19] Before exposing a patient to radiation, one needs to weigh the benfit to the patient against the possible risk.[3] The Image Gently campaign also advocates that parents keep a record of their children's medical imaging procedures. This will help healthcare providers make informed decisions regarding the optimal timing of future radiologic studies.[1] All stakeholders should be educated in the principles of radiation safety and appropriate utilisation of imaging.[1]

Although positron emission tomography - CT (PET-CT) scans have led to increased accuracy in diagnosis, there is higher radiation exposure as the patient receives radiation from both the PET tracer and the CT scan. It is important that appropriate parameters and clinical indications are defined. The use of separate CT scans for diagnosis, PET-attenuation and radiotherapy planning results in unnecessary radiation exposure.[9] Personnel working with PET-CT are also exposed to higher radiation levels. Although minimising radiation dose without compromising diagnostic quality is key, it is important that the benefits of CT and PET-CT, as well as the risks, are considered.[9]

Government intervention is paramount in regulating the radiation industry. Radiographers administering the tests must be certified and registered; imaging and therapy equipment must be licensed and should be regularly surveyed using quality control measures; and providers interpreting images should meet basic training requirements.[1,19] The World Health Organisation has launched a 'Global Initiative in Health Care Settings' that focuses on risks and benfits of the use of radiation in medicine. This includes diagnostic and interventional radiology, radiotherapy, and nuclear medicine. Also considered are appropriteness criteria and referral guidelines to prevent unintended medical exposure.[5] In July 2009, a Bill was introduced in the USA to close the loophole in legislation that allows physicians to self-refer patients for certain imaging studies but this Bill still has to be passed and adopted as legislation.[20]

Concluding comments

Although exposure to natural radiation sources is relatively unavoidable and the medical use of radiation has become an integral part of healthcare, all stakeholders need to be aware of the potential risks associated with increased radiation exposure. It is vitally important that patients do not put off needed imaging care based on fear. The tremendous and undeniable benefits of medical imaging need to be considered; patients must make informed risk/benefit decisions regarding their imaging care based on all the facts available and in consultation with their health professionals[3] (Figure 2). In an emergency or critical care situation, a considerable radiation dose might be delivered to a patient and there should be no argument with the decision to proceed. However, a diagnostic study in a non-critical scenario should employ the appropriate levels of radiation.[6]

International standards, with regard to uniformity in medical radiation exposure, should be developed to provide guidance on the measurement and recording of radiation dose. Dose values may be expressed in terms of 'years of background radiation'.[11] The United Nations' reference value for natural background radiation is 2.4mSv per annum. The International Commission on Radiological Protection for standard man puts organ doses as 1mSv to 30mSv and effective doses from below 1mSv to 20mSv.[11]

If a procedure does not fit the clinical indication it should not be performed. This will not only reduce patient dose but also costs. Appropriateness criteria for medical imaging covering 160 clinical conditions and over 700 variants have been published by the American College of Radiology.[5] The benefits of justified and properly performed imaging examinations will outweigh the risks for an individual child

Figure 2: Balance: Potential benefits vs possible risks.

but unnecessary exposure to radiation will be associated with unnecessary risk. The most vulnerable groups to environmental threats are children and fetuses in pregnant females as they have longer life-spans to develop long term effects. Inappropriate handling of radiation can result in potential health hazards both for patients and staff. There is a need to control and minimize health risks, while maximizing the benefits of radiation in medicine.[21]

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Permission has been given by The South African Society of Radiographers to reprint this article. The article was originally published in SAR November 2009.

DIEN VAN DIJK AWARD

Nominations are invited for the 2010 Dien Van Dijk Award

This award was approved in 2006 and is to be granted only at a World Congress and only with the unanimous agreement of the Board of Directors of the ISRRT.

This award is in honor of the contributions of Dien van Dijk, one of the founders of the ISRRT and who in 1962 become the first President of the ISRRT. The objectives of which she upheld were to assist the education of radiographers and to support the development of medical radiation technology worldwide. This award dedicated to her memory is to honour members of the ISRRT who have shown exceptional service and commitment to the ideals so powerfully demonstrated by Dien Van Dijk.

CRITERIA for nomination

1. Exceptional service to the radiographic community.

2. Past or present holder of a recognized position in the ISRRT.

3. Recognised activities which reflect the founding principles of the ISRRT
   - Assistance in the education of radiographers
   - Assistance in the development of the profession of radiography in several countries.

Nominations to be made by any Council or Board member or other individual of a member society. Individuals nominated must meet all criteria and must be received before J**une 1st 2010.**

Nominations will be submitted to the Secretary General (isrrt.yule@btinternet.com) who will convene a Committee composed of a Council representative from each of the regions to review and short list the applications received for consideration by the Board of Directors.

Award winners must be unanimously recommended by the Board of Directors.

Award to be presented at Congress Banquet.

This award may or may not be presented at each Congress.

Interventional & Intraperative MRI – from Canada to Asia & Beyond

By
Brent Smith & Jenny Wright, Saint John, New Brunswick
Leslie Belbas & Elaine Roy, Winnipeg, Manitoba (RTR & RTMR candidates)
Jonathan Lee, Ph.D., Red River College & National Research Council – Institute for Biodiagnostics, Canada, jlee@rrc.mb.ca & Jonathan.Lee@nrc-cnrc.gc.ca

IN December, 2009, Red River College's 28th intake of MRI/S students were fortunate enough to receive a tour of Winnipeg's own IMRIS headquarters. IMRIS stands for "Innovative Magnetic Resonance Imaging Systems" (www.imris.com), a company that specialises in bringing MR imaging into surgical suites, in other words, they pioneered a way to mobilize a five tonne magnet. Dr John Saunders, Founder & Chief Scientist, was one of the original inventors who designed the intra-operative system and graciously gave us the grand tour. Our tour included a presentation outlining the evolution of the company, whose humble beginning were in a laboratory at Winnipeg's National Research Council (Lawrence Ryner, Paul D. Wiebe. From Research to Clinic and Beyond – NRC Experience in Commercialization/ Technology Transfer. *Journal of Medical Imaging and Radiation Sciences* 2009;40:178-182).

MRI for interventional guidance includes its use by radiologists during the manipulation of needles, electrodes, catheters, or thermal devices as well as its application by surgeons for guiding endoscopes, scalpels, or curettes. The environment best suited to radiologic or surgical intervention is one with maximum patient access, in order to allow for unrestricted interventional approach and to maintain close proximity to the monitoring and therapeutic devices. Such attributes are in direct opposition to the optimal design of a MR scanner so as to achieve superior magnetic field homogeneity for high-quality imaging. Thus, a delicate balance is necessary for a commercial viable product. Furthermore, high-field interventional/ intraoperative MR systems do have the additional advantage of having diverse capabilities such as functional MRI, MR angiography and venography, diffusion-tensor and perfusion imaging, MR spectroscopy, MR thermometry, etc.

Photo of the first test patient in 1996, a six year old shepherd cross pup!

In the early 90's, neurosurgeon Dr Garnette Sutherland had been using MRI for both pre-operative planning & postoperative assessment. Unfortunately though, if a tumor or aneurysm had not been resected in its entirety, the patient had to endure a second surgery or possibly more. Dr Sutherland had the vision to close the gap between the pre and post surgical imaging, to confirm successful resection before closing the patient. As a result, a partnership was formed between Dr Sutherland and the scientists at the National Research Council. Dr Garnette Sutherland, Dr.John Saunders, Dr David Hoult et al. hold the U.S. and International Patents on Surgical Procedure with Magnetic Resonance Imaging. (The Engineering of an Interventional MRI with a Movable 1.5 Tesla Magnet. *Journal of Magnetic Resonance Imaging* 2001; 13(1):78-86)

Today, IMRIS has a partnership with Siemens, who supply the standard components. The very first system for clinical use was installed in the Foothills Medical Centre in Calgary in 1997. There have been over 35 units sold to date worldwide, including three in Western Canada. (Garnette Sutherland. Surgical Imaging with 1.5T movable MR – MRIS Surgical Suite. 2008 Siemens Magnetom World Summit, (www.medical.siemens.com/siemens/en_GLOBAL/gg_mr_FBAs/files/MAGNETOM_world/6th_world_summit_presentations/US_eproceedings/sutherland/sutherland.html). In addition, on February 19, 2009, IMRIS entered into a five-year research initiative to focus on the development and commercialization of MR-guided radiation therapy and interventional procedures, working with the University Health Network (UHN's world-leading cancer research hospital: Princess Margaret Hospital) in Toronto. The IMRIS 3T movable MR will be installed at PMH to enable the development of new approaches to radiation therapy using active MR guidance. (www.imris.com/pdf/IM_Radiation_and_Interventional_Applications_release.pdf)

- 15 – number of installed units around the world
- 13 – number or units sold that are in the process of being installed

- 14 – number of sales offices including six in the United States. two in Europe and one each in India, China, Japan, and Australia
- $87 million – order backlog as of June 2009 (30 per cent greater than the end of 2008)
- $14.6 million – revenue for the first half of 2009 (Martin Cash. IMRIS scores lucrative sale of surgical systems in U.S., Oct. 2, 2009, www.winnipegfreepress.com/business/imris-scores-lucrative-sale-of-surgical-systems-in-us-63232157.html)

As students who are new to the field, it was exciting to learn that such innovation and entrepreneurship is going on in our own backyard. It is amazing to think that we will all be a part of a field that has a direct impact on people's lives and the quality of care they receive. There is also excitement about new advancements in an adjuvant "neoroarm" robot to assist in neurosurgery with 1000x the precision of a human hand (www.flickr.com/photos/neuroarm/sets/72157605166215753/show/). The possibilities seem endless. (www.neuroarm.org/neuroarm.php)

IMRIS, through their ingenious design, have come up with a solution not only to achieve the once thought of as "impossible" moving magnet, but have also created it to make sense economically. In today's healthcare system, cost is everything; and this is especially true in North America. Products that are not utilized to their full potential or which are only useful in a limited capacity have a tendency to be under-purchased by healthcare authorities. An inter-operative MRI in the public sector of healthcare is somewhat of a "dream piece" of equipment for most facilities. Most Canadian facilities would not have the operative cases to justify such a purchase. IMRIS, with their moving magnet and multiple room configuration, have made it feasible for smaller facilities to incorporate the moving design. The innovative two-to-three room set up gives the ability for the MRI apparatus to be utilized in neurosurgery, general duty and interventional cardiology,

Continued on the following page

or any variation thereof. In other words, the scanner itself never sits unused. In today's world where budgets are limited, this makes sense. IMRIS will sell their product because the remarkable ceiling mounted scanner is truly multipurpose. Millions of dollars spent will be offset by the diagnostic capabilities and productivity that can be achieved with the system - not to mention attracting world class surgeons to smaller sites.

1.5 Tesla IMRISneuro suite at PLA 301 Hospital in Beijing, China in operation since 2008 Summer Olympics (www.prnewswire.com/news-releases/neurosurgeons-from-around-the-world-gather-at-pla-301-hospital-in-china-61779112.html)

In 2010, Fudan University's Huashan Hospital in Shanghai, China will be installing IMRISneuro for its expanding neurosurgical department. Huashan Hospital will be the first in Asia to take delivery of the new 3 Tesla version of IMRISneuro (Jeanne Elliott, IMRISneuro 70 cm Bore 3T in Intra-operative Neurosurgery. *Magnetom Flash* 2009;3:74-79): a fully integrated operating room that provides high-quality MR images during a procedure without moving the patient. The project includes IMRISmatrix – a fully integrated surgical information management system. (www.imris.com/pdf/Huashan_Hospital2009-04-15.pdf)

More Specifics on Suite Set-Up

IMRIS offers a number of room configurations for the intraoperative magnet system; ranging from two and three room configurations. Two room configurations include a magnet bay located between an intraoperative suite and a diagnostic room or between two separate operating rooms. However, the most cost efficient room configuration offered by IMRIS consists of a three room configuration including a routine diagnostic room located between two intraoperative suites. This design allows for the magnet itself to move from one operating suite to a diagnostic room and then into a second intraoperative suite; when the magnetic is not being employed intraoperatively it can be used to complete routine examinations on an out patient basis. This particular room design is extremely cost efficient as the magnet is utilised routinely and does not sit idle within a magnet bay when it is not required intraoperatively.

India's first 3-room intraoperative & diagnostic suite (www.kokilabenhospital.in/professionals/videosandbriefings.html)

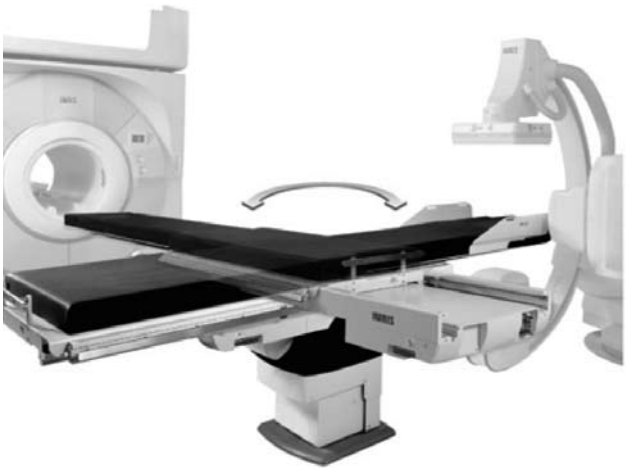
Key Advantages

(www.kokilabenhospital.in/contact/imris.html)

- Improved patient safety via real-time accurate depiction of changes in patient's brain position and anatomy during surgery
- Easy distinction between healthy and diseased tissue during surgery
- Immediate in-theatre determination of surgery success
- Accurate measurement of brain shift
- 30% higher resolution than other MRI technology

Angiography suite

Like the inter-operative neurosurgery unit, the cardiology suite will streamline work flow for the benefit of the patient. Within the suite exists both a radiographic c-arm and the suspended MRI magnet once it is moved into the angiography suite. Interventional radiologists/cardiologists can now have the ability to perform interventional procedures and assess their patient outcome within the same sitting. (Mauricio Ede, John Saunders. Development of IMRIS



Cardio™, an integrated, interventional angio-MR imaging Suite. *EuroIntervention* 2008; 4:154-157) At Kleysen Institute for Advanced Medicine of Health Sciences Center in Winnipeg, the IMRIS suite will be featuring a bi-plane angiography system in the interventional theatre and a wide bore 3T Tesla MR scanner to improve the accuracy of the intervention by providing on-demand imaging for immediate feedback. MR images can be taken before and during procedures to assess tissue condition, and can also be used in conjunction with fluoroscopic images during neurovascular procedures. When not in use for intra operative imaging, both the MR and fluoroscopic system are available for diagnostic use. (www.imris.com/pdf/HSC_Winnipeg_nv.pdf)

Efficient transitions between modalities

At RSNA Technical exhibition in Chicago (November 30 and December 1, 2009) IMRIS Cardio was first unveiled, the new interventional cardiac MRI and angiography suite, and the announcement of a long term master agreement with Siemens to provide their MR scanner and angiography systems as component parts for IMRIS's fully integrated image guided therapy suites. Siemens also introduced their new MR systems: MAGNETOM® Aera 1.5 T and MAGNETOM Skyra 3T. Both feature short bore magnets with a 70cm open bore, and have a base system with 48 receive channels expandable to 128 channels and up to 204 array elements plugged in, cable-less direct connect coils, all digital-in/digital-out design integrating all RF transmit and receive components at the magnet. They include future provisions for easy integration of transmit array technology, eliminating analog cables and enabling an immediate feedback loop for real-time sequence, an un-docking patient table, as well as easier work-flow (DOT).

IMRIS at RSNA 2009
(www.dotmed.com/es/news/story/11014/)

As the sales of intra-operative MRI scanners increase, more opportunities open up for MRI technologists. As a student in the field (one of the co-authors) who is completing her clinical practicum in an U.S. hospital that has a 1.5T Philips

intra-operative room, due to lack of cases performed, she witnesses the room is rarely in use for surgical purposes. The Philips surgical room has been up and running for 15 years and recently the software has been upgraded. Due to a turnover of surgeons over that time, there are currently only a few cases performed per month at this hospital compared to the number they used to perform (approximately 100 neurosurgical cases per year consisting of brain biopsies, tumor resections, and deep brain stimulator placement).

The Philips surgical suite is a single room setup, where mostly brain surgery is performed. Extremity and other types of surgery can also be achieved. For an intra-operative technologist, this means using your problem solving skills in high stress situations. One technologist described it as a roller coaster ride as in the surgeon calls on you to get the right images in the correct orientation. The technologist scans from within the surgical suite and must have the ability to correct any problems quickly as the surgical team stands by. Once the surgeon is satisfied with the images obtained, the technologist waits until more images are required to help guide the surgery.

The table has the capability to be undocked from the magnet and rolled outside the room where the patient can be transferred onto it from their bed. Patients can generally be scanned in any orientation, whichever is convenient for the surgeon as well as manageable for the patient. A number of different coils are used, depending on the body part. All instruments and equipment must be MRI compatible. At the head of the magnet, the floor area there is lower and lit with bright lights where the surgical team and technologist often

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Journees de Radiologie:

Les Techniciens et praticiens formes a la modernisation de L'Imagerie Medicale

Mai 29-30, 2009
Lomé, Togo

Report by Awobanou Komla Midodji, President de l'ATTRIM

L'ASSOCIATION Togolaise des Techniciens de Radiologie et Imagerie Médicale (ATTRIM) a tenu les 29 et 30 mai à Lomé, ses sixièmes journées de radiologie à l'intention des techniciens et étudiants de cette filière médicale sur le thème "Le technicien de radiologie face aux perspectives de la modernisation de l'imagerie médicale au Togo ".

Une formation scientifique et une assemblée générale de l'association étaient inscrites au programme de ces sixièmes journées.

La formation scientifique était inscrite dans le cadre des échanges d'expériences entre professionnels praticiens pour le relèvement de leur niveau en matière des techniques modernes de radiologie et imagerie médicale en voie d'installation pour une meilleure prise en charge dans le traitement des patients au Togo.

Il s'agit entre autres d'initier le personnel technicien de radiologie à l'utilisation des nouvelles gammes d'appareil de radiodiagnostic analogique et numérique (système de numérisation CR et DR), des techniques nouvelles de scanners multibarrettes (acquisition hélicoïdale et reconstructions 3D), de mammographie numérique (tomosynthèse) et de l'échographie doppler couleur (élastographie).

Plusieurs communications ont meublé la rencontre notamment sur les produits de contraste utilisés en imagerie médicale, les nouvelles avancées technologiques en imagerie médicale, les supports d'image en imagerie médicale, la place de la formation des techniciens dans l'évolution de l'imagerie médicale et les apports du technicien dans la prise en charge des patients à l'intérieur du Togo.

Le directeur général de la Santé, M. Dogbe Koku Sika a estimé que l'initiative répond à la préoccupation du gouvernement qui a entrepris, depuis 2007, un vaste programme d'équipement des formations sanitaires afin d'offrir aux patients des soins de qualité. Il a évoqué la politique générale du ministère sur la rédaction des documents stratégiques de réduction de la pauvreté dans lesquels s'insère le plan de développement sanitaire voté par l'assemblée nationale pour la période 2009-2013.

Selon l'ancien président l'ATTRIM, M. Adjamagbo Stephane, les praticiens et techniciens en radiologie doivent suivre la logique permanente de quête de connaissances et l'utilisation du matériel informatique. Ils sont la cheville ouvrière dans les centres où seront installées ces machines, a-t-il souligné. Ils doivent par conséquent se préparer à mieux les utiliser.

L'assemblée générale tenue le samedi 30 mai a procédé aux amendements et à l'adoption à l'unanimité des statuts et règlement intérieur de l'association, et ensuite au renouvellement des membres du bureau exécutif, instance suprême dirigeante de l'ATTRIM.

Au terme des élections le nouveau Bureau Exécutif de quatre (04) membres se compose comme suit :

- Président : M. Awobanou Komla Midodji
- Secrétaire Général : M.Dadji Koffi Emahoedo
- Secrétaire Général Adjoint : M. Awali Seidou
- Trésorier Général: M. Aziagba Dogbévi Robert.

L'Assemblée a en même temps procédé à l'élection du Commissaire aux comptes en la personne de M. SOWADAN Jean-Pierre.

Après l'investiture du nouveau Bureau, le Président élu a remercié tous les participants avant de leur promettre que le Bureau Exécutif s'engage à ne pas décevoir. Il a aussi sollicité la contribution de tout un chacun avant de souhaiter bon retour dans les services respectifs. ❖

Changement d'adresse et de correspondance
Vue le renouvellement du bureau exécutif de l'ATTRIM, nous voudrions procéder au changement de l'adresse de correspondance de l'ATTRIM à paraître dans le news letter de l'ISRRT.

Togo: Association Togolaise des Techniciens de Radiologie et Imagerie Médicale (ATTRIM)
S/C Service de Radiologie et Pavillon Scanner
CHU Campus Lomé, 03 BP : 30284, Lomé, Togo
Tél : (228) 225-7768 / 225-9709 / 225-4739
Fax : (228) 250-1768
Email : attrim_asso@yahoo.fr

Président: Awobanou Komla Midodji
TSRIM, Service de Radiologie,
CHU Campus Lomé
03 BP : 30284, Lomé, Togo
Tél : (228) 233-2570 / 936-7440 / 015-5717
Email : midodji_k@yahoo.fr

Radiology Congress:

X-ray Technicians and professional experts trained to the modernisation of Medical Imaging

May 29-30, 2009
Lomé, Togo

Report by Awobanou Komla Midodji, President de l'ATTRIM

LAST year on May 29-30 in Lomé, the ATTRIM held, its 6th congress of radiology for the x-ray technicians and students of this medical field of study. The topic was "X-ray technician in view of the modernisation of the medical imaging in Togo".

A scientific training and a general meeting of the association were part of these 6th days. The aim of the scientific training was to exchange experiences between the professional experts in order to improve their knowledge of modern technology and medical imaging (soon to be set up) in order to better attend to the patients in Togo.

Different lectures about medical imaging have animated the meeting like, for example, contrast medium, the new technological advance, the images supports, the importance of the training of the x-ray technicians in the evolution of the medical imaging and the contribution of the x-ray technician in the attending to the patients inside Togo.

According to the Health Chief Executive, M. Dogbe Koku Sika, this radiology congress answers to the governement's concern which starded a large equipment program of health trainings in order to offer to the patients quality healthcare, in 2007. Indeed, a health development plan has been voted by the National Assembly for the period 2009-2013.

The general meeting held on Saturday 30th of May unanimously proceeded to the amendments and to the adoption of the association's rules and statuses; and then, to the replacement of the executive council's members which manages ATTRIM.

The new executive council is composed of 4 persons:

- President: M. Awobanou Komla Midodji
- Secretary-general: M. Dadji Koffi Emahoedo
- Deputy secretary-general: M. Awali Seidou
- Paymaster general: M. Aziagba Dogbévi Robert

The general meeting has elected the auditor at the same time, this is M. Sowadan Jean-Pierre.

After the investiture of the new executive council, the elected President has thanked all the participants and asssured them that they will not be deceived. ❖

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work from. The inside of the magnet is also lit up. When no surgeries are scheduled, the room is used for brain and spine imaging at the moment, although, any procedure can be performed with it. From a student perspective, this will be a wonderful opportunity to expand on our knowledge and skills in the field of MRI.

What does interventional & intraoperative mean for MR technologists?

The imaging modality of magnetic resonance is an extraordinary development in technology with endless possibilities; the IMRIS intraoperative suite opens the window of opportunity for MR technologists even further than ever imagined. Technologists are able to directly assist neurosurgeons to ensure tumor resection and other important neurovascular surgeries are entirely complete prior to removing the patient from the operating room. In doing so the possibility of tumor regrowth and the need for additional surgeries is reduced for the patient. If the particular facility in which a technologist is employed possesses the three room design discussed above technologists are also able to complete routine examinations when the magnet system is not being utilised intraoperativly; which allows for job diversity.

The Role of Research in the Advancement of Health Professions: A Focus on Radiography

By
Mubuuke A. Gonzaga, Kiguli-Malwadde Elsie, Businge Francis
Makerere University, College of Health Sciences, School of Medicine, Radiology department

IN every health profession, our knowledge is incomplete, challenges and problems are waiting to be solved, questions are waiting to be answered, issues need to be clarified, explanations need to provided, practices, systems and procedures need to be improved. We address our void in knowledge and seek solutions to all the aforementioned issues by asking relevant questions and seeking answers to those questions. Research provides a method of attaining answers to such scenarios.

Research is s systematic process of collecting and analyzing information to increase our understanding of certain issues or find solutions to problems. Research is relevant in the advancement of health professions, both in terms of training as well as professional practice. There is still a paucity of literature particularly focusing on the role of research in the advancement of the radiography profession.

Research in general terms provides a means of knowing. It is human nature to be inquisitive. In ancient times people used to perform autopsies on dead bodies to learn what happens to the human body and why it happens. But if we focus specifically on the health care profession, then modern research as a scientific process, provides certain advantages over other means of knowing, or of answering relevant questions, in that evidence is documented.

Description research

This kind of research describes what was done before or presents a new conceptual model suggesting how things should be done. Questions like what was done and how was it done are normally asked. For the radiography profession to advance, this research is needed so that a documented account of what has been done is available and methods of improvement are put forward. This research helps radiography professionals to reflect on routine operational procedures that have been described. With this, performance can be measured and either maintained or improved. For example, this type of research can describe the quality control and quality assurance procedures in an X-ray unit such that every body is made aware of the standard procedures. This is particularly important in ensuring quality in our radiography practice.

Justification research: This research usually makes comparisons among several interventions with intent of showing that one intervention is better than or as good as another. This research assists in comparing different modes of practice so that a better mode of operation is adopted from an evidence point of view, e.g. comparing the performance of blue-sensitive films and green sensitive films in radiography, comparing new techniques of performing a Chest x-ray with old techniques such that through evidence, we can adopt a better technique. All this is achieved through research and in a way promoting the radiography profession. This kind of research advances the profession in that new ways of practice are adopted or old ways that are no so efficient are eliminated.

Clarification research

This type of research clarifies processes, practices, systems and procedures in health professions practice. It clarifies issues so that a set of procedures is followed.
This is very important in radiography where many issues need to be clarified in order to promote efficient radiography practice. For example, using high KV technique when taking Chest radiographs is believed to have numerous advantages over the routine techniques. However, it is only through research that this can be clarified so that all people believe in it. It is through this kind of research that new ideas and innovations in radiography can be tested and eventually adopted through evidence. This prevents professional stagnation in that new ideas are brought out. At the same time, this kind of research helps to disagree with a certain idea that has been believed for a long time. For example in radiography, it is only through clarification research that we can agree on set radiographic exposure factors that work best in different situations. In this way, the profession steadily grows.

The hallmark of clarification studies in health professions like radiography is to make predictions and testing them or a concept that can either be affirmed or refuted by study results. This research assists health professionals to adopt

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Summit reached

Digital Radiography Summit focuses on safety measures for children undergoing imaging examinations

February 4, 2010

Mallinckrodt Insitute of Radiology, Washington University, St Louis

Report by **Jake Buehler,** ASRT Director of Communications

ON February 4 this year the Alliance for Radiation Safety in Pediatric Imaging expanded the Image Gently initiative (www.imagegently.org) to digital radiography exams (standard x-ray technology) by hosting a Digital Radiography Summit at the Mallinckrodt Institute of Radiology at Washington University in St. Louis.

The summit bought together nearly 70 representatives from medical facilities, educational institutions, the U.S. Food and Drug Administration, 12 professional associations and 10 equipment manufacturers organised through the Medical Imaging Technology Alliance. The summit provided a forum to discuss the expanded use of digital radiography in pediatric examinations and develop guidelines to increase safety measures. Leading medical imaging experts provided information regarding digital radiography challenges, updated radiation safety protocols, new dose management guidelines and future educational opportunities.

"The summit is a first step in the expansion of the Image Gently to address the most commonly performed imaging procedures. Standard x-rays utilise far less radiation than advanced imaging procedures such as CT, but because they are so commonly performed, present a significant opportunity to lower the radiation dose that children receive each year from medical imaging. We are very encouraged by the progress made at this meeting," said Steven Don, M.D., a summit organizer, head if the Image Gently CR/DR initiative, and associate professor of radiology at St. Louis Children's Hospital.

AAPM, IEC Work to Unify CR/DR Radiation Dose Indexes

The American Association of Physicists in Medicine and the International Electrotechnical Commission agreed to work together to create a unified standard for computed radiography and digital radiography exposure indexes. Currently, different equipment manufacturers may use varying exposure indexes which can lead to confusion, particularly for medical imaging professionals who use different equipment at various sites.

"Maintaining consistent exposure index standards is critical for pediatric patients and the medical imaging personnel. A unified standard would help providers deliver

Continued on the following page

appropriate radiation dose for each procedure, help ensure that patients receive a consistent radiation dose regardless of equipment make and reinforce a consistent baseline quality of care," said J. Anthony Seibert, Ph.D., FAAPM, professor of radiology at University of California, Davis Medical Center, and president-elect of the AAPM._

ACR to Establish Pediatric Dose Registry

An additional summit discussion focused on the importance of tracking pediatric exams. Currently, there isn't a pediatric digital dose registry in the United States. To address this gap, the American College of Radiology announced that it will work with meeting organizers to develop a registry to track children's exposure to radiation."This is an important step forward to develop national benchmarks for quality and optimizing dose for this modality. The ACR is committed to ensuring that all patients, particularly children, receive safe, appropriate care. This pediatric dose registry in digital radiography will join the previously launched CT dose registry in providing valuable feedback to participating practices in reducing the radiation dose that Americans and in particular children receive each year from imaging studies," said Laura Coombs, Ph.D., director or the American College of Radiology's National Radiology Data Registries.

Expanded Technologist Education

Expanding educational opportunities also was on the summit's agenda. Understanding that digital radiography educational materials are limited, educators and equipment manufactures agreed to collaborate and form a digital radiography educational workgroup led by Susan John, M.D., Chair of Radiology at University of Texas Medical School at Houston.

"More robust and standardized education opportunities for radiologic technologists are vital steps toward ensuring safe, consistent care, regardless of market size or geographic location. All imaging stakeholders need to work together to ensure that patients receive the highest quality of care available," said Greg Morrison, M.A., R.T.(R), CNMT, CAE, chief operating officer of the American Society of Radiologic Technologists.

Overall CR/DR Radiation Reduction

Digital radiography exams are the world's most common diagnostic medical imaging procedures. In addition to providing the radiology team with detailed anatomical views, the technology offers a wide variety of images, increased latitude for exposure techniques and the ability to post-process images. Nevertheless, medical imaging professionals have to be cautious when performing pediatric digital imaging procedures because children are more sensitive to radiation than adults.

"The summit was a very successful first step in educating radiologists, radiologic technologists, medical imaging physicists, the FDA and manufacturers of digital radiography equipment about the unique problems faced by those using this equipment for children's imaging in daily practice," said Marilyn Goske, M.D., chair of the Alliance and Silverman chair for Radiology Education at Cincinnati Children's Medical Center. "The Alliance looks forward to continued work with all medical professionals, educators and vendors in moving forward to ensure that pediatric patients receive only the necessary dose for their indication and that there are consistent, reliable protocols in place to help achieve this goal.

About the Alliance for Radiation Safety in Pediatric Imaging

Founded by the Society for Pediatric Radiology, the American College of Radiology, the American Society of Radiologic Technologists and the American Association of Physicists in Medicine, the Alliance for Radiation Safety in Pediatric Imaging is comprised of 54 organizations working together to reduce unnecessary radiation exposure from imaging examinations in children. It represents more than 600,000 health care professionals. ❖

Dr Michael Ward, ISRRT Regional Director, The Americas, attended the Digital Radiography Summit in St Louis on behalf of ISRRT.

CAMRT report

Leacy O'Callaghan-O'Brien, Director of Advocacy CAMRT

THE Canadian Association of Medical Radiation Technologists (CAMRT) has initiated a number of ambitious projects that will ultimately result in an enhanced professional profile and greater awareness of the diversity, professionalism and expertise of CAMRT members among internal and external stakeholders.

A rebranding initiative that is a collaboration between CAMRT and its provincial member associations has proven to be an exciting journey of discovery for the sponsoring organisations and members alike. The project is overseen by a multidisciplinary and regionally diverse steering committee, guided by experts in the area of professional branding. The first phase has focused on research into the perceptions about the profession held by MRTs, their healthcare colleagues, industry, and the general public. Through online surveys, focus groups and public opinion polling, an image of proud, caring, professionals who provide the human connection between innovative technology and effective diagnosis and radiation-related treatment has emerged. An evocative brand promise and tag line have been created, along with an implementation plan to integrate and communicate the brand through various tactics. The rebranding recommendations are now being studied by the participating associations, with the expectation that a plan to move forward will be approved at the time of the CAMRT Annual General Conference at the end of May.

Work has begun on the development of best practice guidelines that will update and consolidate all current professional practice materials, to identify the knowledge, skills and judgment required by MRTs to perform their day to day responsibilities in a safe and effective manner. The Professional Practice Advisory Council will serve as the steering committee and project development will be managed by the Director of Professional Practice. All of CAMRT's current professional practice documentation will, over time, be incorporated into these guidelines. The scope of practice and standards of practice will be retooled, and risk management guidelines will be phased out and the relevant information will be transferred into the best practice guidelines as required. The guidelines will consist of a core set of material that will be consistent across all four disciplines, along with supporting discipline specific components. Numerous volunteers will be engaged in this ambitious multi-year project, with four committees responsible for providing the technical and clinical expertise for the guideline development for each discipline.

The Professional Practice Advisory Council also began to address the complex issues related to defining the continuum of practice for MRTs this year. A proposal that CAMRT host a symposium on continuum of practice where all key stakeholders could assemble to study the current environment and determine appropriate action to meet future requirements was approved by the board of directors. A committee was appointed to develop a plan for a symposium in 2010, and ultimately, to oversee development of a national framework that will promote a common understanding of the continuum of MRT practice in Canada.

Canada is a country that takes pride in its rich diversity of cultures and encourages commitment to inclusiveness among its citizens. Professional associations play an important role in celebrating an inclusive culture such that everyone belongs and can participate in their association regardless of gender, colour, creed or geographic location, preferred language or discipline. CAMRT has recently launched an Inclusion and Diversity Initiative through which members will celebrate their differences and learn the importance of culture, religion, politics, sexual orientation, ethnicity, language and even age. The initiative's champion is Past-President Fiona Mitchell, who has invited members from across the country to share their uniqueness such that CAMRT can become stronger through the inclusion of all members. The group will, for the most part, work together virtually but plan to meet at the CAMRT conference in Quebec City in May for a brainstorming session to launch the program. ❖

coming events

May 27-30,
CAMRT 68th Annual General Conference
Quebec City, Canada
French and English program
For further information www.camrt.ca

June 26-27,
Society of Radiographers (Jamaica)
Annual general meeting and
Continuing Education Symposium

July
In-service training in CT Scanning
Douala, Cameroon

September 24
11th Annual Interventional Neuroradiology Symposium
Renaissance Hotel Downtown, Toronto
http://events.cmetoronto.ca/website/index/MIM1004

September 9-12,
16th ISRRT World Congress
Gold Coast, Queensland, Australia
For further information www.air.asn.au

October 9-11,
The Society of Radiography in Kenya
Conference

December
Radioprotection training
Douala, Cameroon

2011

February
9th Congress of CSMRR / ACPTIMR
Limbe, Cameroon

March 25-27
"Imaging the Imagination"
18th Asian/Australasian Conference of Radiological Technologists (AACRT), and International Joint Conference of the Taiwan-Japan-Korea Radiological Technologists
Taiwan, Taipai. Website: www.twsrt.org.tw

CAMRT 69th Annual General Conference
Saskatoon, Saskatchewan, Canada
For further information www.camrt.ca

18th Asian/Australasian Conference of Radiological Technologists (AACRT)
Kaohsiung, Taiwan

This joint initiative from RSSA and SORSA will be hosted from 4-6 March 2011 at the International Convention Centre (ICC) - Durban.

2012

CAMRT Annual General Conference & ISRRT World Congress
Toronto, Ontario, Canada
For further information www.camrt.ca

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practices that are justified by research findings. Such studies will do far more to advance the radiography profession. However, such important research is still limited in our operations.

There are other important advantages of research in radiography. Jackson (2003) reported that it is through research that normal decision making or organizational growth can be achieved as well as contribute to the formulation of public policy. In relation to radiography, numerous regulations need to be drafted in the practice of the profession like radiation protection regulations. However, for this to happen, research documents are needed to support arguments. Pederson (2007) attested to this when he reported that; researchers have produced policy documents based on their work. It is high time that radiographers started churning out policy proposals regarding the profession. However, it is only through research that such policy papers will be drafted hence advancing the profession of radiography.

Radiography training institutions should also provide evidence-based training. Graduates of radiography must be able to practice safely and use an evidence base in their clinical decision making. Radiography needs to be promoted as a unique discipline with its own knowledge base, research and a publication profile. There are currently limited radiography journals through which professionals can share intellectual discourse and exchange professional ideas. Flexible career pathways are needed including clinical, education, management and research skills which are vital for the progression of the profession. All these can only be achieved through active research to advance the radiography profession. It is particularly important for academics in radiography training to spear head research in radiography since training institutions are the epitome of knowledge. However, even practicing radiography professionals should get actively involved in active research for the profession to grow. More publication in journals is one way of promoting the profession. ❖

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

Aladdin Speelman

ISRRT Council Representative, South Africa (SORSA)

ALADDIN Speelman has served SORSA at branch as well as national level. He has been a committee member of the Bellville branch of SORSA from 1994 until 2009. He has represented Bellville branch on National Council from 1998 – 2005, after which he served one term as president.

He has served on various committees, inter alia the scientific committee of the 15th ISRRT International World Congress as well as the scientific committee for SORSA's National Congress in 2004. He is also a reviewer for The South African Radiographer.

He represented the Society on the Standards Generating Body (SGB) of the Health Professions Council of South Africa from 2003-2008. The SGB was appointed to develop the new four year degree qualification for South Africa.

He is currently employed as a Diagnostic Lecturer at Radiography Education, Faculty of Health and Wellness Sciences of the Cape Peninsula University of Technology in Cape Town. He holds a Masters Degree in Medical Imaging (Computerised Tomography) obtained at Charles Sturt University, Australia.

He also developed and still coordinates a postgraduate certificate course in computerised tomography (CT) offered at the same university, the only of its kind in Africa.

He has a keen interest in art photography and jazz music. ❖

Jenny Motto

ISRRT Regional Rep for Education, Africa

JENNY is currently Vice-Dean of the Faculty of Health Sciences at the University of Johannesburg, South Africa.

Prior to this she was Principal of the School of Radiography at the Johannesburg Hospital. She moved from the hospital to start the Radiography course at the Technikon Witwatersrand (now the University of Johannesburg) in 1984 that started with 13 students and on taking up the Vice-Dean's position had in total over 300 students registered for the four disciplines in radiography, ie Diagnostic, Therapy, Nuclear Medicine & Ultrasound.

Jenny has served on the Health Professions Council of South Africa's Professional Board for Radiography for one 5-year term as an elected member and one 5-year term as representative for the educational institutions in South Africa offering radiography. She currently chairs the education committee of this board.

She has held numerous positions within the Society of Radiographers of South Africa and currently serves on the EXCO Committee. She has participated in curriculum development for both the diploma and degree over the past years.

Jenny still lectures at 4th level in the radiography program and supervises Master students.

To end her career she has registered for her PhD in which the implementation of role extension and advanced practice in South Africa is being researched. ❖

The World Radiography Educational Trust Fund

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For more information and to apply/get involved with WRETF:

www.wretf.com

Article by Hon Secretary Lizzie Zukiewicz

New Trustees vacancy

Unfortunately after a serving a short but fruitful term as trustee Meena Amlani has resigned. This means we are looking for a new trustee to bring a new dimension to the WRETF.

What is the difference between the ISRRT and the WRETF?

Although the WRETF started out life as the K.C. Clarke book fund of the ISRRT it evolved over the years into an independent UK registered charity. We may be independent from the ISRRT but we still work in close cooperation with them and fulfil different goals. Very often we receive applications and offers of help via the ISRRT and we in turn make referrals to the ISRRT when we have applications that are not within our remit. The ISRRT appoints our trustees but we have our own trust deed and make our own decisions on the running of the trust.

Our Role in World Radiography

Our main role is to send used and new textbooks to departments where texts are scarce. We also support workshops with textbooks and technical information, support postgraduate research projects and pay for text translations. All applications are subject to meeting strict criteria ands in some cases a discussion and agreement by the trustees. For more information including activities and feedback visit our website www.wretf.com

Funding

We receive no funding directly from the ISRRT only the donations made when you renew your membership. This means we rely entirely on donations.

Books sent out in February

We sent out a total of 33.78kgs of books at a cost of £466.33 to Zambia, Botswana, Nigeria & Tanzania. We send all books by surface mail to keep costs down but as you would agree the rising costs are making our job harder.

The World Radiography Educational Trust Fund

Recent thanks for books

"Yesterday I received a notification that I could collect three parcels that you posted. We are so glad and today I presented them to the head of the Radiology Dept. Thanks again so much for this service and wish you all the best in your endeavours.
Sincerely, Jackie. A. Kampala, Uganda"

"The books are very applicable to the dynamic radiography cadre that now encompasses several imaging modalities that most of us need more information on. The books have been my year's breakthrough.
Yours Kalende Rogers
Medical Radio/sonographer, St Francis Nkokonjeru Hospital
Uganda-Africa"

Left: Kalende Rogers

"This is Gil Portillo from Belize. I am just writing to inform you that the books have arrived in good condition. I assure you that the books will be of much help to us."

Right: Belize radiographers.

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The Americas

Canada

Shirley Bague assumed the role of the CAMRT President on January 1, 2010, Fiona Mitchell as the Past-President for the next year; as well as the two Vice Presidents Debra Murley and Michel Doucette. A new President-Elect is currently being sought.

There have been some major accomplishments in regards to the CAMRT Strategic Plan which I will summarise below:

Regarding ensuring the highest possible standards in the national certification process and practice requirements for each discipline:

- Action in response to the findings of the CT Operation Gap Analysis Project began in early 2010 with a market study to gather data to judge the feasibility of moving forward with the development of both theory and clinical educational components.
- CAMRT is developing two new projects for Internationally Educated MRT's. The first project will develop three exam preparation courses addressing the competency areas where IEMRTs require additional preparation. The second project will develop a national standard for assessment of IEMRT credentials.

Regarding providing the highest possible value and service to its members:

- CAMRT continues to enhance access to programs and services by maximising use of on-line technologies with increased frequency of e-news bulletins, online voting and surveys, as well as a redesigned website and use of social media tools such as Facebook.

Regarding promoting the profession and encouraging the MRT profession:

- Work has begun on the Best Practice Guidelines Project involves development of core best practice guidelines for the MRT profession and supplementary guidelines specific to the practice of the profession's four disciplines, namely radiological technology, nuclear medicine, radiation therapy and magnetic resonance.
- Plans are proceeding for a "Continuum of Practice" Symposium to examine the potential of advanced practice for radiological technologists, to be held later in 2010.
- A Leadership Development program to build the leadership pool for CAMRT and the provincial associations will begin soon.
- MRT week activities this year included a message of recognition from the Governor-General of Canada and an announcement in the House of Commons, as well as in several provincial legislatures.
- The CAMRT will be choosing representatives to the Canadian Partnership for Quality Radiotherapy.
- The new CAMRT Inclusion and Diversity Initiative will be spearheaded by Past President Fiona Mitchell.

Regarding advocacy on behalf of the MRT profession to influence public policy and to address issues that impact the profession, the health care system and quality of patient services.

- CAMRT has been active in addressing the concerns of members on critical issues with government and other stakeholders Recent activities include a meeting with the Expert Review Panel on the Production of Medical Isotopes, attendance at several hearings of the House of Commons Health Committee and the Natural Resources Committee to hear witness presentations on health human resources and the ongoing isotope supply shortage, and meetings with Natural Resources Canada regarding the supply of isotopes CAMRT submitted a brief to the House of Commons Standing Committee on Natural Resources outlining concerns related to both patient care and the impact of the shortage on health human resources.
- In November 2009, Fiona Mitchell and Chuck Shields, CEO, participated in a media conference at the House of Commons press gallery where a Member of Parliament who was a former MRT, spoke about the importance of MRTs in the healthcare system.
- The rebranding project is progressing very well. Chuck Shields and I hope to provide an update of our new brand and brand promise at the Australian World Congress in September.

Annual General Conferences

- Planning for the 2010 Annual General Conference, to be held in Quebec City May 27-20, 2010 in partnership with l'Ordre des technologues en imagerie médicale et en radio-oncologie du Québec (l'Ordre) is progressing well. The Education Program Committee has been working hard to develop complete English and French program schedules. The opening plenary will be delivered by Dr. Eric Turcotte, nuclear medicine specialist at the Centre Hospitalier Universitaire de Sherbrooke (CHUS), and clinical head of the Molecular Imaging Centre of Sherbrooke, one of the most recognized PET research centres in Canada. Another keynote speaker will be Dr. Richard Beliveau, PhD, the best-selling author of Eating Well, Living Well: An Everyday Guide for Optimum Health and Cooking with Foods That Fight Cancer. And David Gilmore will present on "Hybrid or Fusion Imaging. Hope to see many ISRRT colleagues.

Please feel free to contact me at any time at jreyer@shaw.

Rita Eyer, R.T.R.,A.C.R.
ISRRT Canadian Council Member

Jamaica

The Society of Radiographers (Jamaica) will host its annual general meeting and continuing education symposium on the weekend of June 26 & 27, 2010. At this time there will be an election of officers for the two year period 2010-2012. The meeting will be held at a rural venue.

In November, we will observe Radiographer's Week from November 7-13, and World Radiography Day on November 8, 2010. Activities for the week include, attendance at a Church Service, Continuing Education Seminars, Open Days in Departments, and a fun evening (social). The Week's activities will conclude with a banquet on Saturday November 13.

In an attempt to raise funds to support the Society's activities, members of the group will participate in a fund-raising lapathon at the historic Emancipation Park on Saturday March 27, 2010.

Carol Townsend

Trinidad and Tobago

2009 for The Society of Radiographers of Trinidad and Tobago was another successful year of activities including its most recent one being its Annual Conference that took place on the 31st of October and the 1st of November 2009 in Tobago. The Secretary of Health of the Tobago House of Assembly, the Honorable Mr. Albert Pilgrim gave the opening speech and was delighted to see such an event hosted in Tobago.

During the conference President Aleth Bruce received a very special certificate from the Board of Management of the ISRRT in appreciation of past support and recognition of the Society's 36th Anniversary. The ISRRT continues to be a wonderful source of encouragement and a beacon of professional development.

Papers were presented by the local fraternity and also by radiographers from Barbados and for the first time from Guyana.

The conference was well attended by students from the College of Science, Technology and Applied Arts of Trinidad and Tobago (COSTAATT). The college not so long ago started its Bachelor's of Science Degree in Radiation Therapy with its first group graduating later this year. Also expected this year is the graduating class of Radiographers from the first three-year Bachelor's of Science Degree in Radiography. We would like to pay special tribute to Suzette Thomas-Rodriguez, the new Chair of the Health Sciences Department at COSTAATT, which the Radiological Sciences Program is a part of. She was one of the first graduates of the Associate Science Degree program in Radiological Sciences back in 1995. Congratulations!

The Society's website continues to be an excellent medium of communication for our local, regional and international viewers. Persons from around the world are able to correspond with us and can keep abreast of what's happening with the profession in Trinidad and Tobago. The Society is always willing to help promote events and feature news from around the world including those from other radiological societies and related medical groups.

In an effort to assist the people of Haiti, who in January 2010 experienced a disastrous earthquake, the Society saw a tremendous response of local Radiographers willing to give support to their Caribbean neighbors. The Society and many other individuals gave financial contributions towards the relief aid for Haiti. A survey of our fraternity found that several persons were willing to go to that country as medical imaging professionals should the Government and/or the Caribbean Community (Caricom) require their services. This gesture was applauded by the Society as well as Mr. Jerry Narace, Honorable Minister of Health of Trinidad and Tobago.

The Society looks forward to another successful year with its newly elected Executive:

- President: Timothy Dean
- Vice President: Aneesa Ali
- Secretary: Alisha Ramadeen
- Treasurer: Debra Ealie-Bastaldo
- Assistant Secretary/Treasurer: Carla Julien
- Committee Members: Aleth Bruce & Wendy Riley
- ISRRT Council Member: Anushka Kattick-Mahabirsingh

Visit us online at www.soradtt.com

Timothy

Asia/Australasia

Australia

Everything is coming together in readiness for the 16th ISRRT World Congress being held on the Gold Coast in September this year. An exciting educational program and technical exhibition is being assembled and abstracts have closed. We have been delighted with the response and have received abstracts from practitioners in over 30 countries. More information can be found at the website www.2010isrrt.org regarding the venue, registration and accommodation. This will be the first World Congress held in Australia and will incorporate the AIR annual national conference as well as the NZIMRT annual conference.

The AIR is actively involved in working towards National Registration, and believes that this is an important step forward for the profession. National Registration will simplify the process of registration and enable ease of movement for all members across Australia.

In March, the AIR Annual General Meeting took place in Hobart in conjunction with another AIR Research Symposium designed to promote and encourage research by clinical practitioners. The AIR is looking to assist members with opportunities to develop new skills in this and other areas. Hobart was also the site of the pilot of a leadership training program, with attendees from across Australia taking part in a short form of what is planned to be a comprehensive leadership training program run by the AIR for its members.

The AIR is going to offer a training program for a Presentation to Schools program designed to encourage secondary school students to fully consider the medical radiation profession as their opportunity for the future.

For those applying from overseas for assessment of their qualifications to work in Australia, please visit the AIR website (www.air.asn.au) to view the current requirements, including the English proficiency level.

On behalf of all AIR members I would like to send our best wishes to our colleagues around the world and look forward to welcoming you "down under" in September 2010.

Pam Rowntree
Councillor for Australia

Africa

South Africa

New radiography qualifications in South Africa

The South African universities offering qualifications in radiography are currently busy preparing their documents for the go-ahead to present the qualifications tabled below from 2011/2012. The preparation includes authorisation from the Senate of the respective university, Department of Higher Education and Training, as well as the Council for Higher Education. The South African Qualifications Authority (SAQA) registered the qualifications during 2009, with the exception of the PhD. The qualifications were developed under the guidance of the Health Professions Council of South Africa to align the radiography qualifications in South Africa with international trends. Should you wish to view the qualifications, please visit www.saqa.org.za and follow the link to "registered qualifications".

SAQA ID NO	NAME OF THE QUALIFICATION	NQF LEVEL/ CREDITS
66949	Bachelor of Diagnostic Radiography	8/480
66950	Bachelor of Nuclear Medicine Radiography	8/480
66951	Bachelor of Radiation Therapy	8/480
63449	Bachelor of Diagnostic Ultrasound	8/480
66229	Master of Radiography	9/180
65115	Doctor of Radiography (PhD)	10/350

National Congress

SORSA in conjunction with the Radiological Society of South Africa (RSSA) is currently preparing for our biennial National Conference. We cordially invite you all to attend this very exciting imaging congress.

This joint initiative from RSSA and SORSA will be hosted from 4-6 March 2011 at the International Convention Centre (ICC) - Durban. The ICC Durban is the ultimate in convenience within close distance of a full spectrum of attractions, hotels, restaurants, shops, cinemas, as well as the Golden Mile with its many beaches.

We assure you of an experience where you will be exposed to a technically advanced and academically stimulating programme. Highlights of the programme include a course on MRI mammography, a one day course on cardiac MRI and a short course on current ethical issues in Radiology.

The theme for this congress is Imaging 2011, and there will be sessions devoted to scientific papers, topics such as African diseases and much more. It will be the ideal opportunity to exchange ideas, learn about new advances and strengthen friendships and make new acquaintances. Leading commercial vendors have been invited to present

their latest technology and equipment.

Please diarise these dates and do not miss this opportunity. We look forward to welcome you to Durban 2011.

Prof Hesta Friedrich-Nel, has been elected president of SORSA and will take up office in April 2010. We wish her well in her two year term as president.

Aladdin Speelman
Councillor

Europe

Cyprus

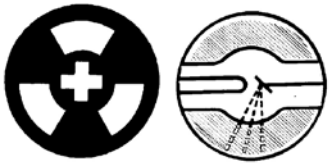
We would like to inform members that the new members of our council for the period 2009-2012 are:

- Savvas Tiniozos - President
- Thasos Athanasiou - Vice President
- Yiannis Anastasiades - Secretary
- Militsa Kouzali - cashier
- Eliana Michael - Member
- Elena Evaggelou - Member
- Christoforos Christofi - Member

At present the members of our society are 120.

John Polyviou

Finland



The theme in 2009 for The Society of Radiographers in Finland was: The changing working environment. This theme was talked in the CPD courses organised by the society and also in the Radiografia journal.

At the end of 2009 The Society of Radiographers in Finland had 3066 members (2565 ~87% paid their membership fee). At the moment we have ~3400 radiographers who are working daily.

The working and studying situation

At the end of this year there will be surplus of radiographers in Finland. In a few parts of Finland there are already radiographers who are unemployed part of the year and at the same time there are areas where there are no radiographers available. This will continue to be a growing problem for the next few years because we still have double the amount of starting places for radiography students than there are radiographers retiring in the near future.

There are six Universities of Applied Sciences offering an education in radiography.

Oulu University had a new radiography course start in August. At present the University has accepted a total of 52 radiographer students since 1999 every second year. 21 of them have received their master degree, 7 their bachelor degree and the rest are still studying (13 of the total number started in August 2009).

Now, the Faculty of Medicine in Oulu University has decided to finish this Degree program in Radiography because of resource constraints (economic reasons etc.).

The Society of Radiographers in Finland has responded to this because we think that it is very important to extend the field of this science. It`s the only way to ensure continuity for our experts who can be specialists in the whole health care area.

The Society of Radiographers in Finland

In November 2009 the Society got the new board (term will be 2010-2011).

The new international coordinator Kaisa Nironen started in September 2009.

The Society of Radiographers in Finland has organised (or has been part of the organisation) in 2009 of several CPC courses – in MRI, Mammography, management and contrast media, just to mention a few.

The annual congress Radiografiapäivät was organised last year in Tampere, with four parallel sessions. Annual congress for radiographers had nearly 500 participants.

Kaisa Nironen
Council Member

Greece

The Pan-Hellenic Society of Radiological Technologists in the first month of 2010 had it's elections and the new council was elected. After an absence of two years, Mr Katsifarakis was re-elected as President.

As it is well documented, Greece is in an economic crisis, which has effected the membership of the Society.

In the second half of the year, the Society is planning a Conference, to deal with various issues concerning the radiographers in Greece.

United Kingdom

Society of Radiographers 1920-2010

2010 is the 90th Anniversary of the Society of Radiographers. At the centre of our celebrations will be a presentation of Gold Medals in recognition of exceptional contributions to Radiography. This will take place at our Presidential Inauguration in July.

Muriel Chesney

Radiographers from across the UK and from around the world have been paying tribute to Muriel Chesney who died in February at the age of 89 years. Together with her twin sister, Noreen, Muriel wrote some of the most influential, popular and widely distributed text books on radiography. She was prominent in the SoR and in the ISRRT and held in great affection by all who knew her through her work in clinical radiography and education.

Molybdenum Shortage

Nuclear medicine teams across the UK have risen to the challenges posed by the unprecedented international shortage of isotope supply over recent months. Innovative scheduling, extended day working and case prioritisation have been used to ensure that patient services have been maintained.

The efforts of all Nuclear Medicine staff have been recognized at national level, with a letter of thanks from the Department of Health in England. There has been outstanding commitment to patients and to services. They have demonstrated that process redesign applied with genuine commitment to excellent services produces extraordinary results.

European Congress of Radiology

SoR attended this meeting in Vienna with a small team of staff and Council. As usual we were busy answering questions about working as a radiographer in the UK. This year we also noticed a growing number of enquiries about radiographer reporting of mammography images. In the UK, the national Breast Screening Service relies heavily on multidisciplinary working, including advanced radiography practitioners taking part in reporting. It seems that other European countries may be looking to build service capacity through developing the practice of radiographers. The EFRS have been invited to take a central role in organising the radiography elements of the programme at future congresses.

SoR Radiotherapy Conference

Our annual conference for radiotherapy radiographers took place in Birmingham at the end of January. This was a very successful event with over 200 delegates attending to share their research and experiences and gain insight into some of the latest thinking in radiotherapy and cancer care. SoR's president-elect Sandie Mathers opened the weekend by paying tribute to the radiotherapy community and highlighting the work that is being carried out by therapeutic radiographers to influence the national development of radiotherapy services.

CPD Audit

As mentioned in the last ISRRT newsletter, the statutory regulator for radiography in the UK, the Health Professions Council (HPC) has recently completed their first audit of CPD activity amongst radiographers. On registration, all radiographers commit to regular CPD and it is a condition of remaining on the register that continuous development activities are undertaken and the outcomes recorded. The audit set out to study the extent to which radiographers are maintaining this commitment. Early results indicate a good level of compliance. The use of the SoR on-line personal manager, CPDNow increased during the period leading up to the audit, indicating its value to members.

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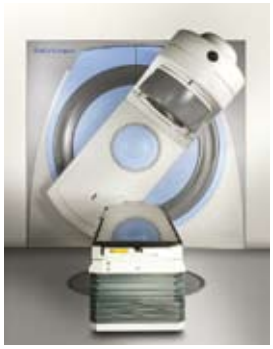

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