

isrrt

NEWSLETTER

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International
Society of
Radiographers
and
Radiological
Technologists

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President's Message

Dear Colleagues,

At the recent ISRRT World Congress held in Denver, Colorado, it was my privilege to be elected as President for a 4-year term.

By way of background, I qualified as a diagnostic radiographer and have had a long career in management in private radiology with a very large private practice based in Adelaide, Australia.

I am a Fellow and Past President of the Australian Institute of Radiography and have served as Australian Council member and ISRRT Regional Director and Vice President for the Asia/ Australasia Region. My daughter and son are both diagnostic radiographers in Australia.

I bring to the position, significant management experience and a commitment to work with the new Board and the Council members to ensure the relevance, role and structure of the Society to meet the needs of the profession.

Our new Board faces some significant challenges, which have been clearly laid out for us by the Council. As identified at the recent Council meeting, one of our prime concerns is to consider pathways that can lead to Europe and Africa being established as separate Regions within ISRRT. We have set the Meeting in Durban in 2008 as our target to have a strategy in place.

The new Board has already met in Denver and has scheduled a Strategic review meeting for January 2007 and on their behalf I give you a commitment to consult widely with all stakeholders to ensure that no-one is disenfranchised by our actions as we work to set the ISRRT on a path for the future.

The Board understands the significance of the issues involved and will make every endeavour to address them to the satisfaction of all our member Societies, not just for the immediate future, but to ensure the longstanding viability of the ISRRT in its important role in International Healthcare.

We will also be building on the relationships we have already established on your behalf with organisations such as the World Health Organisation (WHO), the International Society of Radiologists (ISR), the International Atomic Energy Agency (IAEA), RSNA and ECR.



Your new Board, which is listed in this newsletter, has a wide range of experience and is very enthusiastic regarding their future roles. Please access the Board through their email addresses in this Newsletter, or from our new website.

I urge you to log on to our new Website: www.isrrt.org This new site was is being developed by Luciano Maes of the ASRT who, together with the Canadian Association of Medical Radiation Technologists (CAM-RT) and the UK Society of Radiographers (SoR), have contributed financially to this project.

We are also fortunate to have the site partially funded with a 3-year grant from ELEKTA Pty Ltd who provides hardware and software for radiation therapy applications.

We plan to make much more use of our website which is planned to be interactive, and will be constantly reviewed and updated to ensure it's relevance. If you have any suggestions, please access the comments link to our Secretary General, Sandy Yule, who will be our Webmaster.

One opportunity the Board will be investigating, is distributing the Newsletter to Associate Members from the website as a downloadable "pdf" file. This would give us the opportunity to have it available in multiple languages including Spanish, French, Japanese and Chinese.

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This would have the great benefit of significantly increasing our Associate Member list as many of our Member Societies are denied access to ISRRT information by the present, expensive to produce and distribute, English only Newsletter. Indeed many more Societies would join ISRRT if we had greater language flexibility.

Our exciting new website will also give us the added opportunity to seek greater corporate support for our activities and this will also be a priority of the new Board who have already met with industry representatives at the Denver meeting. We will be further expanding on these relationships at the RSNA and International Congress of Radiology World Congress in Cape Town.

The recent ISRRT World Congress in Denver was a wonderful meeting, hosted by our colleagues from ASRT - The American Society of Radiologic Technologists.

Member Societies from over 60 countries were represented at the Congress and Council meeting, and nearly 1,000 delegates were registered. The excellent

technical program was complemented by energetic social functions that included a Wild West night and a dance floor transformed into a Beach Volleyball court complete with a 1.5 metre blow up whale.

We urge you to consider attending the next ISRRT World Congress in Durban in March 2008 - links are available from our website. The Board also is pleased to advise that it has awarded the 2010 ISRRT World congress to Australia.

The Australian Institute of Radiography (AIR) will host the meeting with the full support of the New Zealand Society (NZSMIRT). Both Societies will combine their annual national meetings with the World Congress, which will be in September 2010 at the Gold Coast in Queensland.

Please remember to contact the Board through the Secretary General if we can assist you or your Society.

Robert George
President, ISRRT

Electronic newsletter?

The ISRRT Board is investigating and making enquiries as to whether members would like to see the ISRRT Newsletter in an electronic form.

This would give the ISRRT the opportunity to have it available in multiple languages including Spanish, French, Japanese and Chinese.

Email your comments to the ISRRT General Secretary Sandy Yule at:
isrrt.yule@btopenworld.com

Secretary General

THE 14th World Congress in Denver sees the completion of my first four years as Secretary General and has certainly kept me fully occupied during this period.

My travels have been quite extensive and I have had the opportunity to visit and meet with many Societies and colleagues. On every occasion I have been met with tremendous hospitality and friendliness which makes my job much easier and very worthwhile.

I have received support and encouragement from all Board members and have had full backing from the President, Dr Tyrone Goh. Mr Terry West, whom I took over from as Secretary General, has continued to give me advice on operational procedures which has made the transition for me from Treasurer to Secretary General all the more easier.

I am pleased to record that many issues have been resolved during the past four years and that the Strategic Plan has had successful outcomes. The revisions of both the Statutes and the Operational Manual have been completed as have several much needed guidelines. These include guidelines for the Council meeting, the Voting Procedure and for Scrutineers. These documents greatly helped to ensure that these procedures ran smoothly in Denver and thanks are due to the three Scrutineers, Mr Emile Badawy, Mr Richard Evans and Mr Chuck Shields for their tremendous work during the recent Board elections.

The education and the professional practice committees have been fully occupied and indeed the roles of both these committees have been reviewed. The former Health and Safety Committee extended its remit and was renamed the Professional Practice Committee.

Huge steps were made in both areas of education and professional practice. The education section continued to work with the World Health Organisation in the provision of training manuals and were instrumental in formulating "Guidelines for Standards of Education", a document which has been very well received throughout the world. The professional practice section increased co-operation with the International Atomic Energy Agency and have been involved in producing new regulations for the safety and training of radiation workers and the protection of patients.

A great challenge has been the review of the ISRRT website under the guidance of the Public Relations Director. This has been on the agenda a long time and will be completed before our meeting in Denver. Thanks are due to the ASRT for the great support they have given and also to CAMRT and the UK Society of Radiographers for their financial support of the set-up costs. I am also pleased to report that the ongoing operational costs of the website is being supported by Elekta, an international company involved in radiotherapy, for a



period of three years. The maintenance of the ISRRT web site has been undertaken in the past by Richard Terrass from Boston, and I would like to thank him for his great help over the years. However I will have the responsibility in the future to keep the information on the new website up-to-date which will keep me even busier.

Work with the WHO has continued over the four years and as most people know valuable training manuals have been produced in co-operation with the WHO. Training schemes have been promoted in Fiji with financial support from the ISRRT. It is hoped to continue with this project in the coming year. In addition to WHO the ISRRT have co-operated with the Pan American Health Organisation (PAHO) in providing workshops in El Salvador and Guyana.

The Treasurer has indicated the present financial stability of the ISRRT and in order to maintain this we must all work together. It is important that we increase our Corporate Membership and advertising and I look towards help from all in this important area. I reported earlier that with the help of the ASRT we have succeeded in obtaining sponsorship of the new web site for a period of three years we followed this up with meetings with companies during the Denver Congress.

Several societies are unable to pay their annual dues and it has been proposed at several meetings that the more affluent countries agree to a possible mentorship in order to assist a country in difficulty. We have spoken about this for some time and perhaps we can implement this before the next Council meeting. Assistance is available from the Development Fund but for some reason this is often not requested. This mentorship may be particularly valuable during the first years of membership.

Site visits for World Congresses are part of the duty of the Secretary General and so far I have participated in the visits to Hong Kong and Denver accompanied by the respective Regional Officers. I look forward to the

site visit to Durban in preparation for the 2008 World Congress. This should prove to be a great success and is of course the first World Congress to be held in Africa. Preparations for the Congress are well under way and a progress report will be given by Fozy Peer during the Council meeting in Denver.

I must mention the World Radiography Trust Fund in the report. This fund, the WRETF, is well known in radiography circles and performs a valuable function in providing textbooks and small equipment to developing countries and schools of radiography in particular. I attend their meetings in the UK as an observer and receive regular information. Like the ISRRT the WRETF is a UK based Charity and relies on donations for its income. Your support, either financially or with book donations, is always very welcome.

I have attended meetings of the ECRRT in Malta, Estonia and Iceland. The European Committee of the ISRRT was chaired by Mrs Niru Kolmannskog and Mr Alain Hembise, the Europe/Africa Officers of the ISRRT. I was very surprised when both Board members resigned in late December 2005 and I would like to wish them both well.

On previous occasions I have reported that much of my work is routine administration and I spend considerable time corresponding with colleagues from around the world. The work continues to expand and one area which is still proving difficult is effectively managing the names and addresses of Societies and Council members and I would ask for your help in keeping this essential information as current as possible. This should be easier to maintain on the website as from June this year when I will take over as webmaster for the new website.

My last Secretary Generals report was published in the February 2006 edition of the newsletter and brought my activities up to December 2005. Since that time I have continued my travels. In February I met with European Societies who were discussing their future co-operation with the ISRRT. I am pleased to report that there was a very positive outcome to the meeting with all Societies expressing their support for the ISRRT. As a result of the meeting a motion has been formulated for discussion at the Council meeting in Denver.

In March 2006 I attended the European Congress of Radiology. The ISRRT have a booth at the event and I would like to thank Dorien Pronk Larive for her assistance at the booth and during the Congress. We also met with Dr Pedro Ortiz-Lopez, Head of the Unit for the Radiation Protection of Patients, International Atomic Energy Agency (IAEA) and passed on the comments of the Professional Practice Director

related to the meeting held earlier in Madrid. I chaired a very successful Satellite Symposium sponsored by GE Healthcare and also chaired one of the radiographer sessions. The number of Radiographer Registrants continues to grow and I would like to thank Susanne Huber from Germany for her work on the Scientific Programme Committee.

In preparation for the meeting in Denver I met with our President Tyrone Goh in April. During our lengthy meeting we finalised the agendas for Board and Council meetings. Tyrone has also agreed to chair the Regional meeting for Europe/Africa in the absence of the Regional Officers.

In May I attended the WHO General Assembly in Geneva. This gave me further opportunity to meet with Harold Ostensen of the WHO to discuss our continuing co-operation. During my time in Geneva meetings are also held between the Non Governmental Organisations who are present. These are extremely interesting and informative and gives me a further chance to put forward the activities of the ISRRT.

My last big meeting prior to Denver was in Birmingham attending the United Kingdom Radiology Congress (UKRC) held in Birmingham. Once again the ISRRT was provided with a complimentary booth which acts a focal point for UK and overseas radiographers. The work of the ISRRT is highlighted and quite a number of new Associate Members are signed up. I also receive many suggestions for improvements and up-to-date information on worldwide activities.

I have enjoyed the last four years working with the Board and helping them to complete the tasks set at the Strategic Planning meeting in Prague. I believe that much has been accomplished by this Board but of course our work is never done.

Finally I would like to thank all Board members, Council members and organisations for their continuing help. Everyone has been supportive and have always made constructive suggestions. Wherever I visit I have been made welcome as has Alison, my wife. Although not a radiographer Alison also enjoys meeting with people and is a great help to me particularly on stand duty. I would therefore like to take this opportunity to thank Alison for all her support and help which she gives to my work for the ISRRT.

Dr Alexander Yule
General Secretary, ISRRT

Regional Director

Caesar Barare

ISRRT Regional Director, Europe and Africa

THE chairman of SORK (Society of Radiography in Kenya) is pleased to announce to you that Caesar Barare is the new Regional Director for Europe and Africa, ISRRT. Caesar was elected in June 2006 in Denver USA.

We here in Kenya seek for your support to enable Caesar to exercise his full potential as he embarks on serving the wider region of Europe and Africa. SORK and Kenya at large have full confidence in his abilities.

A vacancy now exists in our ranks for a ISRRT Council Member. Interested candidates, Radiographers and members of SORK are requested to contact our national offices on 020 2720607 for application procedure details.

**Office of the Chairman,
Society of Radiography in Kenya**



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ISRRT Health and Safety Manual
US \$30

Quality Control Handbook for basic equipment and manual processing £8 / US \$14 *FRS

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Proceedings of ISRRT sponsored African Workshops
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Number 2 – Port Elizabeth, South Africa 1997
£8 / US \$14

Survey of radiographer education program within Europe – 1999
£9 / US \$15

Proceedings of Teachers Seminars
Number 9 – Itea, Greece, 1992
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(Education Needs of Students)
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European Congress of Radiology (ECR)

Vienna, Austria

March 3-7, 2006

Report by Susanne Huber,

Co-chairperson Radiographers ECR 2005 & 2006, ISRRT Council Member Germany

THIS year's European Congress of Radiology ECR was again a huge success with all the posters and presentations by radiographers and radiological technologists from many countries and the subsequent discussions. I am writing this article about an event which has taken place for many years, always at the beginning of March in Vienna, Austria. 1,600 attendees - including the industrial exhibition - registered for the ECR, amongst them 804 radiographers/radiological technologists from 48 countries worldwide, the majority of course European countries.

Fortunately we were able to offer a very interesting program which included most of the areas of our multifaceted profession. Of course every registered person was allowed not only to attend the special radiographer's program, but also the radiologists' presentations, congress ceremonies and industrial exhibition.

The topics of our first Refresher Course on Sunday were "The role of the radiographer in a large epidemiology study: The AGES study (age/gene environment susceptibility study)" by Sigurdur Sigurdsson from Iceland and "Research and clinical neuroimaging at 3T: The Sheffield University experience" by Gail Darwent from UK.

This was followed by the second Refresher Course on Monday morning on MRI and CT: "MR imaging of the whole body: Technique and clinical applications" by Sinead Owens from Ireland and "The radiographers guide to CT applications in urology" by Martin Kusk from Denmark.

During the following Scientific Session we listened to presentations of seven Proffered Papers by colleagues of France, Sweden, Japan, UK, Norway and Germany. We decided to award the Best Paper Prize (1.500 Euro) for the UK paper "Autonomous, sonographer provided, symptomatic breast clinics for women under the age of 35 years" given by Mandy Holland.

Following on from this was the third and fourth Refresher Course with "Migration to a filmless digital mammography department" by Cecilia Aynes from Spain and "Practical applications and use of image processing for imaging professionals" by Dimitris Glotsos from Greece, "Angiography: The responsibility and role of the radiographer" by Henrik Mogensen from Denmark and "The value

of cranial ultrasound in the neonate" by Gillian Cattell from UK.

On Tuesday we concluded the radiographer's program with our fifth Refresher Course and topics around quality management. All speakers were from Scandinavian countries and talked about "Experiences on clinical audit in Finland" by Tiina Sipilä from Finland, "The first accreditation of a radiological department in Europe" by Anita Brinck from Sweden and "Self assessment within clinical radiography" by Päivi Wood also from Finland.

Vienna is a very beautiful city and those of you who have already been there are familiar with all the wonderful coffeehouses and restaurants. You can easily imagine that we enjoyed in the evenings the Vienna atmosphere, the traditional Viennese specialties and the discussions between colleagues coming from so many different countries.

The next ECR will take place starting March 9-13, 2007. After having been chairperson for two years I have now fulfilled my term and am very honoured to have been chosen for this position. My successor will be Karin Eklund from Sweden, who has already built-up a programme for 2007 together with her team. I hope that we will be able to increase the number of attendees, since this is the best reward for all the hard and honorary work done by radiographers for radiographers. □

Report

ISRRT 14th World Congress

Radiologic Technologists gather in Denver to network and learn

Denver, Colorado

June 9-12, 2006

MORE than 1,000 radiologic technologists from around the world met in Denver June 9-13 for the World Congress of the International Society of Radiographers and Radiological Technologists and the Annual Conference of the American Society of Radiologic Technologists and the Association of Educators in Imaging and Radiologic Sciences Inc.

This year's World Congress marked the first time since 1991 that the ISRRT has met in the United States.

In his opening address, ISRRT President Tyrone Goh, of Singapore, discussed some of the society's challenges and goals. "Many of our member countries around the world cannot afford advanced imaging systems and modalities," he said. "Those are the ones ISRRT needs to focus on, to assist radiographically developing nations. To do so, we need the support and cooperation of countries like the US and Canada, European countries like the UK

and the Netherlands, and countries in Asia like Australia and Japan. They can provide resources and expertise."

Some of that expertise came in the form of the main program which included presentations on such diverse topics as Medico-legal Aspects of Imaging Breast Cancer, The Art of Pain Management, Radiological Terrorism and the Role of the Radiologic Technologist, Teaching Digital Radiography, Stereotactic Body Radiation Therapy and Patient Safety. More than 20 sessions were led by international speakers.

All the sessions were very well attended and created much discussion between attendees, both local and international. ISRRT Board and Council members were free to attend all



sessions and were very impressed by the depth, content and delivery of presentations. Everyone came away with at least one new idea to foster within their own departments.

A highlight of each ISRRT World Congress is the Hutchinson Lecture, named for E.R. Hutchinson, a founder of the ISRRT and also its first Secretary General. This year's Hutchinson Lecture was presented by Sanjiv Sam Gambhir, M.D., Ph.D., director of the molecular imaging program at Stanford University.

In his lecture, titled "Medicine's Incredible Future," Dr. Gambhir described how molecular imaging represents the future of not just radiology, but of medicine as a whole.

He drew an analogy between exploring an unknown planet and exploring the human body. "Imagine an alien race and trying to understand a complicated planet such as Earth. The first thing the aliens might do is send a satellite. With the satellite pictures, they would see the oceans and the continents. If they zoomed in, they would see more detail - the freeways and buildings and so on. But they still wouldn't understand how the planet really works," he said.

Conventional imaging, Dr. Gambhir noted, provides important anatomical information but lacks specificity. "Mammography is like shooting bullets into a room full of hundreds of people and seeing what comes out the other side. Molecular imaging is like walking into the room and interviewing every single person who is there."

This does not mean that conventional imaging is not needed, Dr. Gambhir said, "because even if you find cancer you need to know where it's at. You still need the spatial information."

Although many people associate molecular imaging with nuclear medicine, Dr. Gambhir noted that it has applications in magnetic resonance, ultrasound, optical imaging and other areas. "Probably the area with the greatest growth right now is optical imaging," he said, along with microfluidics, split coil MR-PET and nanotechnology.

On the social scene the events organised were great opportunities for networking and interaction with local and international registrants and between all participants and the technical representatives. The opening function was held in the technical exhibition area and all exhibitions were well attended. The World Congress Social Event was in the Plaza ballrooms and the feature of

this evening was the fantastic artist who created large works (Ghandi, Mother Theresa and John Lennon) with great speed and accuracy. These works of art were the subject of a silent auction towards the end of the conference. This was followed by dancing to a hot band the highlight of which seems to have been the indoor volley ball played by a band of very 'merry' souls accompanied by great hilarity. The Wild West Night was attended by a small group, some of who were in costume which added to the general feel of the event.

The closing ceremony was well attended and full of ceremony. The outgoing ISRRT President Tyrone Goh spoke on the future of ISRRT and it's hopes for the future while the incoming President Robert George defined his reasons and role models for attaining the position. The ceremony closed with a promotion for the 2008 ISRRT Conference to be held in Durban in April of that year. □



Report

International Action Plan for the Radiological Protection of Patients

Report of the Second Steering Panel Meeting

Madrid

February 8-10, 2006

Report by Mary Jon Lachance

Historical background

THE IAEA is authorised by its Statute to “establish standards of safety for protection of health and to provide for the application of these standards”. The relevant safety standards are the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources (the BSS). The BSS specifically address the radiological protection of patients by placing requirements on responsibilities and training, justification, optimization (design and operational considerations, including calibration, clinical dosimetry and quality assurance), guidance levels, and investigation of accidental medical exposure.

The Agency, in responding to the importance of this issue, organised, in collaboration with other international organisations and Professional Bodies, the International Conference on the Radiological Protection of Patients in Diagnostic and Interventional Radiology, Nuclear Medicine and Radiotherapy, which was held in March 2001 in Málaga, Spain. The findings and recommendations of this Conference included a request to the Agency to formulate an action plan based on the findings of the Conference for future work relating to the radiological protection of patients. The International Action Plan on the Radiological Protection of Patients was prepared and approved by the Agency’s governing bodies in 2002.

In 2003 a Steering Panel was established to keep under review the implementation of the activities under the Action Plan with a view to providing guidance, on a continuing basis, on the overall approach to the implementation of the Action Plan and to make proposals for adjustments, as may appear necessary..

The purpose of the current Steering Panel meeting was to review progress so far, provide specific advice on topics identified by the Scientific Secretary and primarily identify future directions of importance for radiation protection of the patient in medicine. The status report was reviewed and the Panel felt that given the resources available, the overall the effort as well as quality of the work to date was excellent.

Recommendations on future directions in the eight topical areas have been provided. The first five listed are of critical importance, and the latter three are important but less urgent.

1. Education & Training

The Panel took note of the ongoing activities undertaken by the Agency in terms of training material and syllabus development, educational CDs and their wider dissemination as free material and its availability on some websites, including the upcoming Radiological Protection of Patients (RPoP) website and collaboration with Professional Societies and International Organizations. The materials currently available as draft CDs are focused on the following topics: Radiation Protection in Digital Radiology, Computed Tomography, and Accident Prevention in Radiotherapy. The cardiology CD has undergone testing and review, and is in the advanced stage of finalization. Upcoming CDs include: Radiation Protection in PET/CT, Paediatric Radiology and Radiation Protection for non-radiologists/non-cardiologists.

Recommendation: The Panel recommends the continuation of these actions.

Issues pertaining to professionals in different areas are:

1a. Physicists

Substantial material is currently available from different sources. The educational material available from IOMP, IRPA and IAEA should be shared and harmonized where appropriate.

1b. Radiographers/Radiological Technologists

Programs and documents will appropriately involve consultation with ISRRT, WHO, PAHO, ISR and ESTRO.

Radiological & Nuclear Medicine: The initial training and certification programs are mostly country specific and they are variable. The Panel suggests an initial trial

of e-learning beginning with radiological technologists.

Radiation Oncology: IAEA syllabus and training material will be expanded.

1c. Radiologists and other medical practitioners

Minimum requirements need to be defined for each level. The IAEA may ask appropriate professional groups to develop requirements on recertification every few years on radiation protection.

1d. Referring practitioner

See later in referral criteria

1e. Medical students

Written material is available from ISR, BIR and ICRP. The Panel suggested that some experts collect the material and develop guidelines and minimal curriculum.

2. Information gap

There is a large amount of information currently available on the radiological protection of patients. A major challenge remains in how to make this material available to tens of thousands of regulators and hundreds of thousands of medical staff and professionals. In addition, there are millions of patients exposed each year, some of whom also want accurate information and answers to questions. The Panel also pointed out that an educated questioning patient can be a significant force in facilitating appropriate radiation protection.

The Panel reviewed a means of accomplishing this goal. The following topic areas are listed in order of priority.

2a. RPoP website

Prior work of the Panel indicated that the development of an RPoP website was considered an extremely effective means of providing information on the protection of patients. The RPoP website development is considered by the Panel to be of the highest priority. The Panel reviewed the substantial progress and complemented the Scientific Secretary, consultants and the IAEA website staff. It was acknowledged that the development of the website requires several years and should be accomplished in phases.

Recommendations: The Panel recommended attention to the following points:

- A private area may be created with password protection for draft documents.
- Panel of experts for reviewing the material to be created and operate using e-journal methodology.
- Appropriate links to relevant organizations and professional bodies to be created (such as those participating in the Action Plan).

- Scientific publications cited in latest literature must be from peer reviewed journals.
- Industry and vendors should be considered as users of the website.
- Forums, interactivity, feedback as future development of the website.
- Popularisation of the website through professional and scientific societies media.
- Copyright issue of material published on website - material included in perspective should not be copyrighted (to be included in disclaimer).
- Consistency with BSS.
- E-mail alert on selected updates.

Recommendation: The Agency should give high priority to this item.

2b. Information exchange

The IAEA in the past has had patient radiation protection information exchange in the form of accident reports and other documents. This practice and their availability on the web has been extremely valuable.

Recommendation: Exchange of information should continue and may be expanded to include information from ROSIS and similar existing databases or those developed in the future.

2c. Distance learning

Distance learning (or e-learning) is becoming commonplace in many universities and corporate settings. It appears to be quite effective. Use of distance learning courses may help train more students in various subjects in different parts of the world with a minimum of expense.

Recommendation: The IAEA should develop a trial course with distance learning at several sites.

2d. Literature databases

Recommendation: There should be encouragement of the development of databases by professional organizations, but to be most useful there would be a necessity to have a link to the RPoP website and access for those who are not members of that particular professional society.

2e. National languages

The Panel recognised that many persons desiring information do not speak English and there is a need for accessibility of the information in national languages. The current general IAEA website is only in English.

Recommendation: There are not enough resources for translation of an active website by the IAEA. As the site is not copyrighted, it is recommended that those organisations

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wishing to translate the site do so, but with a proper disclaimer that this was not translated by the IAEA. Downloading and translation of the IAEA's educational material for national courses is encouraged.

3. Staffing

The Panel recognises the current shortage of adequately trained personnel (especially medical physicists) in many developed countries and a general shortage of all types of staff in developing countries.

Recommendation: There should be consideration of issues related to staffing and definition of qualified experts in the course of developing the new BSS.

Recommendation: Minimal staff requirements for various types of equipment and procedures have been developed. There should be collaboration of international organizations and the IAEA to identify manpower needs for the next 10-15 years. This should include not only the projected current growth rate of medical procedures but also the effects of an aging population, increased expansion of new technologies and availability of medical procedures in developing countries. Such a document would help identify training needs in the current generation.

4. Modality specific issues

There are a number of patient radiation protection issues

that are modality related, primarily as a result of new uses of existing technologies as well as emerging technologies. Some of the most important are listed here.

4a. Multi-detector computed tomography (CT)

Use of computed tomography has been rapidly growing for the last 3 decades, and by the year 2000 in many institutions in developed countries, CT scanning accounted for about 5 to 10% of procedures, but 40 to 70% of the radiation dose delivered in diagnosis. In the last 5 years there has been a proliferation of extremely fast helical multi-slice scanners which have engendered new applications and more examinations. The absorbed doses have remained relatively high and patients often have repeated procedures. The Panel is aware of these developments and feels that this is an area of specific and increasing concern. The Panel is aware of some existing documents concerning CT that are available through the IEC, ICRP and EC projects.

4b. Digital radiography/fluoroscopy

Over the last decade, there has been a spread of digital technology for medical imaging. The technology has eliminated some of the traditional parameters, such as optical density, number of images taken, collimation evaluation and others, which were typically used for QA and patient protection measures. The Panel pointed out that the transfer from film to digital technology requires appropriate training and new QA measures.

Digital fluoroscopy and rotational angiography also requires special attention for patient radiation protection. With the new fluoroscopy systems, images are acquired very easily, resulting in sometimes a large number of unnecessary images. Different fluoroscopy modes, with very



IAEA Steering Panel Committee

different patient dose rates, are typically available, requiring a periodic characterisation of the imaging systems. The use of interventional guided fluoroscopy is increasing, and appropriate dose management programs including patient dose measurements should be fostered.

4c. Positron emission tomography (PET)/CT scanning

PET, used primarily for diagnosis and staging, and treatment planning of cancer has become much more available and widespread over the last 5 years. While quite sensitive, the procedures lack fine spatial resolution and anatomic detail. As a result, there has been an introduction of a hybrid nuclear medicine/diagnostic radiology instrumentation known as a PET/CT scanner which produces fused images, incorporating the benefits of each technique. Presently, there are no obvious additional serious patient protection issues, but there are issues about developing the appropriate quality assurance programs and appropriate referral justification.

Recommendation for imaging technologies: Some of these technologies have the potential for dose reduction while other will cause an increase in patient dose. The Panel recommends that research projects (or analysis of current research) be encouraged on the evaluation of absorbed dose, optimization of protection and dose management.

4d. Intensity modulated radiotherapy (IMRT)

Intensity-modulated radiation therapy refers to variation in the radiation beam as the beam is rotated about the patient. The aim is to be able to deliver higher doses to tumour tissues while sparing the immediately adjacent normal tissue from receiving high doses, close to the doses in target tissues. Unfortunately, the procedure also delivers significant doses to a larger volume of normal tissues compared to previous techniques. This raises concern about the possible increased risk of secondary tumours in those patients who are cured.

Recommendations: This technology should only be used at sites with personnel who have significant conformal radiotherapy experience. The Panel recommends that research projects (or analysis of current research) be encouraged. There should also be evaluation of incidents and accidents associated with these new technologies.

General recommendations: Due to the fact that all of the above are fast developing technologies, it is critical to provide rapid dissemination of appropriate guidance.

5. Quality management

Quality management is very important in improving and maintaining patient protection. The Panel highlighted some tools that it believes should be included.

5a. Quality Control of equipment

There should be development of international standards for equipment QC (acceptance and constancy) standards for equipment with the hope that local governments would accept these rather than having local criteria.

Quality audit:

The establishment of a comprehensive quality assurance program in diagnostic imaging and radiation therapy departments is considered a requirement by the BSS. As part of this, a quality assurance program incorporating regular audits for its operation and the performance both of the overall system and of the individual components serves to identify and implement improvements in a systematic way.

Recommendation: Dosimetric intercomparisons, or wider external audits, have been shown to be effective in improving quality. It is recommended that each centre should participate regularly in such exercises. These external audits should be coordinated at the international and national level to prevent unnecessary duplication.

5b. Diagnostic reference levels (DRLs)

There is often a wide variation (up to an order of magnitude) in the absorbed dose for identical examinations.. Implementation of reference values has been shown to result in significant dose reductions.

Recommendation: There should continue to be strong emphasis on continuous development and application of reference levels in both diagnostic radiology and nuclear medicine.

5c. Standard operating procedures (SOPs)

Growing complexity of medical equipment and examinations requires the use of standard operating procedures. Written operating procedures for each piece of equipment and procedure are a very important element in protection of the patient.

Recommendation: There should be emphasis for all facilities to have equipment and procedure- specific Standard Operating Procedures (SOP). Special emphasis should be given to SOPs for paediatric applications.

5d. Referral criteria

Many professional societies have developed referral or appropriateness criteria which are an aid for referring physicians and practitioners to help in determining whether a specific diagnostic examination is generally indicated for various clinical conditions.

Recommendation: The Panel strongly encourages use of referral criteria in both education and practice settings. The Panel does not feel a need to develop new criteria but rather provide links to existing criteria.

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Maintenance: The absence or poor performance of equipment maintenance programs continues to constitute the main problem in many of the hospital-based diagnostic imaging departments and radiation therapy centres worldwide.

Recommendation: Those responsible for the facilities and the persons in charge of their maintenance and operation must have adequate training in elements of radiation protection so as to avoid such effects.

6. Regulation

There currently exist various regulations concerning radiation protection of the patient. Some countries have little or none while others have several years of experience with the BSS. The Panel discussed the efficacy of regulatory approaches to radiation protection of the patient. It was generally felt that prescriptive and purely regulatory approaches have not been very successful. Approaches that have involved professional societies appear to have worked better.

Recommendations:

- a. The revision of the BSS should be done with the appreciation and recognition of differences in the responsibility for patient protection (risk management structure).
- b. Minimal competence for patient radiation protection at various levels of responsibility should be defined and required.

7. Assistance

The Panel reviewed information presented on dose and peer review programs from the IAEA. These included an active program in radiation oncology and developing programs in nuclear medicine. The program in radiation oncology includes a part on dosimetry audits for many institutions as well as visits if there are persistent inexplicable discrepancies in dosimetry results.

Recommendation: The Panel felt that the dosimetry audit and dosimetry discrepancy visit programs by the IAEA are extremely valuable and should be continued. Relative to the peer review program, the Panel felt that the practice audit concept was excellent and has been very successfully conducted in some countries by professional societies. The Panel questioned whether there would be better acceptance if professional societies were involved in evaluation of medical practice rather than the Inter-governmental organisations.

8. Miscellaneous

The Panel identified several additional topic areas for

specific consideration. They are listed here in order of priority.

8a. Software

Software has become a critical element in medical applications of radiation. In the past, software failures and errors in radiotherapy have resulted in patient deaths. Recent application to diagnostic images has generated unforeseen problems as well as some opportunities.

Recommendations:

- a. Dose data is available on most digital imaging equipment. The Panel recommends that the data be linked or stored with the digital image.
- b. Stored dose data should be included in picture archiving systems (PACs or RIS), and methodology/software available for retrieval and evaluation as a QA tool.
- c. Computer assisted diagnosis (CAD) is becoming important for both mammography and lung nodule detection. It is recommended that CAD be recognized as a future potential area of interest.

8b. Cost effectiveness

The Panel had hoped to use such information to be able to help prioritise its work. The conclusion was that evaluation of cost-effectiveness on a global or international scale could not be done because of intrinsic differences in countries and institutions.

8c. Ethical issues

There are a number of emerging ethical issues in radiation protection of the patient. These include, for example, biomedical research and medico-legal examinations.

Recommendation: The Panel does not recommend any specific action at this time other than recognition of the issues and surveillance for potential future action.

8d. Second-hand equipment

The Panel previously felt a need for appropriate guidelines for second-hand diagnostic radiology, nuclear medicine or radiotherapy equipment that is donated or otherwise transferred between countries to assure that the quality is sufficient for patient protection.

Recommendation: The Scientific Secretary will have the document reviewed by some experts. Reviewers should include WHO, PAHO, IEC, possibly NGO's and potentially others. After a mature draft is available, it may be placed on the website for additional comment before finalisation and promulgation.

Other documents considered

A number of documents and training CDs in progress were discussed by the Panel. These included:

1. Radiation protection aspects in computed tomography colonography (virtual colonoscopy).

2. Radiation protection aspects in cardiac computed tomography.
3. Safety report on release of patients after radionuclide therapy.
4. Strategies for patient dose reduction in diagnostic radiology and their financial implications.
5. Draft recommendations on interconnectivity, display and recording of dose related information for digital radiological equipment.
6. The Acquisition and Use of Second-Hand Equipment in Diagnostic and Therapeutic Radiology Departments of Developing Countries.
7. Training CD on Radiation Protection in Cardiology.
8. Training CD on Accident Prevention in Radiotherapy.
9. Training CD on Radiation Protection in Digital Radiology.
10. Training CD on Radiation Protection in Computed Tomography.

Most of these documents are at the advanced stage. Since the time available was not sufficient, the Scientific Secretary should obtain comments from related professional societies and international organisations and finalise the documents.

Conclusion

Medical radiation is, by far, the largest man-made source of radiation. It is an order of magnitude greater than nuclear power, research and accidents combined. Billions of

medical radiation procedures are conducted each year. The risks range from trivial to serious depending upon the specific procedure. In spite of this, the benefits substantially outweigh the risks.

Medical uses and doses continue to grow rapidly as a result of expansion to developing countries, new technologies and expanded use of existing technologies. These factors have created new challenges that must be met to assure that patients are adequately and appropriately protected.

Many actions and issues have been listed in this report without identifying the actual implementation responsibility. The Secretariat should contact participating organizations wherever necessary to decide and allocate the responsibility.

Future Meetings and Conference

The Steering Panel did not schedule a future meeting.

The Malaga 2001 international conference provided the basis for development of the initial International Action Plan for the Radiological Protection of Patients. The Panel discussed the potential need for a future international conference and concluded that, due to rapid expansion of medical uses around the world as well as extensive changes in technology, an international conference is necessary. This would preferably occur in 2009 or earlier. Such a conference would not only identify the changes that have significant impact on the radiation protection of patients but would also be useful to provide feedback on current issues to countries around the world. □

A Northern Canada Experience

A lecture presentation by Carol Ann MacNeil

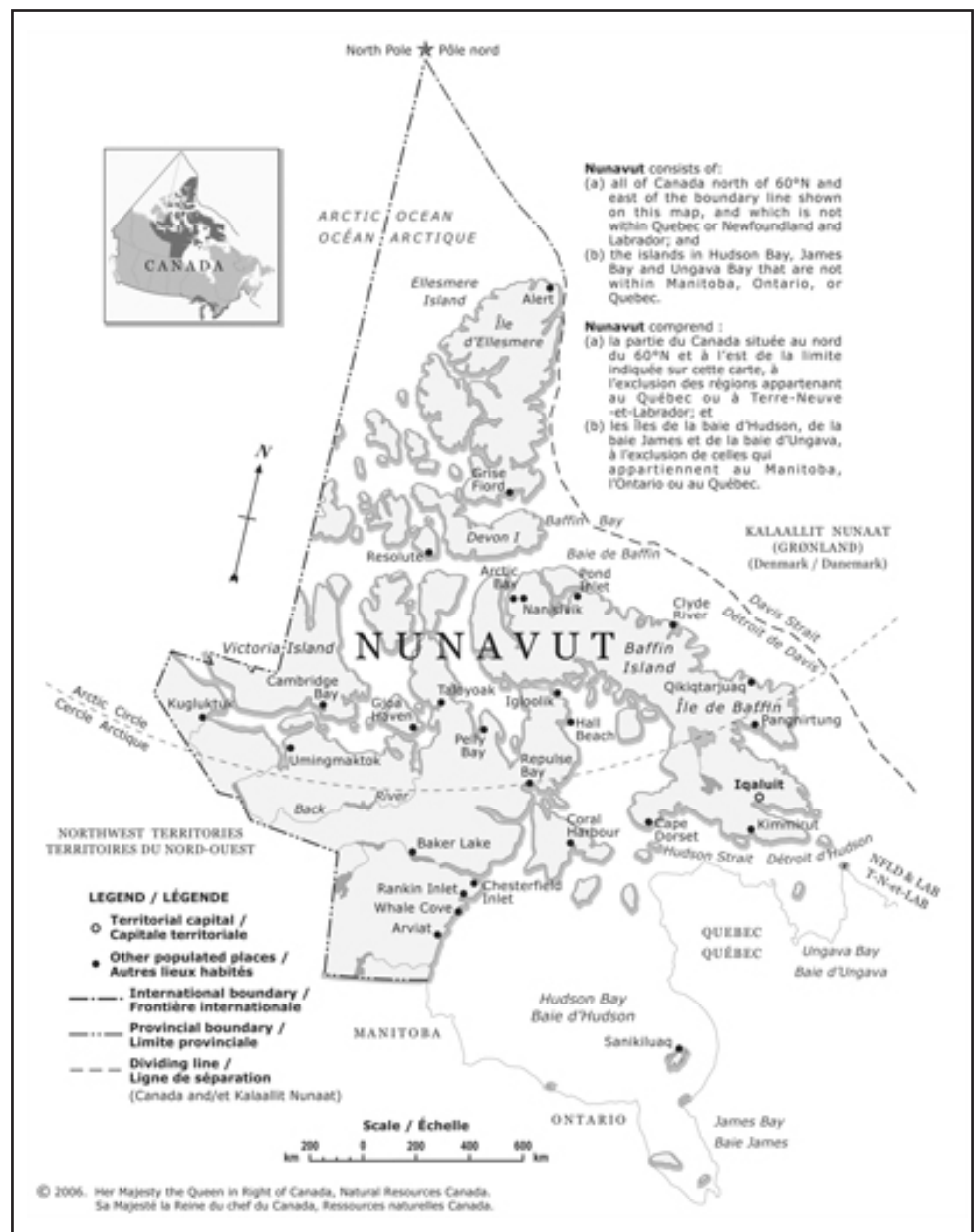
This is a summarised and edited version of the Welch Memorial Lecture presented at the 2006 CAMRT Annual General Conference by Carol Ann MacNeil, RTR, RDMS, currently the Manager of Diagnostic Imaging at the Baffin Regional Hospital in Iqaluit, Nunavut, in Northern Canada.

IN Nov., 1999, I agreed to go to Iqaluit, Nunavut for just 3 weeks to help out. Seeing the need there, I then requested a 4 month leave of absence from my job in St. John's Nfld, which I later extended to 1 year, then a 2nd year leave and by the 3rd year, I resigned my position in Nfld.

I now live in Iqaluit, Nunavut, located approximately 2000 kms north of Ottawa, with a population of 7000. Nunavut is located North of the 60th parallel, above the tree line, represents 20% of the land mass of Canada, has only 128 km of roads, and has a population of 29,500 people of which 85% are Inuit. Iqaluit consists of the tundra with NO trees and only low growing plants and rolling hills. Temperatures in winter can dip down to minus 54°C and a wind chill of minus 69°C. Blizzards can suddenly erupt, yielding winds up to approx. 100 kms/hour. In the summer, there might be a couple of days where the temperature reaches plus 25°C but there is no need for air conditioners!

Nunavut is also known as the "Land of the Midnight Sun". In Iqaluit, around the summer solstice, there is approximately 21 hours of sun. Conversely, around the winter solstice, there is approx. 20 hours of darkness. Cold, dry winter nights often yield beautiful Northern Lights dancing across the sky.

Inuit stands for "the people" who have lived in Nunavut



for more than 4000 years. They are loving people, often addressing each other with a handshake upon meeting. They often answer with their eyes, opening their eyes wide

indicating a “yes” answer, and squinting their eyes and nose indicating a “No” answer. The elders are especially respected and are often sought for advice.

Outside of Iqaluit, a large percentage of the Inuit choose to live on the land in “outpost camps”. They continue to hunt Polar bears, Caribou, Walrus, Seals and whales and fish for Char. There is no wastage. The fur is used for clothing and blankets, caribou antlers, ivory from the walrus & narwhal, and the polar bear teeth and claws are used for carving while the harp seal are fed to the dogs. Dog Mushing, camping, boating and hunting also capture the tourism market.

The Inuit are well known for their art, sculptures and prints, and although they didn’t produce art prior to the 20th century, they have certainly mastered various art forms.

The only way in and out of Iqaluit is by air. The Iqaluit airport is painted a “school bus yellow” because it is a color that does not fade as fast with all the daylight hours. 120,000 passengers went through the airport in 2005. The runway is one of the largest runways in North America. The largest freighter, the Antonov, arrived in 2005 carrying a helicopter for cold weather testing. 2006 brought the arrival of the largest passenger carrying airplane in the world, the double decker airbus A380, also for cold weather testing.

At present the 19 bed Baffin Regional Hospital, BRH, which opened in 1965, is the only Hospital in Nunavut and serves 12 communities with a new extension of 35 beds to be completed in 2007. Currently BRH provides a Mental Health room usually occupied due to the high suicide rate and domestic crises often alcohol related. There is an Isolation room for TB cases as TB is still prevalent in Nunavut despite the stringent TB program in place. Meal and taxi vouchers are given out to encourage residents to have chest x-rays and sputum tests while school age children are given movie passes at the end of their treatment. The major housing shortage and lack of proper

nutrition are the major factors contributing to the TB problem. It is not unusual to find 23 plus people, consisting of 50% or more children, sharing a 2 or 3 bedroom house!

There is a palliative care room usually occupied by patients with end stage COPD or Lung Cancer. 70% of the population smokes and yet the Government has successfully enforced the “No Smoking” ban in all public places in Iqaluit. There are also pre and post surgery, medical, post partum and two birthing rooms with the birthing average being one baby per day. There is one ICU room and a Paediatrics Ward that is opened when there is enough staff available to run it.

The OPD/ER area provides emergency and walk in services. Due to the high pregnancy rate, there is always a Physician assigned to OBS call. Specialty clinics, such

as Orthopedics, Urology, Obstetrics/Gynecology, ENT, to name just a few, are held three times a year and run by Specialists from the south.

There is an OR, Pharmacy, a full service Medical Laboratory, and, of course, Diagnostic Imaging which provides X-ray, Ultrasound, EKG, Holter Monitor and Event Recorder services.

In 2002, I spent 10 months travelling with a portable ultrasound unit to all of the Northern communities outside of Iqaluit. Besides providing a wonderful experience of seeing all of the north, it saved the Nunavut Government approx. \$750,000.00 in medical travel expenses. It is so much cheaper to send a technologist out to the people. I remember well my first trip which was to Artic Bay where the only highway in Nunavut exists. After landing in Nanasivik, the local taxi, a large van with passengers packed in like sardines, drove to Artic Bay along this highway which was a long, winding, narrow road through the mountains.

The old, heavy portable ultrasound unit that had travelled the North is now retired and we are waiting for approval from the government to purchase a new portable to

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Article

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allow the resurrection of the travelling program which will further improve the delivery of health care to the Inuit, thus providing "Care Closer to Home" at a significant cost saving.

If you currently work in an up-to-date PACS environment you would take a step back in time if you visited our Diagnostic Imaging Department. The first thing you would notice is an old, cardex filing system. This is where we keep a file card on every patient, including patient's name, community address, date of birth, health care number, chart number, a manually assigned x-ray number and a list of procedures the patient has had in Diagnostic Imaging. We are now close to implementing a computer software program that will replace the old cardex filing system and provide the required stats. Until a couple of months ago, the technologist had to do everything starting with the registration process. Today we now have a six member team including a dual trained X-ray Technologist/Ultrasonographer Manager, a 2nd dual trained X-ray Technologist/Ultrasonographer, an X-ray Technologist, an Inuit Basic Radiography worker and two Clerk Interpreters, one in filing and one for the registration desk.

Diagnostic Imaging consists of one X-ray room with an R/F unit and one Ultrasound room. There is a 501 Konica Automatic Processor with a smaller Konica 101 automatic processor for back-up for ourselves, or to send out as a loaner to a Community when their processor breaks down. There are at least seven of the Communities in the Baffin Region still manually processing films. The remaining four communities have the Konica 101 automatic processors installed. The other day one of the seven communities still manually processing films was told that an automatic processor for them was a priority item in this year's budget. Imagine my

surprise when told that she was disappointed as she loved that five minutes in the darkroom alone, where no one could get her, she wouldn't take phone calls in there – it was her five minutes of peace in the day! This may give you an idea of just how busy we are in the North with our under staffed health services.

Eight communities still use the old Porta Ray portable x-ray unit for taking x-rays. We have managed to put the newer Dyna-Rad in three communities, and priority items for this year include automatic processors and newer portable units in all 11 communities in Baffin! This is a big step forward for us in the North while most of you are contemplating improvements in your current PACS environment. Our PACS in the North consists of taking a picture of the x-ray with a digital camera on a floppy disc and sending it as an attachment to an e-mail. The resulting images aren't too bad! This is done only for a bad fracture or a suspicious chest x-ray that needs immediate input from the specialist. We, too, hope to one day have PACS in the North, but right now there are bandwidth issues. We receive everything via Satellite.

The new hospital will provide us with an extra x-ray room, a new Mammography program, a new C-arm portable fluoroscopy unit, and will have a room ready in the event that we may one day acquire a CT scanner.

In Iqaluit, we work without a Radiologist on site. Although we are not trained to diagnose, the doctors will often ask us to prove an impression of our ultrasound or x-ray to aid them in their clinical diagnoses. A Radiologist from Ottawa comes to Iqaluit every 3 months to provide a Radiology clinic, perform barium studies, read x-rays and ultrasounds and to actually perform ultrasound to help us catch up. All x-rays and ultrasound studies are sent via Air Cargo to the Radiology group in Ottawa twice a week for reporting.



Nunavut is quickly approaching a modern day society, despite its remoteness. Activities such as fishing, berry picking and hiking in summer while dog mushing, ice fishing and skidooing in winter, keep us by outdoors, or we can choose indoor activities within our community, who is our family away from home because of the isolation.

Things I love about the North are the people, the sky and the daily challenges with which I am presented. To live in the North, one has to be adaptable and flexible. Finally, I'd like to leave you with some thoughts of the North to ponder:

When I leave Iqaluit each time to go South, I look forward to fresh consumables, such as fresh fruit and vegetables, a diet pepsi that is not a year old, to pay \$2.00 for a hamburger instead of \$15.00, to have a choice of variety, to pay \$0.59 for bananas instead of \$1.72 per pound, but

then in the South, I am less likely to run into celebrities such as Jason Priestly, Kevin Spacey, Reese Witherspoon, Brooke Shields, Arnold Schwarzenegger, to name just a few. I wouldn't be able to visit the airport and see the band Cold Play, or see such political leaders as Nelson Mandela and the President of Uganda.

I believe I am now in a place where I am truly needed and certainly feel very appreciated. We provide stand-by, call-in services after regular hours and on weekends. One gets tired if it is a busy night, or weekend, but when you leave that call-in, and know how you contributed to that patient's care, you don't feel tired anymore. That "feel good" feeling had just been re-enforced by the other members of the Health Care team that were involved. I have truly been bitten by the North! – now a place I call "Home". □



New ISRRT President & Board of Management

At the recent World Congress held in Denver, Colorado, the Council of ISRRT, elected Mr Robert George from Adelaide, Australia as President for a 4 year term.

Mr George qualified as a diagnostic radiographer and has had a long career in management in private radiology with a very large private practice.

He is a Fellow and Past President of the Australian Institute of Radiography and has served as Australian Council member and ISRRT Regional Director and Vice President for the Asia/ Australasia Region. His daughter and son are also diagnostic radiographers.

He brings to the position, significant management experience and a commitment to work with the new Board and the Council members to ensure the relevance, role and structure of the Society to meet the needs of the profession into the future.

The new Board of Management of ISRRT is:

President -	Mr Robert George, Australia
Treasurer -	Dr Tyrone Goh, Singapore
Vice President for The Americas -	Mrs Patricia Johnson, Barbados
Regional Director for The Americas -	Dr Michael Ward, USA
Vice President for Asia/Australasia -	Dr Maria Law, Hong Kong
Regional Director for Asia/Australasia -	Mr Robert Shen, Taiwan
Vice President for Europe/ Africa -	Mr Stanley Muscat, Malta
Regional Director for Europe/Africa -	Mr Caesar Barare, Kenya
Director of Education -	Ms Cynthia Cowling, Australia
Director of Professional Practice -	Mrs Päivi Wood, Finland
Director of Public Relations -	Mrs Fozy Peer, South Africa
Secretary General -	Dr Alexander Yule, UK
The Society Web Site -	www.isrрт.org

Contact details for the above ISRRT Board of Management are at the back of the newsletter.



From the left:

Sandy Yule, Cynthia Cowling, Päivi Viljanen-Wood, Maria Law, Robert George (President), Robert Shen, Michael Ward, Patricia Johnson, Stanley Muscat, Fozy Peer, Tyrone Goh.

Inset: Caesar Barare.

CAMRT Life Member

May Jon Lachance, RTE, ACR, MBA, CHE

The CAMRT is pleased to confer Life Membership on Mary Jon LaChance, RTE, ACR, MBA, CHE

AFTER graduating from the Radiography Program at St Mary's General Hospital in Kitchener, Ontario, May Jon Lachance joined the staff at St Mary's Hospital where she worked for eleven years as a general technologist and then as clinical instructor. In 1977 she moved to Peterborough, Ontario where she worked as a vascular special procedures technologist at the Peterborough Civic Hospital for almost three years. She then accepted a position as Chief Technologist and later as Technical Director of Medical Imaging – Radiology at St Thomas-Elgin General Hospital in St Thomas and managed the department for sixteen years. Following a three-year hiatus and with the realisation that retirement at the age of 50 is too young, Mary Jon branched out in the managerial field and joined Cancer Care Ontario as Manager of the Radiation Therapy Recruitment Program. This specially funded program extended to five years, after which she retired for a second time in 2004.

Throughout her career, education has been very important to Mary Jon. Following certification in Radiography, she obtained a “Teachers of Adult” Certificate, a Canadian Hospital Departmental Management certificate, CAMRT Advanced Certification, Quality Control certification, a Bachelor of Administration (Health Services), an Executive MBA, and finally a Certified Health Executive certificate with the Canadian College of Health Services Executives. Wedged in between were numerous conferences and courses.

Mary Jon has supported her profession and professional associations at the provincial, national and international levels throughout her forty-year career. She has been President of the OAMRT, the Ontario Association of Radiology Managers and the Canadian Radiation and Imaging Societies in Medicine, Vice President and Treasurer of the CAMRT and a board member of the International Society of Radiographers and Radiological Technologists. In addition, she has served on numerous committees. She has also written several discussion papers which have influenced the direction of the profes-



Mary Jon LaChance, left, with her Life Member Award from CAMRT with CAMRT President Melanie Hilkewich.

sion or the association, most notably “The Case of Magnetic Resonance Imaging” which led to the recognition of MRI as a separate discipline, and “Opening Doors: Leading the Way” which prefaced new and revised CAMRT membership categories. It was during her term as President that technologists in Ontario were first permitted to inject contrast media. She designed the logo for the Ontario Association of Radiology Managers.

Mary Jon has received several honors and awards for her contributions to the profession. She received the Ken Turnbull Award for outstanding service to the OAMRT in 1995 and delivered the Mary F. Cameron Lecture in 1996. The OAMRT awarded her an Honorary Life Membership in 1997.

After retirement, Mary Jon got married and she and her husband Ron reside in Kitchener, Ontario where they enjoy golfing, gardening, travelling, the family, the cottage and the sunny south in winter. □

The ISRRT Dien van Dijk Award

FOLLOWING suggestions from Members and after considerable discussion over the last 2 years, The Board of ISRRT, at it's recent meeting in Denver, agreed to the establishment of an Award to recognise the contribution of individual members of the ISRRT who have shown exceptional service and commitment to the ideals espoused by the founders of the Society.

This Award will be named in honour of the founding President of ISRRT, Dien van Dijk.

The criteria for the Award follow and are also available from the ISRRT web site - www.isrrt.org

I apologise that, due to an oversight, the announcement of the establishment of the Award was omitted from the Council Meeting Agenda in Denver, however I feel sure that you will agree that the work of individuals who contribute significantly to our profession at an International level should be recognised.

In establishing the criteria for the Award, the Board wanted all members of the ISRRT family to have the opportunity to nominate persons they feel meet and put into practice the ideals of our Society and thus set a further example for us all to follow.

I commend the Award to you and ask you to read the criteria and consider worthy candidates for nomination at the appropriate time.

Robert George
President, ISRRT

This award was approved by the Board of ISRRT in 2006, and is to be awarded only at a World Congress, and only with the unanimous agreement of the Board of Directors of the ISRRT. There will be a maximum of one Award at each World Congress and the Board reserves the right to withhold the Award.

This award is in honor of the contribution of Dien van Dijk, one of the founders of the ISRRT who, in 1962, became the first President of the ISRRT. The objectives 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 recognise 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. Recognized activities which reflect the founding principles of the ISRRT

* Assistance in the education of radiographers

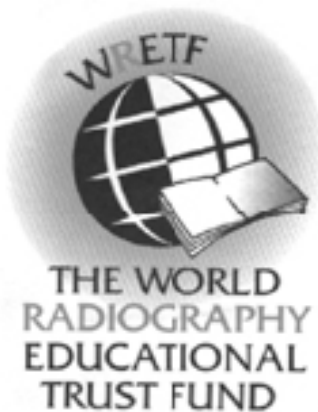
* Assistance in the development of the profession of radiography or radiation therapy in several countries.

Nominations may be made by any Council or Board member, or any individual of a Member Society of ISRRT. A citation outlining the nominee's service and suitability for the Award is to accompany the nomination. Individuals nominated must meet ALL criteria.

Nominations are to be received by the Secretary General no later than 90 days preceding the Council Meeting of the World congress who will then convene and ex - Officio Chair a Committee of Recommendation composed of a Council representative from each of the Regions to review the applications received, ensure they meet the criteria, and make recommendations of individuals for consideration by the Board of Directors .

The Award winner must be unanimously agreed by the Board of Directors.

The Award will be made at Congress Banquet.



The World Radiography Educational Trust Fund

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THE TRUST IS ADMINISTERED BY THE FOLLOWING TRUSTEES

Mrs G. van der
Heide-Schoon
Mr W. Charlesworth
Mr S. Eustace
Mrs N. Kolmannskog
Miss A. Paris
Mrs J. Rouse
Mrs D. Zerroug

A message from the Hon.Treasurer

We are very sorry to report that Dr Alan Regisford is resigning from the post of Hon. Secretary of the trust. During his time as Hon. Secretary he has worked actively to help countries and individuals requesting grants and has recently sought to establish a collaborative partnership with the four countries, Ethiopia, Nepal, Indonesia and Cameroon that the Trustees selected for special help for this year.

The Trustees have approved an application for purchase of textbooks for the 4th workshop in French Africa organised jointly by the French association of radiographers and the Benin society.

Earlier this year the Trustees approved the purchase of 55 copies of the 12th edition of Clark's Positioning in Radiography. We aim to distribute these to schools of radiography and hospital departments. If your department does not have access to a copy of this excellent book please make an application to us.

What is the connection between the WRETF and the ISRRT?

The WRETF was set up by the Board of the ISRRT in 1967 and was registered as an independent Charity in the UK in 1977. The E.R. Hutchinson's Book fund is placed under WRETF and is managed by the Trustees .

The Trustees are appointed by the ISRRT Board of Management and the Secretary-General of ISRRT attends our Trustee meetings as an independent observer.

We rely for a large part of our income on the extra donation member societies of the ISRRT and individual associate members make when they pay their ISRRT subscription. This money is then transferred to us. It has become noticeable in the past five years that we are receiving fewer donations.

We ask you to remember that WE are YOUR charity. Since I have been associated with the WRETF we have given textbooks or grants for other purposes to radiographers and radiologic technologists in over 28 countries overseas as well as supporting several international workshops.

The WRETF would like to thank the following radiographers and member societies who have given donations in 2005 and 2006.

- | | | |
|---------------------|-------------|--------------|
| • Trinidad & Tobago | Jean Laburn | Ms Lerma |
| • Norway | P. Ducker | A. Patterson |
| • Macao | | |
| • Philippines | | |

Africa

Nigeria



The Radiographers Registration Board of Nigeria led by the very reliable and intelligent Mr R.S.J Babatunde has done wonderful things in the Radiography Profession in Nigeria. This year, we have had CPD courses in Ultrasound, CT, management and pattern recognition. These courses have allowed radiographers the opportunities to acquire latest developments and also socialise with colleagues from other hospitals and industries.

In June, there were over ten radiographers from Nigeria who attended the UKRC in Birmingham, this helped to improve international relationships.

Nigeria was also represented at the last ISRRT congress by Mrs Goyea from LASUTH, Council Member Sumbo Oyedele and Mrs Gladys Odunlami who flew in from the UK. The ISRRT congress in Denver Colorado was an awesome experience and will be remembered for a long time.

We are happy to note that as from the last board election it was Africa is now being represented, we hope for more representation in the future.

It is also very exciting to know that the next ISRRT congress will be in South Africa in 2008, we expect all our colleagues to prepare to be there to support South Africa.

The annual conference of the Association of Radiographers of Nigeria will be held in the city of Enugu from November 22nd-25th 2006, the theme of the conference is "Effective Reproductive Health through radiography". It is our hope that Radiographers will give educative and knowledgeable papers. Our colleagues from other African countries are welcome at this conference.

Sumbo Oyedele,
Council Member

South Africa



The 24th International Congress of Radiology is scheduled for 12-16 September 2006 in Cape Town. The Society of Radiographers of South Africa is hosting the radiographic component on behalf of the ISRRT at this congress.

This is the first 'joint' congress of radiology and radiography in South Africa. A bumper scientific program promises something for everybody. The ISRRT tract concentrates on topical radiographic issues such as role extension, radiography training, ethics in radiography.

Check it out on www.isr2006.co.za.

Preparations for the 15th ISRRT World Congress, 'Inter-

weaving Global Images' that is to be held in Durban from 24-27 April 2008 are well under way. A professional conference organiser has been appointed. The 1st announcement is available on www.sorsa.org.za or www.isr2006.org.

The profession is looking at extending the role of radiographers. Some role extension workshops have been held. This will be discussed further at the ISR congress in September 2006.

The re-curriculum of the radiography courses to meet the needs of the country are at an advanced stage. Professional, masters and doctorate degrees for all radiographic disciplines are included in the new curricula. The proposed qualification will be a 480-credit (4 year) professional degree qualification for all 4 radiographic disciplines with an early exit-level at 240 credits (2 years) for Diagnostic Radiography. A post-qualification certificate course of 120 - credits in Ultrasound is also being considered.

Mandatory CPD for Radiographers will be effective from 1 January 2007. CPD in South Africa is set to evolve from 'passive to active learning with increased reward for active learning associated with measurable outcomes'.

Fozy Peer
Council Member

The Americas

Canada



ISRRT 14th World Congress

There were 26 CAMRT members present at the recent ISRRT 14th World Congress held in Denver, Colorado. The CAMRT President Ms Melanie Hilke-wich, was a presenter at the Congress. The Congress was held in conjunction with the American Society of Radiologic Technologists and was truly an event to remember. Western hospitality was at its maximum and lecture topics dealt with professional challenges from a global perspective and centered on the preparation of graduates to meet the needs of the 21st century healthcare environment. Speakers from the UK, United States, Australia and Canada provided presentations on further evolvement of the Advanced Practice level technologist in their respective countries. Two days prior to this ISRRT World Congress each of the three Regions met individually, and then the entire Council. This was my second Council meeting to attend and my first experience in an election of ISRRT Board Members. Council meetings certainly allow the opportunity to gain a broader perspective and grow in the understanding of issues that exist in other parts of the world. We gain as much knowledge from fellow Council members representing Society partners as we do from the World Congress. Thank you to the ISRRT and ASRT Congress organisers for a job well done.

What is Happening in Canada:

1. The Canadian Association of Medical Radiation Technologist's Office relocated to a new address in Ottawa in January, 2006. The new address is the 10th floor of 85 Albert St. We have had some changes in personnel at our central office. Mr Charles A. (Chuck) Shields, Jr. is our new Executive Director. He began in this position in March of this year.
2. The 64th CAMRT Conference took place June 22-25 in Calgary, Alberta. Over 750 Medical Radiation Technologists were in attendance, and, I am so delighted to say, the ISRRT Secretary General, Dr Alexander Yule, with his lovely wife Alison, graced us with their presence as well. The aim of this conference was both educational and scientific with eight parallel tracts running for the three days – Radiological Technology, Radiation Therapy, Nuclear Medicine, Computed Tomography, Magnetic Resonance Imaging, Mammography, Leadership/ Management, and Instructors. Every lecture presented was of excellent calibre with esteemed speakers covering topics related to our changing practice and our technology. Presentations included everything from intra-operative MRI with surgical robotics, Tomosynthesis Mammography, PET/CT updates, and the setting of standards in Medical Radiation Technology- and whose responsibility is it? The Welch Memorial speaker, Carol Ann MacNeil, gave an enlightened overview of working and living in Canada's north. This presentation was a real eye-opener to those technologists now accustomed to working with leading edge-technology. Carol Ann described her PACS (her using a digital camera to take pictures of x-rays, and her absolute go at the very recent conversion from wet-film processing to an automatic unit. At the closing banquet, Melanie Hilkewich was once again sworn in as this next year's President of the CAMRT, Shirley Bague the Vice President, and Fiona Mitchell the once again our Treasurer. In the February 2007 newsletter I will have a more complete write-up with pictures of this fantastic Conference. Our next CAMRT Annual Conference will be held in our beautiful national capital, Ottawa in June 2007. The 65th Conference of the CAMRT promises to be an event well worth attending. I hope all who read this report will plan to be there. I guarantee you, you will be glad that you did!
3. Advanced Practice applications for Canadian technologists was certainly an area of great interest at the Calgary CAMRT Conference. In the Fall of 2004 the Ministry of Health and Long Term Care had granted the Ontario Radiation Therapy Advanced Practice (ORTAP) group funding for a pilot project to field test some advanced roles in the province of Ontario. This AP4RT Project's main goal was to critically assess the creation and pilot testing of 5 different Advance Practice roles for Radiation Therapists in order to ascertain if the augmentation of their scope of practice could help alleviate specific systemic pressures in the delivery of timely and effective radiation treatment. Members for the ORTAP group provided an excellent overview of the results of this pilot project. Their study had included the feasibility of the advanced roles as well as the necessary education and support each role will require. As a result of their hard work in this project, the Ontario Minister of Health proclaimed the creation of the "Clinical Specialist Radiation Therapist" in May of this year. During the Calgary Conference as well, discussions took place with the CAMRT and the Canadian Association of Radiologists (CAR) regarding the need to re-look at the expanded roles for Radiology Technologists.
4. A Situational Analysis and Recommendations for Internationally Educated Medical Radiation Technologists- this is a project funded by the Government of Canada's Foreign Credential Recognition Program the CAMRT launched in June 2005. The objective of this program is to improve access to the certification examination for internationally educated MRT's. Data has been collected on the Canadian MRT work force as well as information on the education and licensing requirements for internationally educated MRT 's desiring to work in Canada. A nation-wide staffing survey is also being conducted to determine MRT vacancy rates and MRT demand in the work places. This audit will also identify barriers experienced by internationally educated MRT's accessing the CAMRT exam with the intention to provide more support the internationally educated candidates.
5. CAMRT Strategy for Entry-to-Practice Credentialing: The CAMRT believes and continues to advocate for a degree as the entry-to-practice requirement for MRT's. However having a deadline has not served a useful purpose in the current environment due to several restrictive occurrences that the CAMRT had had to deal with the last few years. The Committee on Degree Implementation requested that our Board consider removing the deadline date. The result of this is that all graduates of CMA accredited MRT training programs, degree or diploma, will have access to the CAMRT certification examinations.
6. The CAMRT is in the process of revising all Competency Profiles for all four disciplines to ensure learning outcomes that are reflective of current practice and promote best and safe practice. The proposed date for implementation of the profiles for use for certification exam development is September 2010.
7. The CAMRT certification examination process is undergoing major revisions as a result of the CAMRT 's Board of Directors wise decision to increase the professionalism of the certification examinations. The May, 2006 Radiological Technology exam was the first one utilizing the new process. The other disciplines of Nuclear Medicine and Radiation Therapy will follow suit shortly.
8. In terms of continuing educational opportunities, there is a Specialty Certificate in CT Imaging (CTIC) for all technologists and therapists practicing in CT and CT Sim. The CTIC will be expanded to include PET/CT for September 2007. At this time this certification course is not available in French so this has been highly recommended. We are also realizing the necessity for the development for CAM-

RT course related to PACS. There are some provinces that have already implemented such courses but this is of vital importance at a national level as well.

Rita Eyer,
CAMRT Council Member

Asia/Australasia

Australia



The Australian Institute of Radiography has begun the year with a continuation of the focus on further developing a professional profile.

The 3rd Australian Scientific Meeting Medical Imaging and Radiation Therapy (ASMMIRT) was held in Hobart, Tasmania in April, 2006. It proved to be very successful with a number of international speakers, and approximately 600 registrants from both Australia and overseas. At this meeting the Professional Advancement Working Party presented a report on their deliberations regarding the possible ways forward for the profession suggesting there be three levels of practice:- accredited practitioner, advanced practitioner and consultant practitioner.

The Competency Based Assessment review was completed early in 2006 and the Professional Accreditation and Education Board presented a workshop at the Hobart conference and state-based training of assessors has occurred.

Mr Chris Whennan, board member from Western Australia was elected to the position of President of the AIR at the April Board Meeting in Hobart. The next ASMMIRT conference will be held in Perth, Western Australia from March 8-11th 2007, and we would like to invite all our international colleagues to attend.

I was fortunate to be able to attend the ISRRT World Congress in Denver this year along with Chris Whennan, AIR President, and Emile Badawy, AIR Executive Officer. I would like to congratulate all those successful in gaining positions on the Board of Management and regional coordinator positions, especially to Robert George as incoming ISRRT President.

My personal thanks to Council members from the Asia/Australasian region for electing me to the position of Regional Coordinator for Education. I hope to hear from you with suggestions for seminar projects within the region.

Pam Rowntree
Councillor, Australia

New Zealand



I hope you have all had a productive year so far and are looking ahead to the challenges of the remaining year. I enjoyed meeting with many of you in Denver.

During the previous six months there

has been activity in the following areas:

- Further progress has been made on the project looking into role expansion in NZ. To date questionnaires have been sent out to practicing MRT/RTs to gauge their response to the issue and the results demonstrate a strong desire for role expansion opportunities across all modalities. Questionnaires are being developed for Radiologists and Oncologists to assess their perspective on this issue. In 2006 a number of pilot studies will be undertaken to identify benefits and issues associated with role development.
- The NZIMRT have committed to supporting celebrations of World Radiography Day on the 8th November 2006 around the country.
- We have been working on increasing the number of ISR-RT Associate members within the Institute and have managed to raise this from 13 last year, to almost 100 this year. We are continuing to actively promote the activities of the ISRRT.
- The NZIMRT will be holding its next conference in Wellington from the 17th-20th August 2006 This is sure to be an exciting and varied programme as usual.

Please go to the NZIMRT website to check out information on the following: professional updates, upcoming conference information and Continuing Professional Development material. www.nzimrt.co.nz

If you can make it to NZ for the August 2006 conference we would love to have you.

Jo Anson

Europe

Hungary

The Society of Hungarian Radiographers held its annual delegate convention in April. The reports of the President and Treasurer were unanimously accepted by the delegates. The Treasurer announced her retirement at the end of 2006 after 14 years of dedicated work.

2006 will not be forgotten by our profession in Hungary. The first graduate class of Hungarian radiographers to receive a college degree finished their studies in June this year. Altogether, close to 50 students graduated between the two institutions, one in Pécs and the other in Kaposvár. Two thirds participated in the distance learning program, attending classes one week per month as well as fulfilling their duties at work and home. The fact that many young people chose to study Radiography after finishing their High School studies is promising for the future. The structure and methodology of Radiography training is in a transitional phase in Hungary; the fact that the popularity and prestige of the profession is not decreasing at all gives scope for the necessary changes in the near future.

The XI Annual Radiographers Congress will be held in Budapest, on September 1 & 2, 2006. The organising

news from

committee and the Society are doing its best to cater for the several hundred participants.

Following the success at the 1st Euro-Mediterranean Congress held in Malta in 2006, preparations are well underway for the 7th Central European Symposium to be held in Erfurt, Germany this coming September. Hopefully we will have about 20 delegates representing Hungary this year.

Csaba Van Dulek

Society of Hungarian Radiographers

Switzerland



The Swiss society of Radiological Technologists has seen a lot of changes this last year.

In November 2005 it was necessary to organise an urgent assembly to elect new board members. The reason for this was that two members resigned, leaving only two members on the board, which is not deemed a functional board by our Statutes. Six new board members were elected, who also turned out to be very competent in their tasks. Please visit our website to see what we look like!

We have reorganised our departments/committees in order to work together in groups of two to three, which will enable us to share our competences. We are also busy getting in touch with the official of the BAG (Bundesamt für Gesundheitswesen), who is responsible for radioprotection in the medical field in Switzerland.

Our Education committee is working on a new Professional Profile and a National Curriculum.

From 1 to 3 June 2006 we had our last annual assembly as an old-fashioned structure, since our members voted for a new form of organisation of Radiological Technologists. This means that we will no longer be Regions with Regional committees, but Sections with delegates. Sections will be more independent and sufficient. We will continue to have our annual congress with the Radiologists in June and then we will have a separate delegate assembly at the beginning of the year.

We are looking forward to a very busy semester, assisting our Regions to turn into Sections.

Our board is working very closely together with our Central Secretary Office, who supports us enormously.

On behalf of our society, we would like to congratulate all newly elected ISRRT/ECRRT board members and wish them a very successful term.

Jolanda Gabriel

obituary

Andrew C.K. Tsui

1927 – 2006

Andrew Tsui started his training in radiography when joined the Hong Kong government Medical and Health Department at the turn of 1950. After working for a few years in diagnostic radiography, he was one of the few selected to train in the UK as therapy radiographers and to start the radiotherapy service in Hong Kong. In 1957, he went again to the Hammersmith Hospital in the UK to get his fellowship in the then Society of Radiographers. Coming back from training, Andrew started the School of Radiotherapy in Hong Kong in which was the first teacher.

In early 70's, together with some colleagues, he started the Hong Kong Radiological Technologist Association, which is also a founding member of the ISRRT. After his early retirement from the Hong Kong government in 1977, he took up a teaching position in Singapore where he worked for a year or so before he returned to Hong Kong to start his radiological related business.

Andrew passed away in February this year. He will be missed by many friends in Hong Kong and around the world and we extend our condolences to his family.

coming events

2006

August 17-20
NZIMRT Conference
Wellington, New Zealand
Contact: nzimrt.co.nz

September 12-16
International Society of Radiology
Cape Town, South Africa
www.isr2006.co.za

September 14-16,
7th Central European Symposium
Congress venue: Erfurt, Germany
Contact: suehuber@gmx.de

October
4th Conference for French speaking African countries
in Cotonou (Benin)

November 22-25
Annual Conference of the Association of
Radiographers of Nigeria
Enugu, Nigeria

2007

March 9-13
ECR
Vienna, Austria

March 24-25
Breast 2007
Sydney, Australia

May 2007
Nordic Congress
Malmo, Sweden

June
CAMRT Annual Conference
Ottawa, Canada

June
ASRT/AEIRS Annual Conference
Albuquerque, N.M.

2008

April 24-27
15th ISRR World Congress
“Interweaving Global Images”
Durban, South Africa

Deadlines

The deadlines for receiving material for publication in the two issues each year of the ISRR Newsletter are January 1 and July 1.

ISRR WEBSITE

The ISRR website carries up to date addresses of all member societies. Visit the ISRR website at: www.isrr.org
Here you can find information on the ISRR and details of future meetings.

Comments on the newsletter

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

Authors Instructions

Submission details for the ISRRT Newsletter

Articles should deal with subjects of common interest to all radiographers and radiological technologists.

The Editorial Committee may decide not to publish an article if they see it not suitable to the content of the ISRRT Newsletter.

All articles must be sent in the English language. However, other languages may be considered with the permission of the Editor and her committee.



Types of articles

1. Full-length papers, with a maximum of 2000 words, on research, modern developments, historical achievements, education, management, and health and safety. A summary of about 100 words and three key words may be translated into one of the main languages such as French, Spanish, German, Portuguese, Japanese or Chinese to facilitate colleagues for whom the English language is difficult. If the article is in another language then the summary and keywords must be in English. References from books should include the surname and initials of the author(s), year of publication, book title, publisher's name, and the city and country of publication.
2. Short articles and technical notes of no more than one page including diagram, table or photograph. A summary in another language of about 30-50 words is welcome.
3. Letters to the Editor will be considered for publication.
4. News from other countries.
5. Reports of meetings.
6. Announcements of forthcoming events.

Presentation

Always keep in mind that the ISRRT journal is a "Newsletter" containing information on ISRRT activities and articles of common interest to colleagues throughout the world. Reports should, therefore, be kept short and the language easy to read.

To assist the Editor in the layout and production of the newsletter, the following format must be used.

Submission of material

Articles should be submitted in electronic form, preferably in MS Word using Times or Helvetica. All charts, diagrams, illustrations and photographs need to be saved as separate files. The author should retain a copy of the submission as the Editor cannot accept responsibility

for loss or damage. Send all submissions to either the Secretary General or the Editor. If it is not possible to send your submission via e-mail, please use discs (floppy, ZIP or CD-ROM). Contact details are published at the front of the newsletter.

Photographs, illustrations, graphs, charts & diagrams

Computer generated illustrations, graphs, charts and diagrams should be high resolution and saved as separate files (either .eps, .tiff, .PDF or .jpeg format) for publishing. PowerPoint files are not accepted. Original negatives and radiographs will not be accepted for publication unless otherwise already photographed and scanned.

Instructions for Board and Council Members

Council members are requested to send in the following information regularly.

- Short reports of ISRRT meetings and special activities in the field of medical imaging, radiation therapy and radiation protection.
- News from members countries which should have a heading containing the name of the country only, ending with the authors name and role.
- Coming events, please include any congresses, conferences and meetings which would be open to radiographers all over the world.

Advertisements

Advertisements for the *ISRRT Newsletter* and inquiries should be sent to the Secretary General (see address under ISRRT Officers of Board of Management).

Deadlines

The deadlines for receiving material for publication in the two issues each year of the *ISRRT Newsletter* are January 1st and July 1st .

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:

- GE Healthcare Ltd., Bio-Sciences, UK
- Durban Institute of Radiography, Department of Radiography, South Africa
- Shimadzu Medical Systems, Rydalmere, Australia
- Toshiba (Australia) Pty Ltd., Adelaide, Australia
- Joint Review Commission on Education in Radiologic Technology, Chicago, USA
- Agfa-Gevaert N.V.
- ELEKTA Inc, Norcross, USA

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:

ISRRT, 143 Bryn Pinwydden, Cardiff, Wales CF23 7DG, Wales, UK

Title (please tick) ☐ Mr ☐ Mrs ☐ Ms ☐ Miss ☐ Dr ☐ Other

Family name(s): _____

Given Names (s): _____

Address: _____

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

I enclose payment of

Pounds Sterling	US Dollars	Canadian Dollars	Euro
<input type="checkbox"/> 1 year £ 6.00	<input type="checkbox"/> 1 year \$12.00 US	<input type="checkbox"/> 1 year \$14.00 Cdn	<input type="checkbox"/> 1 year 12 Euro
<input type="checkbox"/> 3 years £16.00	<input type="checkbox"/> 3 years \$30.00 US	<input type="checkbox"/> 3 years \$38.00 Cdn	<input type="checkbox"/> 3 years 30 Euro

I am a member of my national society which is: _____

My specialty is (please tick one or more):

☐ Imaging ☐ Therapy ☐ Nuclear Medicine ☐ Education ☐ Management ☐ Ultrasound

Signature: _____ Date: _____

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

Names and addresses of member societies and ISRRT Council Members

Australia	Australian Institute of Radiography P.O. Box 1169, Collingwood, Victoria 3066 Tel: 61-3-9419 3336 Fax: 61-3-9416 0783 E-mail: air@A-I-R.com.au Website: www.A-I-R.com.au	E-mail Soc: xtina@mega.bw <i>Council Member:</i> Mrs Avis N. C.Bareki, address as Society Email: avis@it.bw
<i>Council Member:</i>	Ms Pamela Rowntree Email: p.rowntree@qut.edu.au	Burkina Faso
Austria	Verband DRTA Österreich, Corvinusring 20 2700, Wiener Neustadt, Austria Tel: + 43 699 1749 8367; Fax: +43 2622 321 2685 Email: office.rtaustria@gmx.at Web Site: www.rtaustria.at	Association Burkinabe du Personnel Paramedical d'Electro-Radiologie S/C CHNYO (Service de Radiologie) 03 BP 7022 Ouagadougou 03 Tel: 226 33 37 14 & 31 59 90/91 Poste 506 & 590 E-mail: abpper@bf.refer.org <i>Council Member:</i> Mr Landry Power Kabore, address as Society Email: chnyo@fasonet.bf
<i>Council Member:</i>	Mr Fritz Friedl Vivenotgasse 57/13, A - 1120, Vienna Email : isrtrtaustria@gmx.at	Cameroun
Barbados	Barbados Association of Radiographers c/o X-ray Dept, Queen Elizabeth Hospital Martinsdale Road, St. Michael, Barbados Tel: 246 426-5378 Fax: 246 429-5374 Email: info@imagingandtherapy.bb Web Site: www.imagingandtherapy.bb	Association Camerounaise du Personnel Technique d'Electroradiologie Médicale B.P. 927 Yaoundé Tel: 237-2236218; Fax: 237-2222086 E-mail: czambou@yahoo.fr <i>Council Member:</i> Mr Justin Paul Charles SEE Email: justseefr@yahoo.fr
<i>Council Member:</i>	Derlwyn Wilkinson Email: bar@imagingandtherapy.bb	Canada
Belgium	Medical Radiological Technicians of Belgium, Avenue des Paquerettes, 23 B - 1410, Waterloo, Belgium Tel: 32 64 55 71 99 Fax: 32 64 55 71 99 Email: mrtb@skynet.be <i>Council Member:</i> Mr Eric Bertrand, Rue Provinciale 81, B-4042 Liers Email: ericbertrand2@tiscalinet.be	Canadian Association of Medical Radiation Technologists, 10th Floor, 85, rue Albert Street Ottawa, ON K1P 6A4 Tel: 613 234-0012; Fax: 613 234-1097 Email: dgallagher@camrt.ca Web Site: www.camrt.ca <i>Council Member:</i> Rita Eyer Pt. 1110-234 Ronald Street Winnipeg, Manitoba R3J 3JR, Canada Email: jreyer@shaw.ca
Belgium	Vereniging Medisch Beeldvormers VMBv/Rosseel Geert, Kortrijkstraat 538, 8560 Wevelgem Tel: 32/56/37.37.84; Fax: 32/56/37.37.84 Email: vmbv@net7.be <i>Council Member:</i> Mr Patrick Suvéé Gerststraat 4, 8400 Roksem Email: Patrick.Suvee@hologic.be	Croatia
Benin	Organisation Des professionnels En Imagerie Medicale Du Benin 02 BP 8125, Cotonou Tel: (229) 39-02-99 <i>Council Member:</i> Mr Antoine Agbo 02 BP 8125, Cotonou	Croatian Association of Engineers of Medical Radiology, Mlinarska 38, 10000 Zagreb Tel: 00 385 1 4669771 Fax: 00385 1 4669772 Email Soc: hdimr@zg.hinet.hr Web Site:www.hdimr.hr <i>Council Member:</i> Mr Nenad Vodopija Vlascika 15, 10000 Zagreb Email: Nenad.vodopija@vmskola.hr nenad@hdimr.hr
Botswana	Radiological Society of Botswana P.O. Box 80789, Gaborone, Botswana Tel: (267) 585475; Fax: (267) 585475	Cyprus
		Pancyprian Society of Diagnostic & Radiotherapy Radiographers c/o Mrs Maria Kyraiakides Radiotherapy Depart. Nicosia General Hospital, Nicosia -1450 Tel: 0035722801495; Fax: 0035722303471 <i>Council Member:</i> Mr Achilleas Kalaidjis, address as Society
		Czech Republic
		Czech Radiographers Society

Names and addresses of member societies and ISRRT Council Members

	<p>Sekretariat SRLA CR Na Zlate Stoce 14 370 05 Ceske Budejovice, Czech Republic Email: info@srla.cz Website: www.srla.cz</p> <p><i>Council Member:</i> Mr Cestmir David, address as society Email: cestmir.david@medicon.cz</p>		
Denmark	<p>Foreningen af Radiografer i Danmark H. C. Orsteds Vej 70, 2. tv. DK 1879 Frederiksberg C Tel: 45-3537-4339; Fax: 45-3537-4342 Email: frd@radiograf.dk Website: www.radiograf.dk</p> <p><i>Council Member:</i> Mr Johnny Jensen, Dragebakken 289, 5250 Odense SV Email: Johnny@radiograf.dk</p>		
El Salvador	<p>Asociación Salvadoreña de Técnicos en Radiología e Imágenes Diagnósticas 6a calle poniente y 6a ave. sur reparto 6a calle, 3-8 bis #4, Santa Tecla Email: oc.astrid_es_rad@yahoo.com.mx</p> <p><i>Council Member:</i> Mrs Elizabeth Ventura, address as Society Email: oc.astrid_es_rad@yahoo.com.mx</p>		
Estonia	<p>Estonian Society of Radiographers Ristiku 1, Parnu 80010, Estonia Tel: 372 44 73 555; Fax: 372 44 73 102 www.eroy.ee</p> <p><i>Council Member:</i> Ms Piret Vahtramae Ristiku 1, Parnu 80010, Estonia Email: piretva@ph.ee</p>		
Ethiopia	<p>Ethiopian Radiographers Association P.O. Box 21850, Addis Ababa Tel: 15-50-76</p> <p><i>Council Member:</i> Mr Napoleon Bogale P.O. Box 56324 Addis Ababa Ethiopia Tel: + 251 09 239768 Email: napi_bog@yahoo.com</p>		
Fiji	<p>Fiji Society of Radiographers P.O. Box 17415, Suva, Tel: 679-3215548 Email: jsalabuco@govnet.gov.fj</p> <p><i>Council Member:</i> Mr Jone Salabuco, address as Society Email: jsalabuco@govnet.gov.fj</p>		
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