International Conference on Radiation Protection in Medicine  
- Setting the Scene for the Next Decade -

**MONDAY 3 December 2012**

**MONDAY 3 December; 10.00-11.10**

*Opening Session*
Welcome addresses by host, organizer and co-sponsor representatives
Keynote presentation on “Instilling a culture of safety”

**MONDAY 3 December; 11.10-12.20**

*Briefing Session*
Briefing talks by organizations on activities and priorities influenced by the Malaga Conference (2001) on radiation protection of patients

**MONDAY 3 December; 14.00-16.30**

*Topical Session No. 1: Justification in the use of radiation in medicine*
Strategies for improving the implementation of justification
Developing and implementing appropriateness criteria and referral guidelines
Justification and the role of technology and algorithms
Summary of Contributed Papers
Topical Discussion with Participants and Presenters

(The topical session on justification in the use of radiation in medicine will cover the justification of medical uses of radiation, the knowledge and credentials of those who decide on the uses, and guidelines and incentives for justified uses of radiation in medicine.)

**MONDAY 3 December; 17.00-18.00**

*Roundtable A: Benefit/risk dialogue with patients and public*
Public health risk communication with the media and public
Patients’ perspective on communicating risks and benefits
Radiologists’ perspective on communicating risks and benefits
Family physicians’ perspective on communicating risks and benefits
Discussion with Panellists and Participants

(The roundtable discussion on patient information and risk/benefit dialogue will concentrate on effective communication with referring physicians, patients and the public concerning the benefits and risks of medical uses of radiation.)
TUESDAY 4 December 2012

TUESDAY 4 December; 09.00-10.40 and 11.10-12.00

Topical Session No. 2: Radiation protection of patients in external beam radiotherapy
Impact of new treatment technology on patient protection in radiotherapy
Tools needed and tools available for safety improvement
Issues in human interaction with complex radiotherapy technology
Summary of Contributed Papers
Topical Discussion with Participants and Presenters
(The topical session on radiation protection of patients in external beam radiotherapy will encompass issues and improvements of quality assurance and safety in external beam radiotherapy, including educational and management initiatives essential to inculcation of a safety culture.)

TUESDAY 4 December; 14.00-16.30

Topical Session No. 3: Radiation protection of patients and staff in diagnostic nuclear medicine and hybrid imaging
Radiation protection challenges and trends in PET/CT
Dose reduction in nuclear cardiology
Assessing and reducing exposures to nuclear medicine staff
Summary of Contributed Papers
Topical Discussion with Participants and Presenters
(The topical session on challenges of radiation protection of patients and staff in diagnostic nuclear medicine and hybrid imaging will address benefit/risk and safety concerns in diagnostic nuclear medicine and hybrid imaging, including technological, educational and regulatory approaches to optimizing the benefit/risk ratio.)

TUESDAY 4 December; 17.00-18.00

Roundtable B: Manufacturers’ role in medical radiation protection
Manufacturers’ role - the manufacturers’ perspective
Manufacturers’ role - the trade association’s perspective
Manufacturers’ role - the IEC perspective
Manufacturers’ role - the regulatory authorities’ perspective
Manufacturers’ role - the end-users’ perspective
Discussion with Panellists and Participants
(The roundtable discussion on manufacturers’ role in medical radiation protection will examine the responsibilities of manufacturers in the design, development and utilization of machines and devices for delivery of medical radiation.)
WEDNESDAY 5 December 2012

WEDNESDAY 5 December; 09.00-10.40 and 11.10-12.00

Topical Session No. 4: Radiation protection of patients, staff and the public during therapeutic use of sealed and unsealed radioactive sources

Radiation protection in brachytherapy in the next decade
Radiation protection in radionuclide therapy in the next decade
Developments in patient dosimetry for unsealed sources
Summary of Contributed Papers

Topical Discussion with Participants and Presenters

(The topical session on radiation protection of patients, staff and the public when using sealed and unsealed radioactive sources for therapeutic applications will identify the special challenges accompanying the therapeutic uses of sealed and unsealed radioactive sources, and ways to address these challenges through technology, guidelines, regulations and education.)

WEDNESDAY 5 December; 14.00-16.30

Topical Session No. 5: Radiation protection of patients and staff in interventional procedures

Improving protocols and procedures for strengthened radiation protection in interventional procedures
Diagnostic Reference Levels in interventional procedures
Assessing and reducing exposures to cardiology staff
Summary of Contributed Papers

Topical Discussion with Participants and Presenters

(The topical session on radiation protection of patients and staff in interventional procedures will focus on radiation doses to patients and staff during interventional procedures, and ways to monitor and reduce doses without compromising patient benefits.)

WEDNESDAY 5 December; 17.00-18.00

Roundtable C: Meeting radiation protection needs in healthcare settings with limited infrastructure

Role of collaborations between well-resourced and low-resourced countries
Matching technology with health care needs and infrastructure
Challenges and opportunities with refurbished/second hand equipment
The role of education and training

Discussion with Panellists and Participants

(The roundtable discussion on meeting medical radiation protection needs in areas with limited infrastructure will consider the technological and educational needs and challenges when medical radiation is used in circumstances of limited infrastructure.)
THURSDAY 6 December 2012

THURSDAY 6 December; 09.00-10.40 and 11.10-12.00
Topical Session No. 6: Radiation protection of patients in Computed Tomography
New developments in CT technology and their impact on patient protection
Radiation protection in paediatric CT
Reporting of dose in CT
Summary of Contributed Papers
Topical Discussion with Participants and Presenters
(The topical session on radiation protection of patients in CT will consider radiation doses from computed tomography, and ways to prevent excessive doses through technology, procedure optimization, and education.)

THURSDAY 6 December; 14.00-16.30
Topical Session No. 7: Radiation protection of patients in film-based and digital radiography, diagnostic fluoroscopy and mammography
Ensuring safety in transition to digital radiography in practice
Impact of teleradiology on radiation protection
Radiation protection issues in breast screening
Summary of Contributed Papers
Topical Discussion with Participants and Presenters
(The topical session on challenges of radiation protection of patients in film-based and digital radiography, diagnostic fluoroscopy and mammography will include discussion of delivering, monitoring and recording patient doses in radiography, fluoroscopy and mammography, including trade-offs between radiation doses and image quality.)

THURSDAY 6 December; 17.00-18.00
Roundtable D: Goals for medical radiation protection in 2020
Narrowing the gap between evidence and practice
Future impact on medical radiation protection from radiobiological advances
Goals for medical radiation protection in diagnostic applications
Goals for medical radiation protection in therapeutic applications
Models for education and training
(The roundtable discussion on goals for medical radiation protection in 2020 will identify benefit/risk goals to achieve by 2020, and strategies to reach those goals, applicable to the medical uses of radiation.)
FRIDAY 7 December 2012

FRIDAY 7 December; 09.00-10.30

Topical Session No. 8: Radiation protection of patients and staff where procedures are performed outside radiology departments

Minimizing radiation exposure for patients and staff in endoscopy
Radiation protection in dental radiology
Summary of Contributed Papers
Topical Discussion with Participants and Presenters

(The topical session on challenges of radiation protection of patients and staff where procedures are performed outside radiological departments will expand discussions of benefits and risks of medical radiation to its use outside the radiology department, including uses by other medical specialties and in special locations.)

FRIDAY 7 December; 11.00-13.30

Final Session: Mobilizing for Future Effective Work and Conclusions

A summary of conclusions from sessions and roundtables of the Conference
The new International Basic Safety Standards and their potential impact on radiation protection in medicine
Future international cooperation on radiation protection in medicine
Lessons learnt from the past to consider, when mobilizing for future effective work
Working towards an appropriate level of radiation protection in medicine in the next decade