







INTERNATIONAL CONFERENCE ON RADIATION MEDICINE

CLINICAL APPLICATIONS AND INNOVATIVE APPROACHES

MARCH 1-4, 2010



KING FAISAL SPECIALIST HOSPITAL & RESEARCH CENTRE
RIYADH, SAUDI ARABIA



















Fighting Serious Disease





Welcome Address

We are delighted to invite you to the International Conference on Radiation Medicine: Clinical Applications and Innovative Approaches scheduled to take place at the King Faisal Specialist Hospital and Research Centre (KFSH&RC), Riyadh, Kingdom of Saudi Arabia on 08-10 Rabi Al-Awal 1431 (01 - 04 March 2010). This event is organized by KFSH&RC in collaboration with the King Abdulaziz City of Science and Technology (KACST), Saudi Food and Drug Authority (SFDA) and International Atomic Energy Agency (IAEA).

This event aims to provide radiological health professionals with a venue to maintain advanced knowledge and skills in various aspects of radiation applications in medicine including radiology, radiation oncology, nuclear medicine, nuclear cardiology, radiobiology and radiation protection, and other related disciplines.

Within this dynamic initiative a diverse group of professionals gather to provide a unique scientific program that includes continuing education courses, plenary sessions, workshops, panel discussions, as well as oral and poster presentations that represent comprehensive clinical and research interests in the areas of radiation medicine.

This conference will bring you an array of top-notch speakers from leading institutions worldwide. We are very pleased that our principal speakers will include among others founders and inventors of cutting-edge techniques who will address central issues and challenges experienced in areas of technological advancement and provide participants with information on variety of professional development opportunities.

A scientific exhibition is also a part of the conference where top companies will display their latest products that have found clinical acceptance with particular relevance to enhance patient care.

The conference also offers an active social program which includes visits to famous landmarks and historical sites, such as the King Abdulaziz Museum, Al-Thumamah Desert and Al-Atheria Royal Village, as well as opportunities to see the traditional way of life in Riyadh.

For more information, please visit our website www.radmed.org

On behalf of the Organizing Committee, we look forward to seeing you in Riyadh and to sharing this wonderful opportunity with you.

With best regards. Sincerely,



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About ICRM

The International Conference on Radiation Medicine (ICRM) is an annual scientific meeting organized by the King Faisal Hospital and Research Centre (KFSH&RC) in collaboration with the Kina Abdulaziz City of Science and Technology (KACST), Saudi Food and Drug Authority and International Atomic Energy Agency (IAEA) in Riyadh, Saudi Arabia. The aim of the conference is to provide venues that enhance the development of healthcare professionals on various aspects of radiation medicine. The event provides a medium to share, discuss and disseminate innovative approaches, techniques, applications and best clinical practices, as well as educate healthcare professional about the state-of-art technology pertaining to the use of radiation in medicine including, but not limited to, radiation oncology, diagnostic imaging, radiobiology and radiation protection.

www.radmed.org is the official website of the ICRM.

The first ICRM conference, Innovative Approaches in Radiotherapy: Beyond Tomorrow was successfully held at KFSH&RC between 9-12 March 2009, Riyadh, Saudi Arabia. For further information about this conference and other previous conferences, please go to link Previous Conferences and Workshops.

To provide a more comprehensive scientific program and to enhance the quality of its content ICRM 2010 formed partnerships with the salient professional organizations in the world. Thus, ICRM 2010 has officially been endorsed by the following national and international professional organizations:

- The American Association of Physicist in Medicine (AAPM)
- American Society for Radiation Oncology (ASTRO)
- European Society for Therapeutic Radiol ogy and Oncology (ESTRO)
- European Association of Nuclear Medicine (EANM)
- Radiological Society of Saudi Arabia (RSSA)
- International Organization for Medical Physics (IOMP)
- World Academy of Laser Applications (WALA)
- World Federation of Nuclear Medicine and Biology (WFNMB)
- Saudi Oncology Society (SOS)
- Saudi Medical Physics Society (SAMPS)

Conference Objectives

This four-day meeting will provide a medium to share, discuss and disseminate innovative approaches, techniques, applications and best clinical practices, as well as educate healthcare professional about the state-of-art technology pertaining to the use of radiation in medicine including, but not limited to, radiation oncology, diagnostic imaging, radiobiology and radiation protection.

Who Should Attend

Cardiologists

Dosimetrists

Engineers

Medical/Health Physicists

Neurosurgeons

Nurses

Physicians

Radiation Oncologists

Radiation Therapists

Radiobiologists

Radiologists/Nuclear Medicine

Physicians

Radiology Technologists

Scientists

Students

Vendor Representatives

Workshop Summary

- IMRT/IGRT: Tomotherapy
- IMRT/IGRT: RapidArc
- IAEA TRS 398: Reference dose Calibra tion for Linear Accelerators
- Stereotactic Radiotherapy: CyberKnife
- Brachytherapy
- Radiotherapy for Breast Cancer
- PET/CT
- SPECT/CT
- Functional MRI
- · Read with the Expert
- Radiobiology and Radiation Protection
- Radiopharmaceuticals
- IAEA TRS 457: Dosimetry in Diagnostic Radiology

NOTE: ICRM and/or workshop coordinator reserves the right to cancel a workshop due to low enrolment.



King Abdulaziz City for Science and Technology (KACST) is an independent scientific organization administratively reporting to the Prime Minister. KACST is both the Saudi Arabian

national science agency and its national laboratories. The science agency function involves science and technology policy making, data collection, funding of external research, and services such as the patent office. KACST has currently over 2500 employees. Based on is charter 31.1.2.1.985, KACST's main responsibilities can be summarized as follows:

Main Responsibilities

- 1. Propose a national policy for the development of science and technology and develop strategies and plans necessary to implement them.
- Coordinate with government agencies, scientific institutions and research centers in the Kingdom to enhance research and exchange information and expertise.
- 3. Conduct applied research and provide advice to the government on science and technology matters.
- 4. Support scientific research and technology development
- 5. Foster national innovation and technology transfer between research institutes and the industry .
- 6. Foster international cooperation in science and technology.

Vision

To obtain the scientific and technology knowledge needed for the Kingdom to achieve a better quality of life and sustained development.

Mission

To strategize, plan, manage, coordinate, and fund research and development in the Kingdom in compliance with the needs and requirements through:

- Drafting policies and procedures and activating the cooperation and collaboration venues between research institutes, including universities and the private sector.
- 2. Building a national R&D infrastructure with qualified professionals .
- 3. Localization and development to solve local problems, improve life quality, and reduce cost .

Values

- 1. Be close to the community
- 2. Support national goals
- 3. Contribute to Science
- 4. Dedication to excellence
- 5. Focus on the human factor

For KACST Information Contact Dr. Khalid A. Aleissa

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Registration

To register for the conference, please complete the Registration Form and send it by fax or email to the indicated mailing address in the form. (Special rates for Students: SR100 for Conference; and SR150 for workshop). Early registration fee is SR 400 (for three days) and SR150 (for one day) if registration form is received on or before 14 February 2010. Late registration fee is SR 500 (for three days) and SR200 (for one day only) if received any time after 14 February 2010 date. It is mandatory to send the registration form before the early registration deadline, but the payment can be made at the conference site. Late/on-site registration fees are to be paid on-site on 01 March 2010 during the course registration period between 7:00 and 8:00 AM. Early registration fees are to be paid in full with submission of early registration form. Each workshop has a SR 150 registration fee, and admission is given priority to early registration participants. Late workshop registration will only be possible if seating is available (note that there is a limited workshop occupancy limit). Payments can be made in cash or certified cheque payable to "KFSH&RC Research Grant Fund". Interested attendees are urged to early register so that conference seating is guaranteed and workshop participation is ensured.

CME Credit Applications

A total of seventeen (30) CME credit hours have been accredited by the Saudi Commission for Health Specialties (SCHS), four (4) of which are for workshop participation. Credit hour submission has also been made to the American Academy of Continuing Medical Education (AACME) and the total CME accreditation will be announced during the meeting.

Certificate of Attendance

A total of thirty (30) CME credit hours have been accredited by the Saudi Commission for Health Specialties (SCHS), four (4) of which are for workshop participation. Credit hour submission has also been made to the American Academy of Continuing Medical Education (AACME) and the total CME accreditation will be announced during the meeting

Smoking Policy

The King Faisal Specialist Hospital & Research Centre recognizes the negative implications of smoking. Therefore, our policy is "No Smoking" in the auditorium, exhibition and registration areas, dining hall and restrooms.

Hospital Limousine

A hospital limousine service is available upon request at hospital telephone extension 5555 for reasonable rates.

Mobile Phone Policy

Mobile phones and pagers must be turned off or set on silent/vibrate mode during the meeting sessions.



Kingdom of Saudi Arabia Saudi Food & Drug Authoriy

The Saudi Food and Drug Authority (SFDA) was established under the Council of Ministers resolution no (1) dated 07/01/1424 H, as an independent body corporate that directly reports to the Premier. The Authority objective is to ensure safety of food and drug forman and animal, and safety of biological and chemical substance as well as electronic products.

A Board of Directors chaired by HRH the Second Deputy Premier and Minister of Defense, Aviation and Inspector General, will managed the Authority. Its membership includes HRH Minister of Municipality and Rural Affairs as vice-chairman, and all pertinent ministers (HRH Minister of Interior, Minister of Health, Minister of Commerce and Industry, Minister of Agriculture, Minister of Beard and Planning). As well as, the Director General of Saudi Arabian Standards and Specification Organization, the Chairperson of Council of Chambers of Commerce and Industry in the Kingdom, the Authority's Executive Chief, and a person specialize in food and drug.

Vision

To be the leading regional regulatory authority for food, drugsandmedicaldeviceswithprofessionaland excellent services that contributes to the protection and advancement of the health in Saudi Arabia.

Mission

To ensure the safety of food; the safety, quality and efficacy of drugs; and the safety and effectiveness of medical devices, by developing and enforcing an appropriate regulatory system.

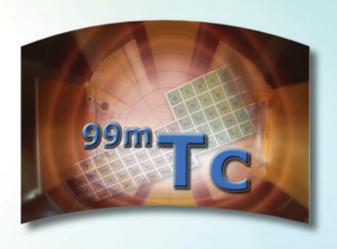
Authority's Main Objectives

The main purpose of the SFDA establishment is to regulate, oversee, and control food, drug, medical devices, as well as to set mandatory standard specifications thereof, whether they are imported or locally manufactured. The control and/or testing activities can be conducted in the SFDA or other agency's laboratories. Moreover, the SFDA is in charge of consumers' awareness on all matters related to food, drug and medical devices and all other products and supplies.

For SFDA Information Contact Dr. Muhammed Al Kanhal

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Advancing Nuclear Medicine





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Mohamed Al Roweily, MSc	King Faisal Specialist Hospital & Research Centre (Riyadh)
Wedyan Safar, CMD	King Faisal Specialist Hospital & Research Centre (Riyadh)
M. Gary Sayed, PhD	King Faisal Specialist Hospital & Research Centre (Riyadh)
Richard Semelka, MD	University of North Carolina Hospital (USA)
mondia definenci, MD	oring of North Carolina Hospital (03/1)

Mohammad Alshabanah, MD	King Faisal Specialist Hospital & Research Centre (Riyadh)
Khaled Al Shalali, BSc	King Faisal Specialist Hospital & Research Centre (Riyadh)
Mamoun Shehadeh, MSc	King Faisal Specialist Hospital & Research Centre (Riyadh)
Penny Smalley, RN	Laser Concepts International (USA)
Afrah Somali, BSc	King Faisal Specialist Hospital & Research Centre (Riyadh)
Freddy Stalhberg, PhD	Lund University (Sweden)
Abdulaziz Al-Sugair, MD	King Faisal Specialist Hospital & Research Centre (Riyadh)
Alphonse Taghian, MD, PhD	Massachusetts General Hospital (USA)
Mahmoud Tuli, MD	King Faisal Specialist Hospital & Research Centre (Riyadh)
Monna Al-Turaiki, BSc	King Faisal Specialist Hospital & Research Centre (Riyadh)
Manhar Vora, PhD	King Faisal Specialist Hospital & Research Centre (Riyadh)
Corey Zankowski, PhD	Varian Medical Systems Inc. (Riyadh)





International Speaker Biographical Data

Stephen Balter, PhD



Stephen Balter, Ph.D. is a Medical Physicist and Associate Professor of Radiology and Medicine at Columbia University Medical Center in New York City. Dr. Balter's research and teaching interests are in the areas of radiation dose management and image quality in diagnostic imaging and fluoroscopically guided interventional procedures. He is currently; the chair of NCRP Report Committee 2-3 on Fluoroscopically Guided Interventions. He is actively involved with major projects at the FDA/CDRH, the Radiation Epidemiology Branch of the NIH, the European Commission, and the IAEA. He is the convener of the International Electrotechnical Commission's maintenance team on quality measurements in diagnostic imaging. IEC PAS 61910-1 on radiation dose documentation was prepared in his group, coordinated with the DICOM standard and internationally

accepted in 2007. This pair of documents provides the basis for developing automatic radiation dose documentation from radiation imaging modalities. Dr. Balter is an active participant in many of the medical specialty societies associated with radiological imaging. He continues to participate in the development of clinical practice guidelines by medical societies for interventionalists and other physicians. Dr. Balter holds fellowships from the ACR, AAPM, and SIR. He received the F.Mason Sones, Jr. Service Award from the SCAI in 2003, and has served as a vice-president of the RSNA and on the board of directors of the AAPM.

Gerd Beyer, PhD



Prof. Dr. rer.nat.habil. Gerd-Jürgen BEYER as a classical Radiochemistry got his academic education in Germany, Technical University of Dresden (Diploma 1965, Ph.D. 1968, Habilitation 1978) and became Professor in Radiochemistry in 1983. Directly after finishing the University he worked as research fellowship in the Joint Institute for Nuclear Research Dubna (Russia) and as post-doc. After his return to Germany he occupied several leading positions in the Department of Radioisotopes in the Central Institute for Nuclear Research Rossendorf, Germany (1975 – 1991). Under his leadership the basic R&D work was organized for introducing PET in the former East Germany. After the unification of Germany he accepted a Scientific Accociate position at the CERN (Switzerland) and developed the PET Cyclotron Unit of the Geneva University Hospital, Switzerland

He was the head of this Cyclotron Unit in Geneva until his retirement in 2005. Since he is active as scientific advisor for the German Company Isotope Technologies Dresden GmbH and continues lecturing at the European Scientific Institute (ESI) and the Joint University Accelerator School (JUAS), Archamps (France) in the Field of Medical Physics (topic: Isotopes in Medicine). Starting from 1984 he was and is still continuously active with the International Atomic Energy Agency Vienna as an distinguished expert in medical isotope and radiopharmaceutical production, assisting in many countries the implementation of modern isotope production technologies. During his scientific carrier he developed new techniques (on-line isotope separation) and methods for fast radiochemical separation (chemical effects connected to nuclear transformations for example), discovered few new short-lived isotopes. He worked with any kind of accelerators, tarting transport to the very high protoc pages (27)

ods for fast radiochemical separation (chemical effects connected to nuclear transformations for example), discovered few new short-lived isotopes. He worked with any kind of accelerators, starting from very low particle energies (6 MeV protons) up to the very high proton energies (72 GeV), used heavy ion as reacting particles, worked with many different types of nuclear reactors. He is familiar working with very few atoms as well as with multi-kCi activities. He is very experiences with the problems in large scale commercial isotope production and with the problems making available non-standard isotopes for research or for therapy. Essentially, he overlooks the field of radiopharmaceutical development, especially for therapy. His scientific activities are documented in about 200 scientific publications (in International Journals), in several Books and Patents, not speaking about his many presentations at international conferences and his invited lectures and presentations at different locations.

Jean Bourhis, MD, PhD



Prof. Jean Bourhis graduated in Paris as a Medical Doctor (MD) and was board certified in Radiation Oncology. He became Professor of Radiation Oncology at the University of Paris in 1999 and since 2002, he is Head of the Radiation Oncology Department at the Institute

Gustave Roussy (Villejuif, France). His clinical activity is focused on Head and Neck Oncology and he has been principal investigator of a number of clinical trials in this field, including several multicentric randomized trials. He coordinated several large scale international collaborative metaanalyses, whose contributions have been recognized worldwide. He is also co-founder and co-chair of the GORTEC group, dedicated to conducting clinical trials in head and neck cancers. Beside his clinical activities, he has a major interest in Laboratory and

Translational Research. He spent a year at the Gray Laboratory in London and obtained a PhD in Molecular Oncology in 1992 at the University of Paris. He is currently the Director of a laboratory dedicated to Experimental and Translational Research in Radiation Oncology. Professor Jean Bourhis is also scientific director of the research and development project ARCHADE in Caen on Hadrontherapy (development of a cyclotron for proton and carbon ions acceleration). Recently, Professor Jean Bourhis has been elected as the next President of the European Society for Therapeutic Radiology Oncology (ESTRO).

Claire-Louise Chapple, PhD, CSci, CRadP



Dr Claire-Louise Chapple completed her BA(Hons) in Physics at Cambridge University in 1987, before moving to Aberdeen to study for a MSc Medical Physics, awarded in 1988. Since that time she has been working in the Imaging Physics and Radiation Safety section of the Regional Medical Physics Department in Newcastle upon Tyne, England, where her current appointment is as one of the Heads of Service. This role includes the management of a region-wide programme of patient dosimetry in diagnostic radiology, together with appointment as Radiation Protection Adviser to several hospitals and other organisations, and a number of teaching and training commitments. Research activities include dosimetry and dose optimisation, particularly in CT and in

paediatric radiology, with over 30 published papers, and she has been an invited speaker at both national and international conferences. Her PhD "The Optimisation of Radiation Dose in Paediatric Radiology" was awarded in 1998, and she received the IPEM Founders prize in 2000. She has more recently been involved in a Coordinated Research Project of the IAEA, and is currently an IAEA expert & lecturer on dosimetry in diagnostic radiology. Claire-Louise lives in the centre of the City of Newcastle, in the North of England, with her husband and three school-age sons.

Arturo Chiti, PhD



Dr. Arturo Chiti was born in Bologna in 1962, he graduated in Medicine and Surgery at Milan University in 1989 and specialised in 1993 in Nuclear Medicine. He was employed in the Nuclear Medicine Division of the National Cancer Institute of Milan, dedicating himself mainly to clinical activity and research. In 1997 he achieved the European Fellowship in Nuclear Medicine. From June 2000 he is Director of the Nuclear Medicine Division of Humanitas. He is lecturing professor at the Medical School and at the Postgraduate School in Nuclear Medicine of Milan University. He is author/co-author of more than 60 scientific papers published in cited journals, more than 20 articles in national and international journals and more than 170 presentations at international and national congresses. He is an associate editor of the European Journal of Nuclear

Medicine, the chairman of the oncology committee of the European Association of Nuclear Medicine (EANM) and expert consultant at the International Atomic Energy Agency (IAEA).

Michael J. Dennis, PhD



Dr. Dennis is an American Board Certified Diagnostic Medical Physicist in the Department of Radiology at the University of Toledo Medical Center. He is an Associate Professor of Radiology in the University of Toledo College of Medicine with adjunct appointments in the Physics and the Bioengineering Departments, as well as in the Jefferson School of Health Professions at Thomas Jefferson University. After obtaining his bachelors degree in physics from Xavier University, he obtained his masters degree in radiological science from the University of Cincinnati, and Ph.D. in medical physics from the University of Texas Health Science Center at San Antonio. Prior to joining this College of Medicine in 1993, he was manager of CT technical applications development at General Electric

Medical Systems and marketing and applications development manager for GE Nondestructive Equipment Systems and Services.

Dr. Dennis is a phantom image reviewer for the American College of Radiology CT and MRI modality accreditation programs and is a member of the ACR MRI accreditation physics committee, as well as the American Board of Radiology physics for radiologist exam committee. Research activities have included collaborative work with MRI imaging in the presence of metal implants, MRI perfusion analysis of patients with migraines and BOLD functional imaging associated with language centers, emotions, motor skill learning, and left-handed writing posture, and cortical thickness measurements versus time and in associated with limb amputation.

Slobodon Devic, PhD, FCCPM



Dr. Devic obtained his M.Sc. degree in non-ideal plasma physics and his Ph.D. degree in Solid State Physics in 1997 at the University of Belgrade, Serbia. He moved to the USA in 1998 where he worked as a Research Associate in Radiation Oncology Physics at the Mallinckrodt Institute of Radiology, St. Louis, Missouri. Subsequently, he moved in 2000 to the Montreal General Hospital and McGill University where he was enrolled into the Medical Physics Residency program. Upon finishing his residency in 2002 he joined the Medical Physics Unit at the McGill University and, in 2008, he moved to his current position at the SMBD Jewish General Hospital in Montreal. He is a Fellow of the Canadian College of Physicists in Medicine and his major research interests are radiochromic film dosimetry and its applications, image auided brachytherapy with particular in-

terest in pre-operative endorectal brachytherapy, and the incorporation of the functional imaging information into radiotherapy treatment planning process. Dr. Devic is also teaching Physics in Nuclear Medicine course at the McGill University and as of 2009 he became a member of the Editorial board of the Medical Physics journal.





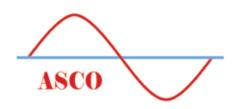


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- SuperSonic Imagine Aixplorer Ultrasound machine uniquely has the Shear wave Imaging option which can be used for breast and liver cancer detection."



Jacob Flanz, PhD



After receiving his Ph.D. in 1979 in Nuclear Physics, Dr. Jay Flanz went to the Massachusetts Institute of Technology (MIT). His first project was to design and construct a Beam Recirculation Facility, which was used to almost double the energy available from the electron LINAC. At MIT, Dr. Flanz was involved in the preparation of proposals for increases in the beam energy and duty factor at Bates. When funding for the Bates South Hall Ring was approved, Dr. Flanz became Project physicist responsible for the beam physics design and commissioning of the storage and high duty factor pulse stretcher ring. Presently Dr. Flanz is Project Director and Technical Director of the Burr Proton Therapy Center at Massachusetts General Hospital (MGH). Joining MGH during the proposal

stages for this facility, in 1993, he participated in the development of the NCI proposal and technical specifications required for the Proton Therapy System. He was responsible for the system integration of the accelerator and clinical systems, and to ensure that the accelerator systems were appropriate for the medical requirements. He contributed to the optimization of the proton therapy equipment and adaptation to the clinical uses. He played the leading role in the initial commissioning of the entire Proton Therapy system and in subsequent upgrades, including Proton Beam Scanning. He was central to the successful FDA 510(k) application. He has continued working with MIT in areas of robotics and software development. In addition to the above Dr. Flanz also has interest in education. He conceived of, and helped organize the first United States Particle Accelerator School (USPAS) course on Beam Measurement at MIT, which was the first course where hands on experience was offered in beam tuning and measurement of beam properties. He has given this course at various laboratories and as a sort of culmination, he taught this course using the cyclotron and beamline installed at the Northeast Proton Therapy Center at Massachusetts General Hospital. Most recently he has developed and taught a new USPAS course entitled Medical Applications of Accelerators and Beams several times.

Udo Gaipl, PhD



Priv.-Doz. Dr. Udo S. Gaipl was born in 1973, studied biology and chemistry, and holds a PhD in immunology. Since 2008 he is Associate Professor at the Department of Radiation Oncology of the University Hospital Erlangen (Friedrich-Alexander University of Erlangen-Nuremberg, FAU). The section Radiation Immunobiology, which PD Dr. Udo Gaipl is leading, is specialised in the research on how the immune system can be specifically activated to contribute to the success of multimodal cancer therapies. The forms of cell death and the immunogenicity of dying and dead tumour cells after combined and single treatment with high dose radiation, chemotherapeutics, biologics, high hydrostatic pressure, and hyperthermia are examined in vitro and in vivo. Dr. Gaipl is a leading scientist in

the research on annexinA5, a protein influencing the clearance of apoptotic and necrotic cells. He is member of the European Society for Hyperthermic Oncology (ESHO) and of the Scientific Study Group for Hyperthermia in Radiooncology and Clinical Oncology ("Atzelsberger Kreis"). Anti-inflammatory mechanisms of action of low and intermediate dose radiation are also in the focus of his research group. Dr. Gaipl is author of more than 60 publications in peer reviewed journals and of many book chapters dealing with dying and dead cells as inducer of chronic autoimmunity and as tool for immune intervention. The Radiation Immunobiology Group is the result of the continuous progression of the FAU, which included immunologists to various institutes and clinics of the medical faculty. This has also led to the founding of the University Cancer Centre Erlangen (UCC) being an excellent centre for the interdisciplinary treatment of cancer.

Gail R. ter Haar, PhD



Gail ter Haar has a PhD in Physics from Guy's Hospital Medical School. She also has a DSc in clinical medicine by the University of Oxford for her work on the safety of ultrasound and her research into the therapeutic applications of ultrasound. She is currently head of therapeutic ultrasound at the Institute of Cancer Research, Sutton, Surrey, UK. Her interests lie mainly in the development of therapeutic applications of ultrasound for use in the treatment of cancer (especially high intensity focused ultrasound, HIFU) and the safety of diagnostic ultrasound techniques. She has published more than 150 papers and 35 book chapters. Gail is Visiting Professor of Therapeutic Ultrasound in the Nuffield Department of Surgery, Oxford University. She was founder President of the International

Society for Therapy Ultrasound (ISTU), Scientific Secretary of the European Society for Hyperthermic Oncology and is chair of both the European Committee for Ultrasound Radiation Safety, and the Safety Committee of the British Medical Ultrasound Society. She is an honorary fellow of the American Institute for Ultrasound in Medicine and a fellow of both the Acoustical Society of America and the Institute of Engineering and Physics in Medicine. Gail is the Associate Editor for Therapy Ultrasound for both "Ultrasound in Medicine and Biology" and "Ultrasonics", and on the Editorial Board of the "International Journal of Hyperthermia".

Konstantinos Hourdakis, PhD



Dr. HOURDAKIS, Konstantinos, J. was born in Crete, Greece in 1964. He studied Physics at the University of Athens, Greece (B.Sc. 1985). He attended a postgraduate course in medical physics at the University of Surrey, UK (M.Sc. 1987) and he did his Ph.D. at the University of Athens, Greece (1995). Since 1995, he has been working with the Greek Atomic Energy Commission. Currently he is the Head of the Licensing and Inspection Department and the Head of the Ionizing Radiation Calibration Laboratory (SSDL).

Since 2004 he has been an IAEA expert, participating in several IAEA expert missions for the operation of ionizing radiation secondary standard dosimetry laboratories (SSDL) worldwide. He has coordinated and/or participated in 12 international scientific research and development projects concerning

the application and metrology of ionizing radiation, the radiation protection, the radiological preparedness and response. He is the Greek delegate in the Euratom Treaty Article 37 Group of Experts, in the Commission of Radiation Protection and Public Health (CRPPH) of the NEA/OCDE, in the European Metrology Committee (EURAMET), as well as the Greek (national) coordinator and national focal point at several EU and IAEA committees and working groups.

He is a lecturer in two Greek Medical Physics Post Graduate courses and an invited speaker in many seminars and courses organized by the Greek Atomic Energy Commission and other scientific organizations and committees. He is an author / co-author at 22 scientific papers published in international scientific journals and at 16 papers published as proceedings in International conferences.

Donald McLean, PhD



Ian Donald McLean is a medical physicist specialising in diagnostic radiology. Before joining the IAEA in 2006 he was a principle medical physicist at Westmead Hospital with clinical, teaching and research responsibilities that include the areas of paediatric CT and mammography. He was involved in the development of professional activities in Australia and as an associate professor at the University of Sydney supervised a number of postgraduate students. Since joining the IAEA he has been dedicated to the development of guidance material, particularly in QA for mammography, digital mammography and CT, clinical training and clinical audit in diagnostic radiology. Other aspects of his current work include maintaining calibration standards in diagnostic radiology at the IAEA secondary standards laboratory and being the technical officer for IAEA medical physics

based technical cooperation projects in diagnostic radiology and those based in Asia.

M. Saiful Hug, PhD, FAAPM, FInstP



M. Saiful Huq received his PhD degree from the College of William and Mary in Virginia, USA, in 1984. After completing a Post Doctoral Fellowship in Medical Physics at Yale University in 1990, he joined the faculty at Jefferson Medical College of Thomas Jefferson University and Thomas Jefferson University Hospital in Philadelphia, where he stayed for 14 years. He is currently a Professor of Radiation Oncology at the University of Pittsburgh School of Medicine and University of Pittsburgh Cancer Institute and the Director of the Medical Physics Division in the Department of Radiation Oncology at UPMC Cancer Centers, where he is responsible for the development of scientific activities of a large group of physicists and management of clinical medical physics operations of 21 cancer centers in Western Pennsylvania. He is certified by the American

Board of Radiology in Therapeutic Radiological Physics and has published over 92 manuscripts in peer reviewed journals.

Dr. Huq has served in many capacities in various national and international organizations. He is a Fellow of both the British Institute of Physics and the American Association of Physicists in Medicine (AAPM) and is a recipient of AAPM's Farrington Daniels Award. He is past president of the AAPM Delaware Valley Chapter and is currently a member of the AAPM Science Council, Vice Chair of the AAPM Therapy Physics Committee, and Chair of the AAPM Task Group 100. He has served on numerous AAPM Task Groups, notably TG51. Dr. Huq has also served as an expert on many IAEA initiatives, developing various documents which provide guidance to the worldwide radiotherapy community regarding various aspects of cancer therapy using external beam radiation. He is a co-author of the IAEA TRS398 Code of Practice and will be giving a continuing education course at this conference on this Code of Practice.

Geoffrey S. Ibbott, PhD, FAAPM



Dr. Ibbott began his career in medical physics immediately upon graduating from high school in 1967. He was first given the title of Medical Physicist in 1974, and remained in this position, with a faculty appointment at the level of Senior Instructor, until 1990. In mid 1990, Dr. Ibbott moved to Yale-New Haven Hospital, where he was a Lecturer and Medical Physicist until 1994. In March 1994, Dr. Ibbott moved to Lexington, Kentucky to become Assistant Professor and Director of Medical Physics at the University of Kentucky Medical Center. He was promoted in 1998 to Associate Professor. In January 2001 Dr. Ibbott moved to the U. T. M. D. Anderson Cancer Center in Houston, Texas and became Associate Professor and Chief, Section of Outreach Physics, Department of Radiation Physics.

While at the University of Colorado Heath Sciences Center, Yale-New Haven Hospital, and the University of Kentucky Medical Center, Dr. lbbott maintained a strong clinical orientation. Upon moving to M. D. Anderson Cancer Center, he assumed the role of Director of the Radiological Physics Center, an NCI-funded resource to support multi-institutional cooperative group clinical trials. As of August 2001, Dr. lbbott has been the principal investigator of the NCI grant supporting the RPC, and in 2004 won a six-year competing renewal of the grant.

Dr. Ibbott's research interests include the radiation response of normal tissues, and the development of a polymer gel dosimeter. In addition to this, Dr. Ibbott's interests include quality assurance for multi-institutional clinical trials. Throughout his career, Dr. Ibbott has held a strong interest in education. He was coordinator of the graduate program at the University of Colorado Health Sciences Center, clinical coordinator of the graduate program at the University of Kentucky Medical Center, and is a course coordinator at M. D. Anderson Cancer Center. In addition, he is co-author of Radiation Therapy Physics, a medical physics textbook now in its third edition.

Kay-Uwe Kasch, PhD



Prof. Dr. Kay-Uwe Kasch (born in 1966) was educated in Dresden, Heidelberg and Vancouver. His interest in Medical Physics started early with getting his first graduation from the German Cancer Reseach Center (DKFZ) Heidelberg in 1992. After doing research in particle therapy at DKFZ and TRIUMF Vancouver, Canada he graduated with a Ph.D. in 1996 at the Ruprecht-Karls-University Heidelberg, Germany. Being a research scholar at the Charité, University Medicine Berlin for more than 6 years he moved to Jeddah, Saudi-Arabia in 2002 to work as a Senior Medical Physics Consultant at the King AbdulAziz University. Being appointed as a Professor for Medical Radiation Physics at the University of Applied Sciences, Berlin he returned to Germany in 2006. There he is now the

vice dean of the Department of Mathematics, Physics and Chemistry.

He is a member of various professional organizations. As Board Member and Chair of Communication and Publication of the European Federation of Organizations for Medical Physics (EFOMP) he is actively involved in getting Medical Physics up on the agenda within the European

and international frameworks.

His research interests are radiation therapy, particularly novel approaches in particle therapy and Tomotherapy.

Faiz Khan, PhD, DABR, ABMP



Dr. Khan's educational attainment is exceptional. He has completed his studies in Bs. Physics, Math, Chemistry, and English in 1957 and acquired his honors degree in mathematics M.S. in 1959 at the University of Panjab Emerson College, Pakistan. He has finished his PhD on Biophysics in 1969 at the University of Minnesota, Minneapolis, U.S.A. He took his board certification on Therapeutic Radiological Physics at the American Board of Radiology in 1974 and Radiation Oncology Physics at the American Board of Medical Physics in 1990. He is a distinguished society member of the American Association of Physicist in Medicine (AAPM), American College of Medical Physics and American Society of Therapeutic Radiology-Oncology.

Though his dedication on his career, Dr. Khan receives numerous awards, honors and grants. He is currently a Professor Emeritus at the Department of Therapeutic Radiology, University of Minnesota since 2001, Professor, Associate Professor and Director of Radiation Physics Section at the same University since 1973. Consultant Physicist, Assistant Professor, Instructor and Teaching Assistant to various hospitals and universities since 1960. He also became President, Chairman, Board Member and member to various professional organizations from 1975 till 1990 and also participated to several research, clinical service, administrative duties and teaching.

Paul E. Kinahan, PhD



Paul Kinahan is a Professor of Radiology, adjunct Electrical Engineering and Bioengineering, at the University of Washington in Seattle. His is director of PET/CT Physics at the University of Washington Medical Center. He received his PhD from the University of Pennsylvania in 1994 in Bioengineering and became an Assistant Professor at the University of Pittsburgh. While there he was part of the group that built the first prototype combined PET/CT scanner. He moved to the University of Washington in 2001. His research interests include quantitative imaging with PET/CT, objective assessment of image quality and image reconstruction algorithms and their application to assessing response to therapy. He has been a member of and/or chaired several grant review panels

and national committees on medical imaging. His awards include the IEEE Nuclear Medicine Imaging Science Council Young Investigator Award. He has been principle investigator on 15 research grants and was a recipient of the NIH FIRST award. Currently he is a member of the Science Council of the American Association of Physicists in Medicine.

Massoud Leesar, MD



Dr. Leesar serves as the director of cardiac and vascular invasive services, as well as associate chief of cardiology and professor of medicine at the University of Cincinnati. He was previously professor of medicine and the director of the cathlab at the University of Louisville. He earned his medical degree at Mashad University, Iran, and completed internal medicine residencies at the University of Toronto and Yale University. He then completed fellowships in cardiology and interventional cardiology at Wayne State University, Detroit, and the University of Louisville. Dr. Leesar is certified by the American Board of Internal Medicine, American Board of Cardiology, and the American Board of Interventional Cardiology. He is a fellow of the American College of Cardiology, and is a member of the

American Heart Association and American Medical Association. He is the member of the editorial board of the journal Catheterization and Cardiovascular Interventions. He is an active lecturer and has published numerous research papers in medical journals.

Christer Lindquist, MD, PhD



Professor Lindquist trained in Neurosurgery at the University of Texas, USA, and the Karolinska Institute, Sweden. Professors Lars Leksell and Ladislau Steiner were his mentors. He was the Head of the Karolinska Gamma Knife Center 1986-1998, and Professor of Neurosurgery and chief of the New England Gamma Knife Center at Brown University, USA 1992-1993. He has over 30 years experience in Gamma Knife surgery spending 20 of those at the Karolinska Institute in Sweden. He was the former President of the Leksell Gamma Knife Society, and President of the International Stereotactic Radiosurgery Society (ISRS) 1995-1997. He is the only recipient of the 1999 Fabrikant Award for Achievement in Radiosurgery form the International Stereotactic Radiosurgery Society and won other awards

including Lars Leksell lectureship by the Karolinska Institute, and Pioneers in Radiosurgery by the Leksell Gamma Knife Society. He has authored several hundred publications in Neurophysiology, General Neurosurgery, and Radiosurgery, and serves on the board of many prestigious peer review editorials. Professor Lindquist has been a visiting professor to numerous institutions in the USA, Europe, Australia, Japan and other Asian countries. He is currently the Medical Director of the Cromwell Gamma Knife Center, London, UK since 1998. He also serves as Neurosurgery Consultant to Elekta AB, manufacturer of the Gamma Knife. Prof. Lindquist obtained his medical degree and Ph.D. in Physiology from the prestigious Karolinska Institute in Sweden in 1973. He underwent neurosurgical residency training at both the Karolinska Hospital and the University of Texas.

Thomas Rockwell Mackie, PhD



Dr. Thomas "Rock" Mackie received his undergraduate degree in Physics from the University of Saskatchewan in 1980. He went on to earn his doctorate in Physics at the University of Alberta in 1984. His expertise is in radiation therapy treatment planning and intensity-modulated radiotherapy. He is an inventor and algorithm designer for the tomotherapy concept. Dr. Mackie is a professor in the departments of Medical Physics, Human Oncology, and Engineering Physics at the University of Wisconsin-Madison. Dr. Mackie has around 10 peerreviewed publications, 0 patents, and has been the supervisor for more than 5 Ph.D. students. Dr. Mackie is a Fellow of the American Association of Physicists in Medicine (AAPM) and a member at large of that organization's Science

Council. Dr. Mackie has won the Farrington Daniel's award (twice) from the AAPM and the Sylvia Fedoruk award from the Canadian Organization of Medical Physicists. Dr. Mackie's group developed the PinnacleTM treatment planning system marketed by Philips Medical. He is a cofounder and Chairman of the Board of TomoTherapy, Inc. that employs about 700 people and is based in Madison. He is also on the Boards of Biolonix and Cellectar corporations.



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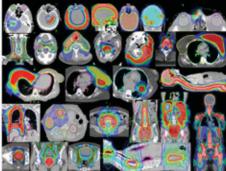
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Ahmed-Yasser Abou-Madian, M



Dr. Abou-Madian, 35, graduated 1996 from Kasr El-Aini Faculty of Medicine, Cairo University. He finished a 3 year residency program in the department of Radiation Oncology and Nuclear Medicine during which he acquired the Masters of Science in Radiation Oncology (M.Sc.) in 2001. He acquired his Doctorate of Medicine (M.D.) in Clinical Oncology from the University of Cairo in 2006 and was appointed as a lecturer and consultant in the department. Since late 2005 he joined the Heidelberg University staff members in the University Hospital in Mannheim, Germany. He is currently the department consultant for the Breast and Head and Neck Cancer group. Dr. Abou-Madian is a regular lecturer in the Mannheim International IMRT/VMAT workshops

and for the Mannheim/Heidelberg medical students. Dr. Abou-Madian joined and headed different clinical research teams in Mannheim mainly in the fields of intensity modulated radiotherapy, volumetric modulated arc therapy, and adaptive radiotherapy with 28 research publications (IJROBP, RO, Strahlen Onkol, ZPM, and EJC) and three M.Sc. and PhD theses in universities in Egypt and Germany.

Abrahim Al-Mamgani, MD



Dr. Al-Mamgani completed his education in Bs. Medicine and General Surgery in July 1987 and graduated as a Radiation Oncologist at the Erasmus McDaniel den Hoed Cancer. He was involved in the treatment of Head and Neck, Lung, Urological and Breast Cancers by using Traditional with 3D Conformal, Intensity Modulated and Image Guide Radiotherapy treatment of cancers. His interest were especially focused in the treatment of head and neck cancers with noval techniques application such as Brachytherapy, Stereotactic Radiotheraphy and CyberKnife Robotic Radiosurgery.

Dr. Al-Mamgani is a member of the American Society of Radiation Oncology, European Society of Radiation Oncology, Nederlandse Vereinging Voor

Radiotherapeuten-Oncolgen and member of the Head and Neck Oncology Board. With his expertise on his field, he became the winner of the Golden Siemens Poster Award at the ESTRO Sweden Conference in 2008 for the Urinary Toxicity after Radiotherapy of Prostate Cancer and Best Oral Presentatuib Award for Extra-Cranial, Head and Nect Cancers at the 8th Annual User's Meeting of the CyberKnife 2009 in Florida, U.S.A. for the Treatment of Oropharyngeal Cancers with Robotic Radiosurgery by means of CyberKnife.

Majid Mohiuddin, MD



Dr. Mohiuddin is originally from Philadelphia and graduated from Brown University. He received his medical degree from Brown University Medical School and completed his radiation oncology residency at the Massachusetts General Hospital, Harvard Medical School. He also trained in brachytherapy at the Brigham & Women's Hospital, Harvard.

Dr. Mohiuddin was an Assistant Professor at the University of Maryland in Baltimore. He specialized in breast and gynecological malignancies, authored a number of peer-reviewed publications, and received several research awards. He has been an invited speaker to the American Society for Radiation Oncology (ASTRO) and the Federal Drug Administration (FDA). In June

2009, Dr. Mohiuddin joined Northwest Radiation Oncology in Houston, TX with a clinical appointment at the University of Houston Medical School.

Marc Müenter, MD



Dr. Münter was trained in Radiation Oncology at the Department of Radiation Oncology at the Ruprecht Karls University Heidelberg, Heidelberg; Germany and the German Cancer Research Center in Heidelberg. He is the Clinical Head of the Heidelberg Ion-Beam Therapy Center (HIT), Heidelberg; Germany. Furthermore he is the leading attending for head and neck cancer and gastrointestinal cancer at the Department of Radiation Oncology in Heidelberg. HIT is the first hospital based particle therapy center in the world with a raster scanned beam and the possibility to use protons and heavy ions at the same time. His special interest is particle therapy, IMRT, IGRT and the combination of radiation therapy and new systemic "targeted therapies". Dr. Münter has a ten

year experience in particle therapy and modern photon techniques. He has authored more than 60 publications in radiation oncology. He was trained at the German Cancer Research Center and the University of Heidelberg.

Richard Semelka, MD



Richard Semelka is a Professor, Director of MRI Services, and Vice Chairman of Clinical Research and Vice Chairman for Quality and Safety of the Department of Radiology, at the University of North Carolina Hospitals, U.S.A. He is a member of the Editorial Boards of the journals JMRI, MRI and TMRI, and is a reviewer for many journals. He has contributed to over 220 publications in referred journals and has authored numerous review articles and textbook chapters. He has authored 7 text-books, including Abdominal-Pelvic MRI, third edition, Wiley-Liss, 2006. His main expertise lies in cross sectional abdominal imaging with an emphasis on MRI, with a particular interest of liver, pancreas, kidney and bowel diseases. He regularly conducts various teaching and categorical courses at International Radiology Conferences.

Penny J. Smalley R.N., CMLSO

Penny J. Smalley R.N., CMLSO, is a self employed, independent nurse consultant, working in the field of laser and safety technology, since 1980. Her company, Technology Concepts



International, established in 1986, assists clinical facilities with strategic planning, education, technology assessment, compliance audits, education and training, and clinical research projects. She also assists industry with clinical product development, sales training, and a variety of related services. Ms. Smalley is a member of the International Electrotechnical Commission (IEC) for International standards (TC76), and represents the Australian College of Operating Room Nurses (ACORN) on the Australian Standards (AS/NZ4173), and the Association of periOperative Registered Nurses (AORN) on the American National Standards for Laser Safety (ANSIZ136).Ms. Smalley works with many international professional organizations to design and implement safety education programs, including: American Society for Laser Medicine and Surgery, Dermatology Nurses

Association, Asia Pacific Association for Laser Medicine and Surgery, International Society for Laser Medicine and Surgery, World Association for Laser Therapy, International Academy for Laser Medicine and Surgery, European Medical Laser Association, and the Australasian Laser Alliance. Ms. Smalley is listed in Mbo's Who of American Women, and Who's Who in American Nursing, has authored numerous articles and text chapters, and has taught perioperative concepts in laser technology and safety, throughout the world.

Freddy Stahlberg, PhD



Freddy Ståhlberg (born 1952) is professor of MR physics with special emphasis on medical applications at Lund University, Sweden. He is the author of over 100 peer-reviewed papers in the field of MRI research, primarily on the methodology and application of techniques for quantification of functional/physiological parameters such as flow, perfusion and diffusion. Professor Stahlberg has served as president of the European Society for Magnetic Resonance in Medicine and Biology (ESMRMB) 2003-2004, past president 2004-2006. Member of the board of Lund University from 2007, and since 2008 he is director for Lund University Bioimaging Center which comprises front-end equipment for experimental and clinical MRI and PET.

Herman Suit, MD, PhD



Herman Suit was born in Houston, TX in 1929. His formal education is: B Sc, University of Houston, 1948; M Sc in Biochemistry, Baylor University, 1952; MD. Baylor University College of Medicine, 1952; D Phil Thesis on Radiation Effects on Erythropoesis, Oxford University, 1956. Professional Appointments: Radiation Branch, National Cancer Institute 1957-59; Chief, Experimental Radiation Therapy, MD Anderson Cancer Center 1959-1970; Chief of Radiation Oncology at Massachusetts General Hospital 1970-2000 and Physician in the Department 2000-present. Andres Soriano Professor of Radiation Oncology, Harvard Medical School 1970-2000; Andres Soriano Distinguished Professor of Radiation Oncology, Harvard Medical School 2001-present.

Clinical activities at MDACC very active in the development and popularizing the management of patients with sarcoma of soft tissues by the combination of less than radical surgery and moderate dose radiation, with special emphasis on pre-operative radiation. Also, he developed the afterloading technique using the Fletcher Suit applicators. At MGH [1970-present], Suit and physicist M Goitein with colleagues treated the first patient by low dose per fraction proton irradiation [Jan 1974], a small boy with pelvic sarcoma. Then shortly we performed the first proton treatment of a skull base sarcoma and in 1975 the first uveal melanoma with ophthalmologist E Gragoudas. The research component of this program has been generously supported by the NCI from 1976 to present. Proton therapy has yielded several clinical gains. Another clinical initiative has been intra-operative electron irradiation as the boost dose. For the 30 years as chief, he spent \(\preceq 40\% \) of time in laboratory primarily with quite special experimental mice, viz defined flora and pathogen free. Findings include: no difference of in vitro radiation sensitivity of cells derived from C3H mouse breast carcinomas or sarcomas; tumor control probability is determined primarily by tumor cell sensitivity and not stroma cells; metastasis frequency increases with tumor volume and increases with local recurrence. This work has been funded continuously by RO 1 NCI grants from 1961 to 1999.

Alphonse Taghian, MD, PhD



Dr Alphonse Taghian gained his medical degree from Alexandria University in Egypt. He did his residency in Radiation Oncology at Centre Alexis Vautrin in France. He then did a clinical and research fellowship at Gustave Roussy Institut. He obtained his PhD in Radiobiology from Paris XI University. He then spent 4 years of basic research at Dr. H. Suit lab at Massachusetts General Hospital, Harvard Medical School where he studied the in-vitro and in-vivo radiation sensitivity of brain tumors. He is now the chief of Breast Radiation Oncology at Massachusetts General Hospital and an Associate Professor of Radiation Oncology at Harvard Medical School. Dr. Taghian has published more than 130 peer reviewed articles, general reviews and chapters. He has edited a book on

the multidisciplinary approach in the treatment of breast cancer. He has been awarded several NIH grants for research totaling \$2.9 Million for research in lymphedema. He is internationally recognized leader in breast radiation oncology in particular in the field of Accelerated Partial Breast Irradiation. His main interest beside that is cardiac exposure to radiation, post-mastectomy radiation and early intervention for lymphedema.

Hirohiko Tsujii, MD, PhD



Dr. Hirohiko Tsujii is a director of the Research Center for Charged Particle Therapy at the National Institute of Radiological Sciences (NIRS) in Chiba, Japan since 1994 and a Professor (Concurrent) at Chiba University, Graduate School of Medicine since 2002 till today. He is known internationally for his work on treating cancer with carbon ions and is the first doctor to have treated patients using hadron therapy in a clinical environment. Dr. Tsujii has three decades of experience in developing hadron therapy as a novel treatment for cancer. He also worked on research for pion treatment in the U.S., where the use of pions in cancer therapy has pioneered at Los Alamos in cooperation with New Mexico University. With his great dedication and commitment on his field. he was

awarded Honorary Member of the European Society of Radiation Oncology (ESTRO) and Prize of Princess Takamatsu Cancer Research Fund. Dr. Tsujii majored in Radiation Oncology, especially

in Charged Particle Therapy.

Dr. Tsujii graduated in 1968 and Intern at Hokkaido University, School of Medicine, served as a Junior Medical Staff, Department of Radiology, National Sapporo Hospital in 1969. Resident at the Department of Radiotherapy, St. Vincent Hospital and Medical Center of New York, U.S.A, Lecturer and Associate Professor at the Hokkaido University from 1974 till 1985, Professor and Director, Proton Medical Research Center, University of Tsukuba in 1989.

Jake Van Dyk, PhD



Jake Van Dyk is Professor of Oncology, Medical Biophysics, Medical Imaging, and Adjunct Professor of Physics at the University of Western Ontario, London, Ontario, Canada, and Manager (Head) of Physics and Engineering at the London Regional Cancer Program of the London Health Sciences Centre. He leads a staff of about 35 people. He has about 38 years of experience in the practical facets of radiation oncology physics with 24 years at the Princess Margaret Hospital (PMH) in Toronto, Canada and 14 years at the London Regional Cancer Program. His research includes multiple aspects of the implementation of modern technology into clinical practice. His recent research addresses outcome optimization and uncertainty propagation in

conformal and intensity modulated radiation therapy as well as the assessment of normal tissue response to radiation treatment. He has won various teaching awards. He was elected Fellow of the American Association of Physicists in Medicine in July 1997 for his "contributions to the field of medical physics". He has served as the President of the Canadian College of Physicists in Medicine for four years and participates on the boards and task groups of various professional, national and international organizations. He also participates as a consultant and lecturer for the International Atomic Energy Agency and the World Health Organization.

Johannes van Lier, PhD



Johannes van Lier is the Jeanne and J.-Louis Lévesque Professor of Radiobiology at the University of Sherbrooke, Québec, Canada. He received his basic training in chemical engineering from the Technological University of Delft, The Netherlands and a Ph.D. in biochemistry from the University of Texas Medical Branch, Galveston, Texas, USA. After a year as an instructor at the same institution, he joined the new medical faculty of the Université de Sherbrooke where he was appointed full professor in 1981. Co-founder of the Medical Research Council group in the radiation sciences and the PET Center at Sherbrooke, his research interests' centre on the interface between chemistry and biology. Well over 300 scientific papers from his group cover issues from medicinal chemistry, through structure-activity

relationships of new drugs for photodynamic therapy, to radiopharmaceuticals for PET imaging.

Konstantin Zakaryan, PhD



Dr. Konstantin Zakarian is a Medical Physicist and Regional Business Development Manager at Sun Nuclear Corporation, Florida, USA. Sun Nuclear Corporation is a world leader in designing and manufacturing QA & Dosimetry Equipment for Radiotherapy. Sun Nuclear has provided the medical physics community with innovative and unique solutions that save valuable time and more impotently improve the integrity of measurements. Sun Nuclear provided the first modular patient dosimetry system, the first routine QA device with standard PC trending database, the first film-less 2D array and first programmable patient specific gating and targeting motion QA solution. Dr. Zakarian is a member of American Association of Physicists in Medicine (AAPM). He has been a participant of many

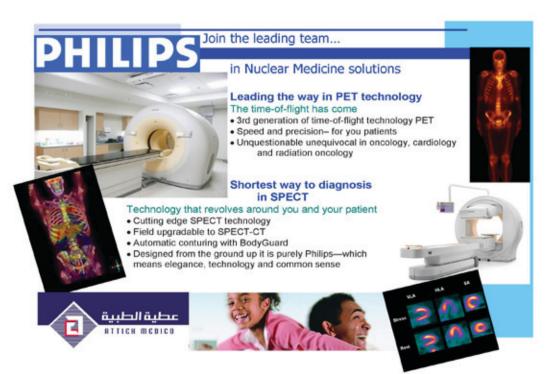
international conferences in Medical Physics and Radiation Oncology and has extensive list of peer reviewed publications.

Corey Zankowski, PhD



Corey Zankowski has held various positions at Varian Medical Systems since joining the company in 1999, and currently has the role of Senior Director, Product Management at Varian. Prior to joining Varian, Corey had the good fortune of spending nearly two years working as a clinical medical physicist as a member of a highly skilled physics group at the Vancouver Cancer Center, B.C. Cancer Agency (Vancouver, Canada). His background is in treatment planning and radiation dosimetry. Corey received his education at McGill University (Montreal, Canada), earning a B.Sc. in Physics in 1992, M.Sc. in Medical Physics in 1994, and PhD in Physics in 1998. Under the mentorship of Erwin Podgorsak, he won the Sylvia Fedoruk Award for the best Canadian research paper in the field of Medical

Physics (1997), Young Investigators Award, American Association of Physicists in Medicine (1998), and the Farrington Daniels Award, American Association of Physicists in Medicine for the best article in radiation dosimetry (1997).





Providing State Of The Art In Medical Technology Since 1983



MD'S MESSAGE

When I started Gulf Medical Company in 1983, I had a vision to bring the most innovative and state-of-the-art medical technology to the Kingdom of Saudi Arabia and the Gulf. Today, after more than two decades, that vision, not only lives on but also continues to gain momentum. Thanks to our customers and suppliers who contributed with precision and excellence to enrich this vision.

The acquisition of Gulf Medical by the House of Naghi in 1992 and its great financial strength gives stability to the company and allows it to realize its tremendous growth potential both in its desired areas of specialization as well as in geographical areas of coverage. During the last 10 years Gulf Medical has been witnessing a steady growth of 30-40% yearly to become the market leader in Saudi Arabia in its specialty. The company continues its mission to play a significant role in developing the skills of leading medical practitioners.

For the first time in the Middle East, Gulf Medical has introduced the Robotic Surgical Technology at the King Khaled University Hospital Riyadh (KKUH), the King Faisal Specialist Hospital & Research Center Riyadh, King Fahad Specialist Hospital Dammam, King Abdul Aziz University Hospital Jeddah (KAAUHJ) and King Fahad National Guard Hospital Riyadh (KFNGH) where all operations were conducted successfully. This year we are installing the 7th & 8th Robotics Surgical System at the King Khaled University Hospital in Riyadh as well as King Fahad Cardiac Center in Madinah.

We have successfully introduced OR-1 System at King Faisal Specialist & Research Center Riyadh, ARAMCO Dhahran, King Khaled University Hospital Riyadh, 5 new OR-1 Systems at the King Fahad National Guard Hospitals in Riyadh, Jeddah and Al Hofuf. This year we have installed 8 OR-1 rooms at King Fahad General Hospital Gizan and 8 rooms at King Fahd General Hospital Jeddah and we are now installing 8 more rooms at King Abdul Aziz University Hospital Jeddah in addition to 4 new rooms at King Khaled University Hospital Riyadh.

Gulf Medical installed the first CyberKnife Radio Surgery System in the Middle East at the King Faisal Specialist Hospital & Research Center in Riyadh. The New acquisition of Carl Zeiss, Maquet Surgical Work Place, Getinge, Maquet Critical Care and Fresenius-Kabi will enhance our market leader position in the area, keeping the momentum of the steady yearly double digit growth for some years to come.

Human resource development has always been at the core of Gulf Medical's investment. In the past few years, Gulf Medical has always made sure that they recruit highly professional, dedicated and a multilingual workforce of biomedical engineers and health care specialists. To cope with the growing need of the market, Gulf Medical highly invests in continuously educating and training its employees and in increasing the workforce as required.

In addition, several new products are expected to contribute to the Gulf Medical's growth. It is our aim to continue our journey of introducing the most innovative medical technologies to our market.

LEADERSHIP

DR. ISMAIL AHMED | Bsc. Ph. Ch. MBA. DBA.
MANAGING DIRECTOR

- Founder of Gulf Medical Co. Ltd.
- Completed Qualification in Basel, Switzerland and USA, numerous management and marketing training programs in USA, Canada, UK, France and Germany.
- * Experience in the medical field: 35+ years

Session Chairpersons

Abdelilah Aboussekhra, PhD Mohei Eldin Abouzied, MD Mushabab Alassiri, PhD Khalid Aleissa, PhD Tarek Amin, MD Omar Alamoudy, MSc Ibrahim Al-Anazi, MSc Ibrahim Aref, MSc Saleh Bamajbour, MSc Yassir Bahader, MD Sarah Bouhaimed, MSc Kostas Chantziantoniou, MSc Osman Elhanafy, PhD Ahmed Alenezi, PhD Adnan Ezzat, MD Mohammed Ezzat, MD Hassan El-Solh, MD Suliman Al-Ghamdi, MD Fadel Al-Fadley, MD Abdulrahman Al-Hadab, MD Stig Holtas, MD Konstantinos Hourdakis, PhD Maha Al-Idrissi, PhD Mohammad Al-Johani, MD Imaduddin Kanaan, MD Nabil Maalej, PhD Abdulroaf Maimani, MD Majid Mansour, MD Essam Matter, PhD Fareed Mayoub, MSc Donald Mclean, PhD Salman Milliebari, BSc Ueber Miola, PhD Belal Moftah, PhD Huda Al-Mohamed, PhD Mohammad Mohiuddin, MD Jazi Al-Mokhlef, MSc Kalaf Al-Moutaerv, MD Sameer Natto, PhD Mohammed Neamatallah, MD Rami Niazy, PhD Maied Al-Othman, MD Saleh Othman, MD Nasser Al Raihi, MD Fathy Saeedi, MSc Ivad Al-Saeed, MD M. Gary Sayed, PhD Abdul Hameed Saoudi, PhD Sultan Al-Sedairy, PhD Hani Al-Seraani, MD Essam Al-shail, MD Mohammad Alsubael, PhD Saleh al-Tayyar, PhD Manhar Vora, PhD Farouk Al-Watban, PhD

Khalid Al-Yahya, PhD

Khalid Al-Yousef, PhD

Ali Al-Zahrani, PhD

King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Fahad Medical City (Riyadh) King Abdulaziz City for Science and Technology (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) Military Hospital (Jeddah) King Faisal Specialist Hospital & Research Centre (Riyadh) Riyadh Military Hospital (Riyadh) Riyadh Military Hospital (Riyadh) King Faisal Specialist Hospital & Research Centre (Jeddah) Dubai Hospital (Dubai) Saudi ARAMCO (Dhahran) King Fahad Medical City (Riyadh) Rivadh Military Hospital (Rivadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Jeddah) King Faisal Specialist Hospital & Research Centre (Riyadh) Princess Nora Oncology Centre National Guard (Jeddah) King Faisal Specialist Hospital & Research Centre (Riyadh) King Abdulaziz Medical City (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) International Atomic Energy Agency (Austria) King Fahad Specialist Hospital (Dammam) King Abdulaziz University (Jeddah) King Faisal Specialist Hospital & Research Centre (Riyadh) King Fahad University of Petroleum & Minerals King Abdulaziz University (Jeddah) Dr. Erfan Bagedo General Hospital (Jeddah) Kina Saud University (Rivadh) King Faisal Specialist Hospital & Research Centre (Riyadh) International Atomic Energy Agency (Austria) King Faisal Specialist Hospital & Research Centre (Riyadh) Riyadh Military Hospital (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) Advanced Systems Company (Riyadh) Riyadh Military Hospital (Riyadh) Umm Al-Qura University (Makkah) King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) Saudi ARAMCO (Dhahran) King Saud University (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Abdulaziz Medical City –National Guard (Jeddah) King Saud University (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Abdulaziz Medical City (Jeddah) King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Faisal Specialist Hospital & Research Centre (Riyadh) King Saud University (Riyadh) Saudi Food and Drug Authority (Riyadh) Kina Faisal Specialist Hospital & Research Centre (Rivadh)

King Faisal Specialist Hospital & Research Centre (Riyadh)

Saad Specialist Hospital (Al Khobar)

Riyadh Military Hospital (Riyadh)

King Abdulaziz Medical City (Riyadh)

PHILIPS

sense and simplicity



Innovative & Clinical Solutions



Scientific Program

3CI	emm	ic riogiani
	16:40 - 17:30	Tutorial 1 [choose 1] Uncertainty in instrumentation measurement C-L. Chapple: Uncertainty in clinical measurement
_	16:00 - 16:40	Phantoms, dose and image quality
tatio	:	Coffee Break
Clinical Implemen	14:10 - 14:50 14:50 - 15:30	DRL determination
10 Radiology and its	14:10 - 14:50	Patient dose audif methods and deferminalit results
Sunday, 28 February 2010 SHECTON ARA COURSE TRS 457: Joint KESHRC/JAEA Advanced School on Dostmetry in Disenosite Radiology and its Clinical Implementation	13:30 -14:10	Dosimetry for fluoroscopy – basics
%		rnucy вьеак
unday,	11:20 -	Osimetry Dosimetry amework, for general Caelaction ormalism radiology strumentation netuding and clinical instrumentation certainties uncertainty
SL nt KFSHRC/IAE	10:40-	osimetry Dosimetry Caelection amework, for general Caelection of or natiology ratumentality and clinical instrumentality certainties uncertainty
rse TRS 457: Joil	10:00 - 10:40	Dosimetry Dosimetry framework, for general formalism radiology including and clinical uncertainties uncertainty
Coul		Coffee Break
IAEA	8:00 - 8:45 8:45 - 9:30	A. ALHaj: Dosimetric quantities quantities introduction
	8:00 - 8:45	Introduction to radiological dosimetry ii
	Time	Course Lecture

<u>TIME</u> 7:00 AM					Venue: Prince Salı	On-Site Registration Venue: Prince Salman Auditorium and North Tower Exhibition Hall	tion Vorth Tower Exhib	ition Hall			
7:30-8:30AM						Breakfast Venue: North Tower Exhibition Hall	nibition Hall				
8:30-9:30AM	8:30–9:30AM Session 1: Cont	tinuing Education Courses (Part I)	ourses (Pai	(i t							
Course No	RO-CEC1	RO-CEC2	RO-CEC3	RO-CEC4	RO-CEC5	DI-CEC1	DI-CEC2	DI-CEC3	DI-CEC4	RBRP-CEC1	RM-CEC1
Course Title	IMRT IGRT	Breast	SRS	Brachy	IAEA TRS398	Adv Nuc Med Tech	Mol Func Imaging	IAEA TRS457	Radiophar maceuticals	Radiobiology and Radiation Protection	Int to Radiation Medicine
Venue	Prince Salman Auditorium	Oncology Lecture Oncology Hall Conferenc	Oncology Conference	RT Conf	PGC #7	PGC Auditorium	PGC1	RC 304	PGC 4	BMP Meeting Room	PGC 3
Coordinator	N. Al-Rajhi	M. Alshabanah	A. Hebshi	K. Balaraj	B. Moftah	O. Demirkaya	M.G. Sayed	A. Al-Haj	M. Vora	G. Alsbeih	R. Al-Mazrou
Chairperson	M. Al-Othman	M. Alassiri	A. Al- Zahrani	M. Mansour	K. Al-Yahia	A. Alenezi	M.G. Sayed	D. McLean	M. Vora	M. Al-Johani	E. Matter
CEC Lecture 1 8 :30-9:00AM	CEC Lecture 1 Introduction, Practices as :30-9:00AM Guidelines and evaluations for IMRT	A. Alsayed: W. Al- Areview of all Najjar: female breast cancer cases from the Saudi Cancer aspects of Registry SRS	W. Al- Najjar: Physics aspects of SRS	F. Khan, Brachytherapy. The Rules of Implantation	S. Huq: Primary and Secondary Standards of Air- kerma and absorbed dose to water	O. Demirkaya: Introduction to PET Physics and Image Formation in PET/CT	P. Kinahan: PET/CT and molecular imaging	A. Al-Haj: Dosimetry in interventional radiology	M. Vora: Overview of FDG in PET	G. Alsbeih Biological effects of ionizing radiation	M. Abdelsattar: History of Medical Imaging
CEC Lecture 2 9:00-9:30AM	J. van Dyk: Image-Guided Adaptive Radiation Therapy (IGART)	D. Ajarem: Interdisciplinary breast cancer management: KFSH Experience	R. Mackie: SRS with Tomotherapy	Z Hassan: Physics Aspects of Brachytherapy	S. Huq: Cavity theory and Absorbed dose to water based formalism	Al Mazrou: Introduction to SPECT/CT Physics	A. Al-Sugair: Molecular Imaging with PET/CT: Clinical Overview	C.Hourdakis: Calibration at an SSDL facility	C.Hourdakis: Calibration at an I. Al-Jammaz: KFSH&RC SSDL facility experience	E.H.Zubizarreta: IAEA QUATRO Program	A. Aboussakhra: Introduction to Non- ionizing radiation
9:30- 10:00AM						Coffee Break	¥	ı		ı	

DAY 1 (Mo	Aonday, 01 March 2010)	
10:00-10:30 AM	<u>Session 2</u> : ICRW2010 Opening Ceremony <u>Venue</u> : Prince Salman Auditorium Prodcast to PGC Auditorium and Research Centre 1" Floor Lobby	
	Recitation of the Holy Quran: Dr. Adnan Al Hebshi, Consultant, Radiation Oncologist, Oncology Centre Opening Remarks: Dr. Belal Moffah, Chairman, ICRM Organizing Committee Reynote Speaker's Address: Prof. Herman Suit, Harvard Medical School, USA H.E. Dr. Mohammed I. Al-Suwaiyel, President, King Abdulaziz City for Scienter H.E. Dr. Mohammed Al Kanhal, President, Saudi Food and Drug Authority H.E. Dr. Qasim Al-Qasabi, Chief Executive Director, King Faisal Specialist	Dr. Adnan Al Hebshi, Consultant, Radiation Oncologist, Oncology Centre Dr. Belal Moffath, Chairman, ICRM Organizing Committee Prof. Herman Suit, Harvard Medical School, USA H.E. Dr. Mohammed I. Al-Suwaiyel, President, King Abdulaziz City for Science and Technology H.E. Dr. Mohammed Al Kanhal, President, Saudi Food and Drug Authority H.E. Dr. Qasim Al-Qasabi, Chief Executive Director, King Faisal Specialist Hospital and Research Centre
10:40-12:10AM	<u>Session 3</u> : Plenary State-of-the-Art Lectures A <u>Venue:</u> Prince Salman Auditorium Chairs: Dr. Adnan Ezzat and Prof. Gen. Kalaf Al-Moutaery	
10:40-11:10AM	SoA Lecture 1 Title: " Radiation Offers New Cures, and Ways to Do Harm ": What Have We Leamed? Lecturer: Prof. Jake van Dyk	
11:10-11:40AM	SoA Lecture 2 Title: "First patients treated with carbons in the first-ever heavy-ion radiation therapy center in Europe" Lecturer: Dr. Marc Muenter	in Europe"
11:40-12:10 AM	SoA Lecture 3 Title: "Why High Field MR!" Lecturer: Prof. Freddy Stahlberg	
12:10-1:30 PM	Lunch Break (Al-Maather Cave Park) and Prayer	QUATRO group meeting Coordinator: M. Al Shabanah

	Session 4: Parallel Sessions I		
1:30-3:30PM	Session 4 A: Radiation Oncology Chairs; Dr. Yassi Bahadur and Dr. Jazi Al-Mokhlef	Session 4 B: Diagnostic Imaging Chairs: Dr. Fadel Al-Fadley and Dr. Hani Al-Sergani	Session 4 C.: Radiobiology & Radiation Protection & Other Topics Chairs: Dr. Saleh Al-Tayyar and Dr. Sameer Natto
Venue	Prince Salman Auditorium	Post-Graduate Centre Auditorium	Post-Graduate Centre (Class Room 1)
1:40 – 2:05 PM	ROLecture 1 Title: "Future directions in breast radiation oncology" Lecturer: Prof. Alphonse Taghian	DI Lecture 1 Title: "Infravoscular ultrasound (IVUS) and optical coherence tomography (OCT) with a focus on image quality" Lecturer: Prof. Stephen Balter	RRPO Lecture 1 Title: "Radiation induced secondary cancer" Lecturer: Prof. Herman Suit
2:05 – 2:30 PM	RO Lecture 2 Tifle: "Integrated use of protons in cancer management" Lecturer: Prof. Jacob Flanz	DI Lecture 2 Title: "The Role of Intravascular Ultrasound in the Era of Drug-Eluting Stents" Lecturer: Prof. Massoud Leesar	RRPO Lecture 2 Title: "Obstetric ultrasound, are you sure it is safe? – Current evidence and guidelines." Lecturer. Prof. Gail ter Haar
2:30 – 2:55 PM	RO Lecture 3 Title: "Image-guided radiation therapy; benefits and limitations" Lecturer; Prof. Faiz Khan	DI Lecture 3 Tifle: "Isotopes in Medicine" Lecturer: Prof. Gerd Beyer	RRPO Lecture 3 Title: "Multimodal Cancer Treatments – The Role of Temperature Controlled Hyperthermia" Lecturer: Prof. Udo S. Gaipl
2:55 – 3:20 PM	RO Lecture 4 Title: "Multi-centric randomized trials in head and neck cancer: 15 years experience of the GORTEC group" Lecturer: Prof. Jean Bourhis	DI Lecture 4 Title: "Uptake Volume Histograms: A novel venue towards Biological target volumes" Lecturer: Dr Slobodan Devic	RRPO Lecture 4 Title: "Radiation protection in pediatric radiology," Lecturer: Dr. Claire-Louise Chapple
3:20 – 3:30 PM	Discussion	Discussion	Discussion
3:30 – 4:00 PM	Asr Prayer and Coffee Break		

DAY 1 (Monday, 01 March 2010)

DAY 1 (M	DAY 1 (Monday, 01 March 2010)	
4:00 – 5:30 PM	Session 5: Panel Discussions	
	Session 5 A: Proton-carbon Ion Therapy Moderators: Dr. Belal Motfah, Dr. Mohamed Alshabanah	Session 5 B: Innovative Approaches in Diagnostic Imaging Moderators: Prof. Stig Holtas, Dr. Tariq Lingawi
Venue	Prince Salman Auditorium	Post Graduate Centre Auditorium
	RO Presentation 1 Title: "Harvard Clinical Experience on Proton Therapy" Presenter: Prof. Herman Suit	Di Presentation 1 Title: "Functional MRI" Presenter: Prof. Freddy Stahlberg
	RO Presentation 2 Title: "Ion Therapy: Chiba Experience" Presenter: Prof. Hirohiko Tsujii	D) Presentation 2 Title: "Computed Tomography" Presenter: Prof. Michael Dennis
	RO Presentation 3 Title: "ARCHADE Proton-Carbon Centre" Presenter: Prof. Jean Bourhis	DI Presentation 3 Title: "PET/CT" Presenter: Prof. Paul Kinahan
	RO Presentation 4 Title: "Compact Proton Therapy Solutions" Presenter: Prof. Rock Mackie	D) Presentation 4 Title: "Clinical Cardiology" Presenter: Prof. Massoud Leesar
	RO Presentation 5 Title: "Proton Beam Scanning" Presenter: Dr. Jacob Flanz	DI Presentation 5 Title: "Radioisotopes" Presenter: Prof. Gerd Beyer
	RO Presentation 6 Title: "Heidelberg heavy-ion radiation therapy center" Lecturer: Dr. Marc Muenter	DI Presentation 6 Title: "Non-invasive High Intensity Focused Ultra Sound" Presenter: Prof. Gail ter Haar
	Discussions Presenters: All Panelists	Discussions Presenters: All Panelists
7:30 PM	Bus Pick-up for King Abdulaziz Museum	
8:00-10:00PM	Venue: ALMaather Cave Park Evening Presentation and Dinner sponsored by Gulf Medical / Accuray Presentations by Omar Dawood, M.D., M.P.H. Vice President of Clinical Development, Accuray Inc. and Enis Ozayer, PhD, Radiation Oncologist, Acibadem University	her Cave Park pnsored by Gulf Medical / Accuray Dawood, M.D., M.P.H. elopment, Accuray Inc. and cologist, Acibadem University

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8:00-9:30AM	Session	ı 6: Con	tinuing Ea	Ucation (Session 6: Continuing Education Courses (Part II)	art II)					
Course No	RO-CEC1	RO-CEC2	RO-CEC3	RO-CEC4	RO-CEC5	DI-CEC 1	DI-CEC2	DI-CEC3	DI-CEC4	RBRP-CEC1	RM-CEC1
Course Title	IMRT IGRT	Breast	SRS	Brachy	IAEA TRS398	Adv Nuc Med Tech	Mol Func Imaging	IAEA TRS457	Radiophar maceuficals	Radiobiology and Radiation Protection	Int to Radiation Medicine
Venue	Prince Salman Auditorium	Oncology Lecture Hall	Oncology Conference	RT Conf	PGC #7	PGC Auditorium	PGC1	RC. 304	PGC 4	BMP Meeting Room	PGC 3
Coordinator	N. Al-Rajhi	N. Al-Rajhi M. Ashabanah	A. Hebshi	K. Balaraj	B. Moffah	O. Demirkaya	M.G. Sayed	A. Al-Haj	M. Vora	G. Alsbeih	R. Al-Mazrou
Chairperson	S. Al- Ghamdi	M. Al- Idressi	I. Alsaeed	N. Al-Safadi	F. Saeedi	S. Othman	S. Holtas	C. Houdrakis	S. Milibari	M. Alsubael	N. Maalij
CEC Lecture 3 8:00-8:30AM	R. Mackie: IMRT/IGRT- based Helical Tomotherapy	A. Tagian: Cardiac Exposure to RT: the Policy of Zero	C. Lindquist: SRS with Gamma Knife/UK Experience	G. Ibbott: Recommendations! and Regulations for Brachytherapy	B. Moffah: Implementation of N _{Dw} based formalism I	P. Kinahan, Attenuation Correction Artifacts in PET/CT	F. Stahlberg: Perfusion aliffusion and BOLD Imaging (fMRI) Part I	CL. Chapple: Dosimetry for CT#1: Basic Dosimetry	M. Vora: Facility Planning: lay- out; personnel; equipment	M. Mohideen: Spatially fractionated grid radiation	G. Alsbeih: Introduction to Radiobiology
	ill Z		A. Mamgani Clinical	J. Bourhis:	B. Moffah:		F. Stahlberg: Perfusion		G. Beyer:	A. Aboussakhra:	A. Alwatban: Medical
CEC Lecture 4 8:30-9:00AM	IMRT with Ion Beams	affer breast conserving therapy: A Multidisciplinary approach	Applications of Cyberknife Robotic Radiotherapy	Roussy Institute Brachytherapy Experience	Implementation of N _{Dw} based formalism II	SPECT/CT: Clinical Applications	diffusion and BOLD Imaging (fMRI) Part II	C. Hourdakis: Calibration of	Regulations: European perspective	Biological effects of non-ionizing radiation	Physics in Diagnostic Imaging
CEC Lecture 5 9:00-9:30AM	C. Zankowski: Clinical implementation of RapidArc		M. Mohideen: A Stereotactic Approach to Advanced Cervical	18A	S. Hug: Calibration of Evaluation of High energy response with photon beams FDG PET	A. Chill: Evaluation of response with FDG PET	S. Holtas: Clinical Cerebral Perfusion Imaging	CTChambers	F. Al-Rumayan: Cyclotron and fluoride production; FDG production	G. Alsbeih: Variation of Radiosensitivity	Y. Khafaga: An overview of radiotherapy process
9:30-10:00AM							Coffee Break	3reak			

DAY 2 (TUC 10:00-12:30AM 10:30-11:30AM 11:30-11:30AM	DAY 2 (Tuesday, 02 March 2010) Session Z: Plenary State-of-the-Art Lectures B Venue: Prince Salman Auditorium Chairs: Dr. Hassan Al-Solh and Dr. Mohammed Mohiudden soa Lecture A Title: "Jopanese experience on 5,000 patients freated with carbon ion beams" Lecturer. Prof. Hirohiko Isujii soa Lecture Rod. Hirohiko Isujii soa Lecture Prof. Jan Bouthis Soa Lecture Rod. Jan Bouthis Lecturer Prof. Michael J. Dennis	es B mmed Mohiudden ta" m bench to bed side"
12:00-12:30AM	SoA Lecture 8 Title: "Clearing the air in surgery" Lecturer: Ms. Penny J. Smalley	
12:30-1:30 PM	Prayer and Lunch Break (Al-Maather Cave Park)	Poster Viewing Session at North Tower Exhibition Hall

DAY 2 (Tu	esday, 02 March 2010)		
	Session 8: Parallel Sessions II		
1:30-3:30PM	Session 8 A: Radiation Oncology Chairs: Dr. Imaduddin Kanaan and Dr. Terek	Session 8 B: Diagnostic Imaging Chairs: Prof. M. Gary Sayed and Dr Abdulraof Maimani	Session 8 C: Radiobiology & Radiation Protection & Other Topics Chairs: Dr. Abdellian Aboussekhra and Dr Abdelhamid Saoudi
Venue	Prince Salman Auditorium	Post Graduate Centre Auditorium	Post-Graduate Centre (Class Room 1)
1:30 – 1:55 PM	RO Lecture 5 Title: "Rationale for clinical trials of particle beam therapy" Lecturer: Prof. Herman Suit	DI Lecture 5 Title: "Advancement in Computed Tomography" Lecturer, Prof. Michael Dennis	RRPO Lecture 5 Title: "A new paradigm for radiotherapy quality management" Lecturer: Prof. Saiful Huq
1:55 – 2:20 PM	RO Lecture 6 Title: "SRS/Clinical Experience" Lecturer: Prof. Christer Linquist	DI Lecture 6 Title: "Assessment and radiation dose reduction in pediatric CT" Lecturer: Dr. Claire-Louise Chapple	RRPO Lecture 6 Title: "SAFETY AUDIT: Key To Quality and Compliance in Practice" Lecturer: Ms. Penny J. Smalley
2:20 – 2:45 PM	RO Lecture 7 Title: "Tomo TBI" Lecturer: Prof. Kay-Uwe Kasch	DI Lecture 7 Title: "Difect Production of Technecium-99m on a Cyclotron" Lecturer: Prof. Johannes Van Lier	RRPO Lecture 7 Title: "Roles, responsibilities, and education of medical physicists" Lecturer: Prof. Faiz Khan
2:45 – 3:10 PM	RO Lecture 8 Title: "Introoperative radiatherapy with KV-X-rays: The Mannheim experience using INTRABEAM" Lecturer: Dr. Ahmed Madian	DI Lecture 8 Tifle: "PEI-CT in head and neck tumors" Lecturer: Prof. Arturo Chiii	RRPO Lecture 8 Title: "Output calibration of radiobiological experiments using EBT films" Lecturer: Dr. Slobodan Devic
3:10 – 3:30 PM	Discussion	Discussion	Discussion
3:30 – 4:00 PM	Prayer & Coffee Break	l	

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		Session 9D: Who is Who at ICRM 2010 Chairs: Dr. Sultan Al-Sedairy and Dr. Khalid Aleissa	Prince Salman Auditorium	- King Faisal Specialist Hospital and Research Centre (KFSHRC): H.E. Dr. Qasim Al-Qasabi - King Abdulaziz City for Science and Technology (KACSI): H.H. Prince Dr. Turki Saud Mohammed Al-Saud	- Saudi Food and Drug Authority (SFDA): Dr. Saleh Al Tayyar - International Atomic Energy Agency (IAEA): Prof. Jake van Dyk / Dr.	- American Association of Physicist in Medicine (AAPM); Prof. Faiz Khan - American Association for Radiation Oncolooy (ASTRO); Prof. Herman	Suit - European Association of Nuclear Medicine (EANM): Prof. Gerd Beyer
		Session 9C: Radiobiology, Radiotion Protection and Other Topics Abstracts Chairs: M. Alsubael and F. Mahyoub	Post Graduate Centre (Classroom 3)	RRPO Abstract 1 Title: "Low Power Laser Title: "Low Power Laser Therapy or Non-Diabelic and Diabelic wounds and Burns" F. Al-Watban, King Faisal Specialist Hospial and Research Centre, Riyadh, Saudi Arabia	RRPO Abstract 2 Hille: Preparation and Evaluation of a Universal Bombesin Pepide on the Universal Sequence for Tagesting Bombesin Receptor- Positive Tumors" M. Okaru, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia	RRPO Abstract 3 Hille: "Kinddiation of Tissues Results in Ultraviolet Light Generation: Possible Explanation of X-ray Bystander Effect" B.H.J. Juuring, T.K. Sham, L.D. Chapman, B. Brewer and R. Samminaiken, Al Faisal University, Riyadh, Saudi Arabia	RRPO Abstract 4 Title: "The Effects of Electromagnetic Fields on Human Health" L. Dubani, Rafik Hariri University Hospital, Beirut, Lebanon
2010)		Session 98: Diagnostic Imaging Abstracts Chairs: M. Abouzeid and K. Chantziantoniou	Post-Graduate Centre (Classroom 1)	DI Abstract 1 Ille: "Performance Characteristics of SPECI Systems Equipped With EPIC-AZ Defectors Using NEMA NU PLOOI Guidellines". R. Al-Mazriou, O. Demirkoya and A. Al-Enezi, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia	DI Abstract 2 Monitoring be of PACS for Monitoring Potlent Doses in Computed Tomography". Na Shibilis, Suburmadia M., Bayoumi, S. Gilani, N. Neligan, R., Bayoumi, S. Gilani, N. Neligan, R., Adencia Lastuwajai, A. Irlouni, and H. Affi, Dubai Haspital, Dubai, United Arab Emirates	DI Abstract 3 Title: "Quantification of Bone Marastosis in Whole-Body PEI/CT Images" O_Demircoy and M. Abouzied, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia	DI Abstract 4 Title: "A Patient Specific Espiratory, Model For Mation Correction in Nuclear Medicine" M. Alnowarni, E. Lewis, M. Guy and K. Wells Surrey. Guildford, United Kingdom
DAY 2 (Tuesday, 02 March 2010)	Session 9: Parallel Sessions	Session 9A: Radiation Oncology Abstracts Chairs: O. Elhanafi and H. Al-Mohamed	Post-Graduate Centre Auditorium	RO Abstract 1 Itile: You faint Specific QA For RopidArc Patients Using Commercially Available Two- Dimensional Array Devices! A. Noban and B. Modfau, King Faisal Specialist Hospital and Research Centre, Riyadh Saudi Ardbid	RO Abstract 2 Tifle: "Linac Radiosurgery Treatment Results of Benign Amelingioma, Shehab-Eldien and M. A. Bayoumi, Dubai Haspita, Dubai, United Arab Emirates	RO Abstract 3 Iller: Beam Proameters for Monte Carlo Simulation of Five Varian Magavoltage Photon Beams (4, 6, 10, 5 and 18 MV)" O_Chipani, B. Moffan and M. Shendaeh, King Faisal Specialist Hospital and Research Centre, Saudi Arabia	RO Abstract 4 Title: "Dosimetric Comparison of assistance of most patient Specific Quality Assurance" R. Ladossh, T. Ganesh, R. Mahan, R.C. Joshi, Y. Rashed, M.Y. Kharadi and S. Devadasan, King Faharadi Specialist Hospital, Saudi Arabia
DAY 2 (Tu	4:00 – 5:30 PM		Venue	4:00 – 4:10 PM	4:10 – 4:20 P.M	4:20 – 4:30 PM	4:30 – 4:40 P.M

4:40 – 4:50 PM	RO Abstract 5 Title: "Dosimetric Parameterization of Title: "Dosimetric Parameterization of Mode Beam Modeling and Rapid Delivery" P.S. Negl, S.N. Sinha, A.G. Babu, T. Rajesh, and S. Gill, Rajiv Gandhir Cancer & Research Centre, Delhi, India	DI Abstract 5 Title: "Variability of the Performance of the Digital Mammography Systems Used that Acfassim Beasts Screening Program" A. Abdulazz, AM. Yousef, King Fahad Specialist Hospital, Qassim, Buraidah, Saudi Arabia	RRPO Abstract 5 Intel "Inmune Bological Rationales for the Use of Temperature Controlled Hyperthermia in Multimodal Cancer Teatments" P. Schildkogt, O.J. OTT, F. Mantel, E.M. Weiss, R. Sieber, R. Fietkau, Rolf S., B. Frey, and U.S. Gaipl, University Hospital of Erlangen, Germany	- The European Society for Therapeutic Radiology and Oncology (ESTRO):
4:50 – 5:00 PM	RO Abstract 6 Title: "Treatment Shifts and Doses Measurements During daily CBCT Based IN Tomic T. Vuong, T. Niazi, L. Lihang, F. DeBlois and S. Devic, McGill University, Canada	DI Abstract 6 TRIE: "The Ryadh Military Hospital's Experience with The First advanced ToF- PET/CT Scanner in Saudi Arabia" A.M. Alenezi, Riyadh, Military Hospital, Riyadh, Saudi Arabia	RRPO Abstract 6 MIRE: Madozenstivity of a Novel MIREI Multation Responsible for the Ataxia Telangiectasia-Like Disorder in Saud Arabia' K. Al Hadyan, N. Al-Harbi, M. Al-Buhairi, M. Rajab and G. Alsbeih, King Faisal Specialist Hospital and Research Centre, Riyath, Saudi Arabia	Prof. Jean Bourhis - World Academy of Laser Applications (WALA): Prof. Farouk Al-Watban - World Federation of Nuclear Medicine
S:00 – 5:10 PM	RO Abstract 7 Title: "Definition of Uptake Volume Histograms for NSCLC Using FDG PET-CT Data H. Mohammed, S. Aldelaijan, N. Tomic, J. Seuntjens, F. De Blois, S. Faria and S. Devic, McGill University, Canada	DI Abstract 7 Title: "Initial Clinical Experience with PET/CT Imaging at King Fahad Specialist Hospital Darmam" K.A. Salman, O.H. Siraj, A.M. Fawzy, King Fahad Specialist Hospital, Damman, Saudi Arabia	RRPO Abstract 7 Title: "Uses of Radiobiological Models To Predict Normal Tissues Complications Following Radiotherapy" M. Al-Buhair, B. Moffah and G. Alsbeih, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia	and Biology (WFNMB): TBA - Radiological Society of Saudi Arabia (RSSA): Dr. Sattam Lingawi - Saudi Cancer Society (SCS): Dr. Abdullah
5:10 – 5:20 PM	RO Abstract 8 Title: "High Dose Preoperative Radiation/ Chemoradiatrion and Full-thickness Local Excision for Select Rectal Ganciers" M. Mohiuddin, King Faisal Specialist Hospital and Research Centre, Riyadh Saudi Arabia	DI Abstract 8 Title: "Modeling Left Ventricle Motion Using Tagged Magnetic Resonance Imaging" M.D. Alenezy, Dammam University, Dammam, Saudi Arabia	RRPO Abstract 8 Itle: The Robe of Research Coordinator in Organizing Clinical Projects Involving Patients Undergoing Multi-Modalities Cancer Treatment" L.A. Venturing. S. Al-Cahttani, and G. Alsbeh, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia	AFAmro - Saudi Medical Physicsrbociety (SMPS): Dr. Adnan Al Watba
5:20-5:30 PM	RO Abstract 9 Trier "3-D Andromy Based Inverse Treatment Planning for HDR Bachtyhterapy of Cervix Cancer- KFSHRC Experience" C. Constantinescu. Y. Bahader, N. Ghassal and M. Ezzat, King Faisal Specialist Hospital and Research Centre, Jeddah, Saudi Arabia	Title: "Relationship Between Genetic Polymorphic Variations in Cell Cycle and Polymorphic Variations in Cell Cycle and MA Repair Genes and Complications to Radiotherapy in Saudi Head and Neck Cancer Patents." N. Al Harbi, M. Al-Bihari, K. Al Haddyn, M. Al-Schaie, M. Al Rajhi and G. Akbeih, King Faisal Specialst Hospital and Research Centre, Riyadh, Saudi Arabia	RRPO Abstract 9 Litle: "Luw Power Laser Therapy of Non- Diabetic and Daibetic Wounds and Burns" A. Livathan, King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia	- Saudi Oncology Society (SOS): Dr. Esam Murshid
7:30 PM	Bus Pick-up for Gala Dinner			
8:00-10:30PM	Gala Dinner and Evening Presentation Sponsored by Al-Faisaliah Medical Systems Venue: Holiday Inn			

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		RM-CEC1	Int to Radiation Medi- cine	PGC 3	G. Alsbeih R. Al-Mazrou	I. Aref	I. Duhani: Radiation Protection & Emergencies	S. Al-Sowaid- an: Introduction to Radiop- harmaceu-	ticals	G. Sayed: Future Op-
		RBRP-CEC1	Radiobiology and Radiation Protection	BMP Meet- ing Room	G. Alsbeih	I. Elanazi	S. Al-Tayyar: Role of SFDA for Radiologi- cal Health Devices	A. Arfaj: Saudi Radiation Protection	Regulations	C-L. Chap- ple:
	art III)	DI-CEC4	Radiophar maceuticals	PGC 4	M. Vora	A Al Watban	S. Shawoo: Quality con- trol; Quality assurance	M. Vora: Good Manufacturing Practice		All faculty:
010)	Session 10: Continuing Education Courses (Part III)	DI-CEC3	IAEA TRS457	RC. 304	A. Al-Haj	O. Alamoudy	C-L. Chapple: Dosimetry for CT #3: Practical Experi- ences		C.Houdrakis:	Enective dose and its limitations
arch 20	ucation	DI-CEC2	Mol Func Imaging	PGC1	M.G. Sayed	R. Niazy	R. Niazy: Multi-modal functional imaging	M. Tuli Molecular Imaging with SPECT/ CT: Clinical	Overview	A. Fatthalla:
3y, 3 Mi	nuing Ed	DI-CEC1	Adv Nuc Med Tech	PGC Audito- rium	O. Demirkaya	M. Abouzeid	A. Chiti: Clinical Applications of PET beyond FDG	M. Dennis: Multi-modality Computed To- mography		O. Demirkaya: Recent Ad-
dnesda	0: Conti	RO-CEC5	IAEA TRS398	PGC #7	B. Moftah	K. Al-Yousef	S. Huq: Calibration of High en- ergy photon beams II	S. Huq: Calibration of High en- ergy electron beams I		S. Huq: Calibration
DAY 3 (Wednesday, 3 March 2010)	Session 1	RO-CEC4	Brachy	RT Conf	K. Balaraj	M. Ezzat	K. Balaraj: Clinical Ap- plications of Brachytherapy	S. Devic: Image Guided Brachytherapy		B. Moftah:
DĄ	0,	RO-CEC3	SRS	Oncology Confer- ence	A. Hebshi	I. Alshail	I. Kanaan: Anal- ogy between radiosurgery and SRS	K. Al-Moutaery / A. Al-Zahrani SRS Clinical Aspects: The RKH Experi-	euce	A. Hebshi:
		RO-CEC2	Breast	Oncology Lecture Hall	M. Alshabanah	A. Al-Hadab	A. Tagian: Postmas- tectomy radiotherapy: indications and selection of RT fields	M. Alshaba- nah: From 2D to 3D breast radiotherapy		A. Tagian/Y. Bahadur/R. Pant: Stan-
		RO-CEC1	IMRT IGRT	Prince Salman Auditorium	N. Al-Rajhi	U. Miola	B. Moftah: KFSH&RC IMRT/IGRT Experience	H. Alkhatib: The role of nanodosime- try in adaptive	radiotherapy	K. Zakarvan:
	8:00-9:30AM	Course No	Course Title	Venue	Coordinator	Chairperson	CEC Lecture 6 8 :00-8:30AM	CEC Lecture 7 8:30-9:00AM		0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

PGC Exhibition Hall, Room#8 rou F. Al-Watban

Laser

LSR-CEC1

F. Al-Watban

Saudi Arabia

Program in

Setting Up a Laser Safety

Ms. Alice

Winters:

Laser Science

Photonics ... but I'm Not

Smalley:

Ms. Penny

and Systems an Engineer!

> in Radiation portunities Future Op-

> > protection Radiation

cussion and Course dissummary

vances in PET Multi-modality imaging in CAD

and PET/CT Technology

ergy electron Calibration of High enbeams II

brachytherapy endorectal

& treatment dardization planning guidelines

HDR Preoperative

A. Hebshi: KFSH&RC SRS Experience

K. Zakaryan: IMRT and **IGRT QA**

CEC Lecture 8 9:00-9:30AM Medicine

Coffee Break	
9:30-10:00 AM	

DAY 3 (We	DAY 3 (Wednesday, 3 March 2010)		
10:00–12:30PM	Session 11: Plenary S <u>Venue</u> : Prince Chairpersons: Dr. Nasser A	<u>Session 11</u> : Plenary State-of-the-Art Lectures C <u>Venue</u> : Prince Salman Auditorium Chairpersons: Dr. Nasser Al-Rajhi and Dr. Saleh Bamajbour	Session 11. a: Laser Concepts in Healthcare Venue: RGC #8
10:00–10:30AM	SoA Lecture 9 Title: "Integration of Diagnostic Imaging and Radiation Oncology for Cancer Treatment" Lecturer: Prof. Rock Mackie	on Oncology for Cancer Treatment"	Ms. Danny Smallay
10:30–11:00AM	SoA Lecture 10 Title: "Role of PET/CT in radiotherapy treatment planning" Lecturer: Prof. Paul Kinahan	ming"	Electromagnetic Interactions and Systems - Photoablation
11:00-11:30AM	SoA Lecture 11 Title: "The Radiological Physics Center's auditing pro Lecturer: Prof. Geoffrey lbbott	SoA Lecture 11 Title: "The Radiological Physics Center's auditing procedures for advanced technology radiation therapy" Lecturer: Prof. Geoffrey lbbott	- Photothermal Effects - Photochemistry
11:30–12:00 AM	SoA Lecture 12 Title: "Cathlab basics: image formation, radiation dose, and safety" Lecturer: Prof. Stephen Balter	se, and safety"	Dr. Mohammad Al Shammari Innovative Approach to Varicose Veins with Laser Therapy
12:00–12:30AM	SoA Lecture 13 Title: "Ultrasound for therapy – drug delivery, bone healing and much more. A review" Lecturer: Prof. Gail ter Haar	nealing and much more. A review"	
12:30-1:30PM	Prayer and Lunch Break (Al-Maather Cave Park)	Poster Viewing Session at North Tower Exhibition Hall	tion Hall

				DAY 3 (Wednesday, 3 March 2010)	Wedn	esday	, 3 Mg	arch 20	010)					
1:30 –5:00PM					Session	12: W(ORKSH	Session 12: WORKSHOPS (Part I)	art I)					Session 12.a:
Workshop Title	IMRT/ IGRT: Tomo- therapy	IMRT/ IGRT Rapid Arc	RO Breast	SRS Cyber Knife	HDR/ LDR Brachy Therapy	IAEA TRS 398	PET/CT	Read with the Expert (Radiology)	Read with the Expert (Cardiol- ogy)	fMRI	FDG	IAEA TRS 457	Radio Biology Radio Protection	Laser Con- cepts in Healthcare
Venue	T6+TPS5	T2 + TPS1	Onco Hall (TPS)	T5 + STPS	T1 + LDRB + Old Sim	Ε	PET/CT	PGA	PGC#5	MRI 3T	C&R FDG Facility	RC 304	Radio biology Lab SSDL	RGC#8
Coordinator	O. Chibani	A. Nobah	P. Yates	W. El-Najjar	Z. Hassan	A. Al-Kafi	O. Demir kaya	A. Al-Sugair	H. Al- Sergani	S. Holtas	M. Vora	A. Al-Haj	G. Alsbeih, F. Mayhoub	F. Al-Watban
Instructors	E. Khalil, T. Mackie, N. Al-Rajhi, W. Safar, M. Shehadeh	Y.Khafaga, G. Nazer, C. Zankowski, M. Nasmi	M. El-Se- baie, M. Al Shabanah, R. Pant, A. Taghian	T. El-Kaissi, A. Al-Hebshi, I.Kanaan, A. Al-Mamgani,A. Amin, J. Poon	H. Al-Mo- hammed, K. Balaraj, R. Awad	S. Haq, S Devic, B. Moftah	P. Kina- han G. M. Sayed	S.Holtas, M. Neamatallah, K. Ismail, T. Rana A. Fathallah, M. Tuli	M. Leesar, W. Hassan, F. Al-Turki	F. Stahl- berg, K. Al Shalali, M. Al Ghamdi	I. Al- Jamaz, M. Vora, IS/AS	D. McLean, CL. Chapple, N. l'Qilan	K. Al- Hadyan, N. Al-Harbi, M. Al-Buhairi, I. Al-Anazi	Ms. Penny Smalley
1:30 –3:30PM	Session	Session	Session	Session		Session	Session	Session	Session	Session	Session	Session	Session	Laser Safety: Beyond Signs and Goggles:
3:30 - 4:00 PM						Ь	Prayer & Coffee Break	fee Break						
4:00 –5:00PM	Session	Session II	Session II Ses	Session II Session II Session II	n II Session II		Session II Session II	Session	Session		Session :	Session	Session II	Procedural Controls (Perioperative Safety)
5:15PM					Bus Pick	Up for A	thria Vil	Bus Pick Up for Athria Village (To be confirmed)	oe confir	(pəm.				
6:00-10:00PM					Athri	a Villag	e Visit (Athria Village Visit (To be confirmed)	onfirme	Q				

			Ī) 4 XVC	Thursda	DAY 4 (Thursday, 4 March 2010)	arch 2	010)					
8:00AM – 12:00Noon					Session	Session 13: WORKSHOPS (Part II)	RKSHOI	PS (Par	t II)				
Workshop Title	IMRT/ IGRT: Tomo- therapy	IMRT/ IGRT Rapid Arc	RO Breast	SRS Cyber Knife	HDR/ LDR Brachy Therapy	HDR/ LDR Brachy IAEA TRS 398 Therapy	PET/CT	SPECT/ CT	Mini Symposium	fMRI	FDG	IAEA TRS 457	Radio IAEA Biology TRS 457 Radio Protec- tion
Venue	T6 + TPS5	T2 + TPS1	Onco Hall (TPS)	T5 + STPS	T1 + LDRB + Old Sim	T3	PET/CT	SPECT/ CT	Prince Salman Audi- torium	MRI 3T	C&R FDG Facility	RC-304	Radio RC-304 biology Lab SSDL
Coordinator	O. Chibani	A. Nobah	P. Yates	W. El-Najjar	Z. Hassan	A. Al-Kafi	O. Demir kaya	R. Al-M120 azrou	Coordinator: A. Al-Sugair Chair: Dr. Muham-mad Neamatallah	S. Holtas M. Vora	M. Vora	120 A. Al-Haj	120 G. Alsbeih, A. Al-Haj F. Mayhoub
Instructors	E. Khalil, T. Mackie, N. Al-Rajhi, W. Safar, M. Shehadeh	Y.Khafaga, G. Nazer, C. Zankowski, M. Nasmi	M. El-Sebaie, M. Al Shaba- nah, R. Pant, A. Taghian	T. El-Kaissi, A. Al-Hebshi, I.Kanaan, A. Al-Mamgani,A. Amin, J. Poon	H. Al- Mohammed, K. Balaraj, R. Awad	S. Haq, S Devic, B. Moftah	P. Kinahan G. M. Sayed	M. Abdu ssettar, M. Al Roweily	P. Kinahan G. Seettar, M. Prof. Richard Semelka M. Sayed Al Roweily	F. Stahl- berg, K. Al Shalali, M. Al Ghamdi	I. Al- Jamaz, C-L. M. Vora, Chapple, IS/AS N. I'Qilan	D. McLean, CL. Chapple, N. I'Qilan	D. K. Al-Hadyan, McLean, N. Al-Harbi, C-L. M. Al-Buhairi, 'Chapple, I. Al-Anazi
8:00 -9:30AM	Session	Session I	Session I	Session	Session	Session	Session	Session	1) CT Studies and Risks of Medical Radiation. 2) Risks in Radiology: Radiation, Contrast Induced Nephropathy and Nephrogenic Stemic Fibrosis,	Session	Session	Session Session	Session
9:30-9:45AM						Coff	Coffee Break						
9:30-12:00 Noon	Session II	Session II	Session II Session II	Session II	Session =	Session II S	Session II	Session II	3) New Techniques in Acquiring Liver MR1 Acquiring Liver MR1 Direction for Patient Safety, 5) Session/Discussion Dedicated for Residents and Fellows	Session II	Ses- sion II	Session II	Session II
12:00 Noon		ı	ı	Closing Cere	nony/Distrib	ution of Certi	ficates (Ven	ue: Prince	Closing Ceremony/Distribution of Certificates (Venue: Prince Salman Auditorium)	n)	ı	ı	ı
12:15-1:00		ı	ı	Praye	r and Lunc	h (Venue: Pr	ince Salm	an Audita	Prayer and Lunch (Venue: Prince Salman Auditorium Foyer)	ı	ш	П	I

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12:30 – 1:30 PM	Session 14: Poster Viewing Sessions
Venue	North Tower Exhibition Hall
	Session 14A: Radiation Oncology Posters
RO Poster 1	Trite: "Quality of Life Among Invasive Cervical Cancer Undergoing Radiotherapy in Malaysia" S. M. Aljunid, S. E. W. Puteh, <i>United Nations University nt'I Institute for Global Health, Kuala Lumpur, Malaysia</i>
RO Poster 2	Title: "Impact of Post-Irradiation time on the Accuray of Dose Measurements for EBT-2 Model GAFCHROMICTM Film" S. Aldelaijan, H. Mohammed, N. Tomic, J. Seuntjens, F. DeBlois, L. Liang and S. Devic, McGill University, Montreal, Quebec, Canada
RO Poster 3	Title: "Innovative Radiation Techniques in Treating Pediatric Cancer: Implementation & Limitations" Y. Khafaga, <i>King Faisal Specialist Hospital & Research Centre, Saudi Arabia</i>
RO Poster 4	Title: "Computed Verification of Light and Radiation Field Size Superimposition On Cobalt-60 Machine" Y.M. Yousif Abdallah, M. E. M. Gar-elnabi and M.A. Ali Omer, <i>Sudan University of Science and Technology, Sudan</i>
RO Poster 5	Title: "Comparative Study on Skin Dose Measurement Using MOSFET and TID for Pediatric Patients with Acute Lymphatic Leukemia" H.I.Al-Mohammed, F.H. Mahyoub and B.A. Moffah, <i>King Fdisal Specialist Hospital & Research Centre, Saudi Arabia</i>
RO Poster 6	Title: "Evaluation of 3D Breast Irradiation Dose in Prone Position in RICK Radiation Isotopes Center of Khartoum." L.A. Idris, A. Omer, M.A. Ali Omer and M. Izzeldin, <i>Rad Isotopes Center of Khartoum, Sudan</i>
RO Poster 7	Title: "Evaluation of Motrized Wedge for Telecobalt Machine" S. El Hassan and M. Taha, <i>Gezira University, Sudan</i>
RO Poster 8	Title: "The Impact of Geometric Electron Density Distribution On The Electron Dose Calculation Accuracy" A. Nobah, S. Devic and B. Moffah, <i>King Faisal Specialist Hospital & Research Centre, Saudi Arabia</i>
RO Poster 9	Title: "Accerclated Dose Calculation Engine for Interstitial Brachytherapy" O. Chibani, <i>King Faisal Specialist Hospital & Research Centre, Saudi Arabia</i>
RO Poster 10	Title: "Dosimetric Comparison of aSi 1000 EPID and IMatrixXX System for IMRT Patient Specific Quality Assurance" K. Jayesh, T. Ganesh, R. Mohan, R.C. Joshi, Y. Rashed, M.Y. Kharadi and S. Devadasan, <i>King Fahad Specialist Hospital, Saudi Arabia</i>
RO Poster 11	Title: "Commissioning of Asymmetry Collimator for a New Generator of Telecobalt Machine" E. Suliman, <i>Sudan Atomic Energy Commission, Sudan</i>
RO Poster 12	Title: "Anal Canal Carcinoma Treatment Results: The Experience of a Single Institution" M. El-Haddad, R. Awad, A.Al-Suhaibani, M. Al-Hazza, N. Al-Sanae, A. Abd Al-Jabbar, S. Hamoud, L. Ashaary, S.Bazerbashy, K. Balaraj, King Faisal Specialist Hospital & Research Centre, Saudi Arabia

DAY 1-3 (Monday - Wednesday, 01-03 March 2010)

12:30 – 1:30 PM	Session 14: Poster Viewing Sessions
Venue	North Tower Exhibition Hall
RO Poster 13	Title: "Cone Beam CT-Based 3-D Planning in Inracavitary Brachytherapy for Cervical Cancer" H. Al'Halabi, S. Devic, L. Portelance, M. Duclos, B. Reniers, M. Bloemers, B. Bahoric, T. Niazi, L. Souhami, McGill University Montreal, Quebec, Canada
RO Poster 14	Title: "Delivery Quality Assurance for Helical Tomography" Z. Hassan, O. Chibani, M. Shehadeh, B. Mortah, King Faisal Specialist Hospital & Research Centre, Saudi Arabia
RO Poster 15	Title: "Evaluation of the Uncertainties in the Dose Delivered of Sterectactic Radiosurgery (SRS)" Y. Rashed, T. Hashim, M. Bayoumi and A. Halaka, <i>Dubai Hospital, UAE</i>
	Session 148: Diagnostic Imaging Posters
DI Poster 1	Title: "Biological Target Volume Definition for Radiotherapy Treatment Planning of NSCLC" S. Devic, N. tomic, J. Seuntjens, F. DeBlois and S. Faria, McGill University, Montreal, Quebec, Canada
DI Poster 2	Title: "Development of Departmental Standards for Measured Activity in Nuclear Medicine" R. Ravichandran, and J. P. Binukuma <i>r, Royal Hospital, Oman</i>
DI Poster 3	Title: "Patient Dose Measurement for Measurements of Establishing Guidance Levels for Medical Exposures in Diagnostic Radiology." I. Duhaini, Y. Assafiri. L. El-Nachef, T. Koubaissy, A. Mohanna, R. Dib, A. Baassiri, C Barkil and M Haddad, Rafik Hariri, <i>University Hospital, Lebanon</i>
	Session 14C: Radiobiology, Radiation Protection and Other Topics Posters
RRPO Poster 1	Title: ""New Oxorhenium (V) Complex with Aminothazole Ligand and Radiochemical Behavior of Its Oxotechentium (V) Complex Analog" N. S. Alhokbany and I.J. Al-Jammaz, <i>King Saud University, Saudi Arabia</i>
RRPO Poster 2	Title: "The Association Between P53 Codon 72 Ploymorphism, Human Papillomavirus Infection and Cervical Cancer in Saudi Arabia", G. Alsbeih, N. Al Harbi, S. Al Qahtani, L. A. Venturina, R. Awad and K. Balara, King Faisal Specialist Hospital & Research Centre, Saudi Arabia
RRPO Poster 3	Title: "Medical Physics Status in the Middle East Countries", I. Duhaini, A. Mohamad and J. Al-Suwaidi, Rafik Hariri, <i>University Hospital, Lebanon</i>
RRPO Poster 4	Title: "The Professional Doctorate in Medical Physics. A Matter of Degrees" M. G. Sayed and A. Alenezi, <i>King Faisal Specialist Hospital & Research Centre, Saudi Arabia</i>
RRPO Poster 5	Title: "Radiologic Science Faculty and the Terminal Degree Requirement" M. G. Sayed, E. Mattar and A. Alenesi, King Faisal Specialist Hospital & Research Centre, Saudi Arabia

Acknowledgements

Co-Organizers:

Our special appreciation to

- King Abdulaziz City for Science and Technology (KACST)
- · Saudi Food and Drug Authority (SFDA)
- International Atomic Energy Agency (IAEA)

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- European Association of Nuclear Medicine (EANM)
- Radiological Society of Saudi Arabia (RSSA)
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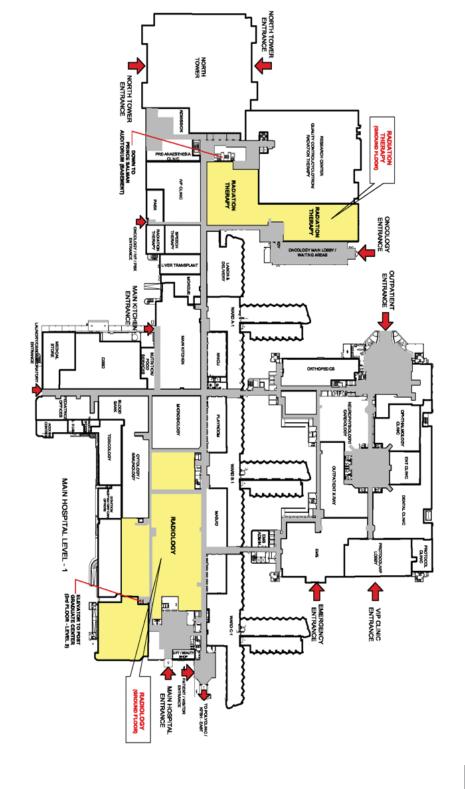
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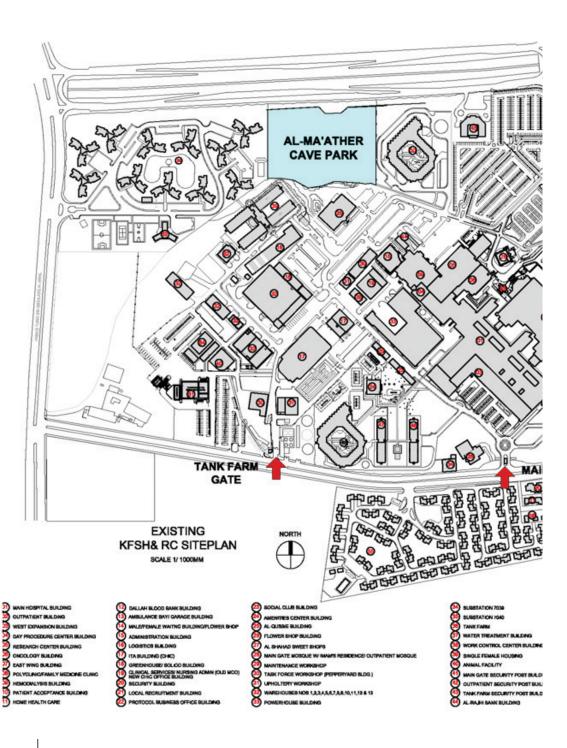
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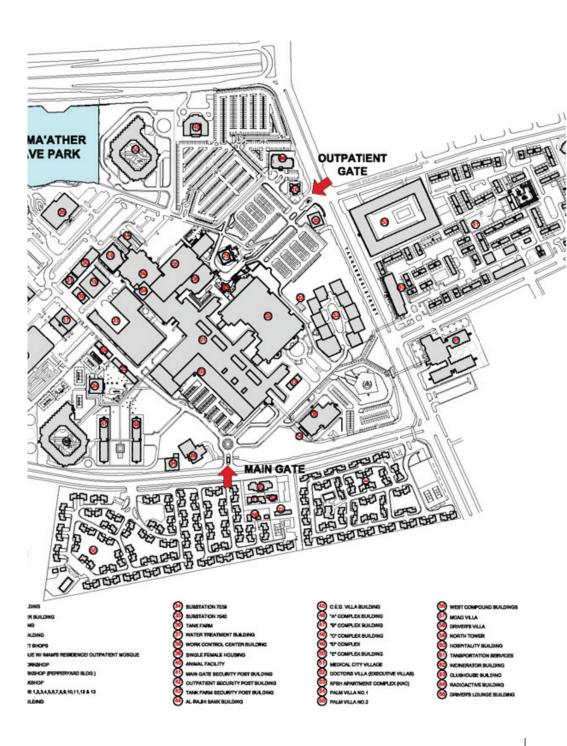
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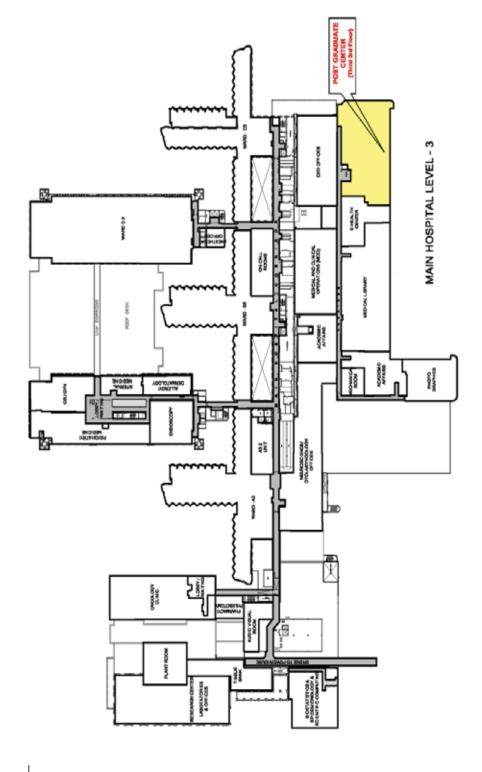
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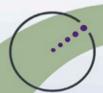
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