

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

## MESSAGE

Dear Colleagues,

Building on the celebrated success of the ICRM2010, the King Faisal Specialist Hospital and Research Centre will conduct the International Conference on Radiation Medicine (ICRM2012) at its campus in Riyadh, Saudi Arabia, from 27 February - 01 March 2012.

We invite you to attend the ICRM2012! It will offer a series of diverse continuing education courses and workshops in the applications of radiation in medicine. The program activities shall be led by experts and distinguished speakers from different leading institutions worldwide. Our prospective audience includes physicians, medical physicists, clinical scientists, technologists and other healthcare professionals.

This event aims to provide participants working in radiation medicine with a venue in maintaining cutting-edge knowledge and skills in their fields including radiation oncology, radiology, nuclear medicine, nuclear cardiology, radiobiology, medical physics and radiation protection and other related disciplines. More importantly, ICRM2012 aims to promote radiation medicine, its practice and advancement in the region.

The ICRM2012 will also include scientific exhibition, where leading companies will display state-of-the-art products that have found clinical acceptance with particular relevance to the delivery of quality patient care.

There will also be a number of social events during the Conference. Such events include: gala dinners; visits to famous landmarks and historical sites; and opportunities to see the traditional way of life in Riyadh.

Please visit our website at: [www.radmed.org](http://www.radmed.org) for more information and updates about the Conference.

On behalf of the Organizing Committee, we look forward to seeing you at the Conference and wish you a pleasant stay in Riyadh!

With best regards.

Sincerely,



**Belal Mofteh, PhD, FCCPM**  
Chairman, ICRM2012  
Organizing Committee  
Chairman, Biomedical Physics  
Department



**Mohammad Al-Shabanah,**  
**MD**  
Co-Chairman, ICRM2012  
Organizing Committee  
Head, Radiation Oncology

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## ABOUT ICRM2012

The biennial International Conference on Radiation Medicine (ICRM2012). ICRM2012 is part of our continuing initiative in enhancing the development of medical and healthcare professionals with a focus on the applications of radiation in medicine, including medical physics, radiation oncology, radiology, radiation protection, nuclear medicine, nuclear cardiology and radiobiology. Our ultimate goal is to support our colleagues in providing safe and quality patient care.

ICRM promotes improvements in healthcare and advances the dissemination and development of knowledge in the region.

The King Faisal Specialist Hospital and Research Centre (KFSH&RC), in collaboration with the International Atomic Energy Agency (IAEA), leading national and international institutions and professional societies, will host the "International Conference on Radiation Medicine (ICRM2012)" at its campus in Riyadh, Saudi Arabia, from 27 February - 01 March 2012.

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, ICRM2012 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 Radiology and Oncology (ESTRO)
- European Association of Nuclear Medicine (EANM)
- International Atomic Energy Agency (IAEA)
- National Institute of Radiological Sciences (NIRS)
- Radiological Society of Saudi Arabia (RSSA)
- Saudi Cancer Society (SCS)
- Saudi Food and Drug (SFDA)
- Saudi Oncology Society (SOS)
- Saudi Society of Medical Radiologic Technology
- World Federation of Nuclear Medicine and Biology (WFNMB)
- World Health Organization (WHO)



## 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.

## CONTACT INFORMATION

### **Ms. JOSEPHINE VERIDIANO**

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## WHO SHOULD ATTEND

Cardiologists	Radiation Oncologists
Clinical Scientists	Radiation Therapists
Dosimetrists	Radiobiologists
Engineers	Radiologists
Medical/Health Physicists	Nuclear Medicine Physicians
Neurosurgeons	Radiology Technologists
Nurses	Students
Physicians	Vendor Representatives

## WORKSHOP SUMMARY

1. IAEA LDR/HDR Brachytherapy
2. Introduction to Radiation Medicine
3. IMRT/IGRT: Tomotherapy
4. IMRT/IGRT: Rapidarc
5. Stereotactic Radiosurgery: Cyberknife
6. Radiography - Updates and Trends
7. PET/CT application in treatment planning
8. PET/CT QC/QA
9. Radiobiology and Radiation Safety

## 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; Early registration fee is SR 400 (for three days) and SR150 (for one day), if registration form is received on or before 14 February 2012. Late registration fee is SR 500 (for three days) and SR200 (for one day only) if received any time after 14 February 2012 date. Late/on-site registration fees are to be paid on-site on 26 February 2012 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

50% Discount for students.

## CME CREDIT APPLICATIONS

A total of thirty (30) CME credit hours have been submitted by the Saudi Commission for Health Specialties (SCHS). 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

Certificate of attendance will be available on the 4th day of the meeting only. Please collect your certificate from the registration desk just in front of the Prince Salman Auditorium before you leave.

## 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 35555 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 AUTHORITY



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 for man 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 Water and Electricity, Minister of Finance and Minister of Economic 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, drugs and medical devices with professional and 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

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CARL ZEISS MEDITEC

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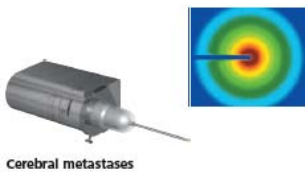
- Efficient local tumor control
- Safety shown by clinical experience
- Improved patient convenience
- Over 10 years of clinical experience
- Optimized system

#### Effective Internal Radiation

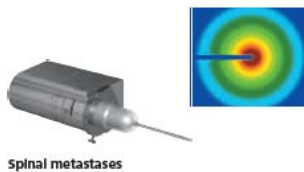
“Go where the tumor is” is the philosophy that impels INTRABEAMR. The sterile INTRABEAMR applicator can be positioned directly into the tumor bed, allocating the precise radiation dose exactly where it is needed most. Radiotherapy delivery with the INTRABEAMR system stands for highly effective radiation with low doses. This approach is possible because the INTRABEAMR X-ray source generates low energy X-rays characterized by high relative biological effectiveness (RBE) allowing superior tumor-cell killing.

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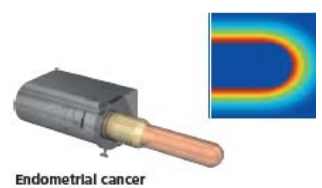
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Cerebral metastases



Spinal metastases



Endometrial cancer



Oral cancer



Gastrointestinal cancer



skin cancer



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## ORGANIZING COMMITTEE

### CHAIRMAN

#### **Belal Moftah, PhD, FCCPM**

Chairman, Sponsorship Committee  
Head, Radiation Physics  
Chairman, Biomedical Physics Department  
KFSH&RC, Riyadh

### CO-CHAIRMAN

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Chairman, Sub-Committee for Radiation Oncology  
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<p><b>Mr Jazi Al-Mokhlef</b> General Manager, Health Physics Est. Past Acting Chairman, Biomedical Physics Department King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>	<p><b>Ms Shahinas Morshed</b> Conference Coordinator, Academic &amp; Training Affairs, CME Section King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>
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<p><b>Prof Ibrahim Ali Alorainy</b> Professor &amp; Consultant Radiologist, King Saud University Riyadh, Saudi Arabia</p>	<p><b>Dr Majid Al-Othman</b> Radiation Oncologist, Saudi Aramco Medical Services Organization Dhahran, Saudi Arabia</p>
<p><b>Dr Eyad Alsaeed</b> Chairman, Radiation Oncology King Khalid University Hospital Riyadh, Saudi Arabia</p>	<p><b>Dr Abdelhamid Saudi</b> Chief Medical Physicist, Princess Norah Oncology Center (PNOC) KAMC-WR, NGH Jeddah, Saudi Arabia</p>
<p><b>Dr M. Gary Sayed</b> Head, Imaging Physics Head, Molecular &amp; Functional Imaging Head, Secondary Standard Dosimetry Laboratory Biomedical Physics Department King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>	<p><b>Dr Ghazi Alsbeih</b> Deputy Chairman / Senior Scientist, Head, Radiation Biology Section Biomedical Physics Department King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>
<p><b>Dr Essam Senan</b> Consultant, Head Section, Radiation Oncology King Faisal Specialist Hospital &amp; Research Centre Jeddah, Saudi Arabia</p>	<p><b>Dr Hani Al-Sergani</b> Section Head, King Faisal Heart Institute King Faisal Specialist Hospital &amp; Research Centre Clinical Assistant Professor, King Saud University Riyadh, Saudi Arabia</p>
<p><b>Mr Khaled Al-Shami</b> Manager, Public Relations Department King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>	<p><b>Dr Mahmoud Tuli</b> Consultant, Nuclear Medicine, Medical Imaging Services King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>
<p><b>Ms Josephine Veridiano</b> Senior Hospital Assistant, Biomedical Physics Department King Faisal Specialist Hospital &amp; Research Centre Riyadh, Saudi Arabia</p>	<p><b>Dr Khalid Al-Yousef</b> Assistant Professor, COM, KSAU-HS Medical Imaging Department King Abdulaziz Medical City Riyadh, Saudi Arabia</p>
<p><b>Col Dr Ali Al-Zahrani</b> Director &amp; Consultant, Clinical and Radiation Oncology Department of Oncology Riyadh Military Hospital Riyadh, Saudi Arabia</p>	

## INTERNATIONAL SPEAKERS

<p><b>Hani Abdel-Nabi, M.D., Ph.D., FACNP</b>            Professor,            Nuclear Medicine            University at Buffalo            Buffalo, New York</p>	<p><b>Walter Curran Jr., M.D., FACR</b>            Executive Director,            Winship Cancer Institute, Emory University            Professor, Lawrence W. Davis Professor            Chair, Emory's Department of Radiation Oncology            Chairman, Radiation Therapy Oncology Group (RTOG)            USA</p>
<p><b>Tom Depuydt, Ph.D.</b>            Medical Radiation Physicist            Universitair Ziekenhuis Brussel, Radiotherapy, Medical            Physics Group            VUB, Faculty of Medicine and Pharmacy,            Medical Imaging and Physical Sciences Group</p>	<p><b>Slobodan Devic, Ph.D., FCCPM</b>            Assistant Professor, Department of Medical Physics            Medical Physicist, Radiation Oncology Department            McGill University Health Centre            Montréal, Québec, Canada</p>
<p><b>John Gueulette, Ph.D.</b>            Scientific Consultant,            Radiation Biologist,            Radiobiology Laboratory            Universite Catholique de Louvain            Bruxelles, Belgium</p>	<p><b>Leonard Gunderson, M.D., MS, FASTRO</b>            President,            American Society for Therapeutic Radiology and Oncology            (ASTRO)            Emeritus Professor &amp; Consultant, Mayo Clinic            Department of Radiation Oncology            Scottsdale, Arizona, USA</p>
<p><b>Mohammed Saiful Huq, Ph.D., DABR, FAAPM, FlnstP</b>            Professor &amp; Director,            Medical Physics, UPMC Cancer Centers            Department of Radiation Oncology            Professor, Radiation Oncology            University of Pittsburgh School of Medicine Pittsburgh            Pittsburgh, PA, USA</p>	<p><b>Wassim Jalbout, Ph.D., DABMP</b>            Clinical Medical Physicist,            Radiation Oncology Department            American University of Beirut Medical Center            Beirut, Lebanon</p>
<p><b>Tadashi Kamada, M.D., Ph.D.</b>            Director,            Research Center for Charged Particle            Therapy National Institute of Radiological Sciences            Chiba, Japan</p>	<p><b>Osama Mawlawi, Ph.D.</b>            Professor,            Imaging Physics            The University of Texas MD Anderson Cancer Center            Houston, Texas, USA</p>
<p><b>Ahmed Meghzifene, Ph.D.</b>            Head, Dosimetry and Medical Radiation Physics Section            Division of Human Health            PhD and Post-doc in Radiation Dosimetry            International Atomic Energy Agency (IAEA)            Vienna, Austria</p>	<p><b>Daud Mohamad, Ph.D.</b>            Professor,            Deputy Director General, International Atomic Energy            Agency (IAEA)            Head, Department of Nuclear Sciences and Applications,            IAEA            Vienna, Austria</p>
<p><b>Shinichiro Mori, Ph.D., MPH, RT</b>            Director,            Department of Accelerator and Medical Physics            Research Center for Charged Particle Therapy            National Institute of Radiological Sciences (NIRS)            Japan</p>	<p><b>Koji Noda, Ph.D.</b>            Director,            Department of Accelerator and Medical Physics            Research Center for Charged Particle Therapy            National Institute of Radiological Sciences (NIRS)            Japan</p>
<p><b>Fridtjof Nuesslin, Ph.D.</b>            Professor, Biomedical Physics            Klinikum rechts der Isar            Institute of Advanced Study (IAS)            Technische Universität München            Germany</p>	<p><b>Roberto Orecchia, M.D.</b>            Professor, Radiotherapy            Chair, Radiotherapy Department, University of Milan            Director, Radiation Therapy Department, European            Institute of Oncology (IEO)            Scientific Director, Centro Nazionale di Adroterapia            Oncologica (CNAO ) Foundation            President, Associazione Italiana di Radioterapia            Oncologica (AIRO)            Board member, European Society of Treapeutic Radiology            and Oncology (ESTRO)            President, International Society of Intraoperative            Radiotherapy (ISORT)            Milan, Italy</p>



<p><b>Maria del Rosario Perez, M.D.</b>  Scientist,  Radiation and Environmental Health Programme  Department of Public Health and Environment (PHE)  Health Security and Environment Cluster (HSE)  World Health Organization (WHO)  Coordinator,  WHO Global Initiative on Radiation Safety in Health Care  Settings  Switzerland</p>	<p><b>Stefan Rieken, M.D.</b>  Neuro-Radiation Oncology Research Group,  University of Heidelberg,  Department of Radiation Oncology  Germany</p>
<p><b>Toshikazu Suzuki, Ph.D.</b>  Scientific Research,  National Institute of Radiological Sciences (NIRS)  Chiba, Japan</p>	<p><b>Hideo Tatsuzaki, M.D., Ph.D.</b>  Section Head, Diagnosis Section  Department of Radiation Emergency medicine  Research Center for Radiation Emergency Medicine  National Institute of Radiological Sciences (NIRS)  Chiba, Japan</p>
<p><b>Elwin Tilson, Ph.D.</b>  Head,  Department of Radiologic Sciences  Armstrong Atlantic State University  Georgia, USA</p>	<p><b>Hiroshi Tsuji, M.D., Ph.D.</b>  Director,  Research Program for Carbon Ion therapy &amp; Diagnostic  Imaging of Research Center for Charged Particle  Therapy  Head,  Radiation Oncology Section of Research Center for  Charged Particle Therapy  National Institute of Radiological Sciences (NIRS)  Japan</p>
<p><b>Hirohiko Tsujii, M.D., Ph.D.</b>  Research Fellow,  National Institute of Radiological Sciences (NIRS)  Japan</p>	<p><b>Jack Venselaar</b>  Senior Specialist Medical Physicist,  Dept Clin. Physics  Instituut Verbeeten  The Netherlands</p>
<p><b>Shada Wadi-Ramahi, Ph.D., DABR</b>  Head, Medical Physics Section  King Hussein Cancer Center  Amman, Jordan</p>	<p><b>Shigeru Yamada, M.D., Ph.D.</b>  Head,  Treatment Team 2, Radiation Oncology Section of  Research Center for Charged Particle Therapy,  National Institute of Radiological Sciences  Japan</p>
<p><b>Naoyoshi Yamamoto, M.D., Ph.D.</b>  Head,  Radiation Oncology Section of Research Center for  Charged Particle Therapy  National Institute of Radiological Sciences  Japan</p>	<p><b>Terry Yoshizumi, Ph.D., FAAPM</b>  Professor, Radiology and Professor of Radiation Oncology  Duke Radiation Safety Officer (RSO)  Director, Duke Radiation Dosimetry Laboratory (DRDL)  Duke University Medical Center (DUMC)  USA</p>

## LOCAL SPEAKERS

<p><b>Mr Nasser Abdullah Alaboudi</b>          Director, Radiation Protection and Safety Department          Medical Devices Sector          Saudi Food &amp; Drug Authority</p>	<p><b>Dr Abdelilah Boussekhra</b>          Senior Scientist,          Biological &amp; Research Department          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>
<p><b>Dr. Abdullah Al- Amro</b>          Chief Executive Officer,          King Fahad Medical City (KFMC)          Chairman of the Board of Directors, Saudi Cancer          Society          Riyadh, Saudi Arabia</p>	<p><b>Mr Ibrahim Al-Anazi</b>          Health Physicist,          Biomedical Physics Department          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>
<p><b>Dr Omer Demirkaya</b>          Senior Scientist,          Imaging Physics Section          Biomedical Physics Department          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>	<p><b>Mr Ibrahim Duhaini</b>          President, Middle East Federation of Organizations of          Medical Physics (MEFOMP)          Director, Radiation Safety          OHS Department, Hamad Medical Corporation          Doha, Qatar</p>
<p><b>Dr Ahmad Fathala</b>          consultant, Nuclear Medicine and Cardiovascular          Imaging          Medical Imaging service          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>	<p><b>Dr Peter Hall</b>          Chairman, Department of Molecular Oncology          Senior Consultant, Office of the Chief Executive KFSH&amp;RC          Professor, Molecular Pathology, Alfaisal University          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>
<p><b>Dr Adnan Al Hebshi</b>          Consultant,          Oncology Centre          King Faisal Specialist Hospital and Research Centre          Riyadh, Saudi Arabia</p>	<p><b>Mr Nabil Iqeilan</b>          Medical Physicist,          Imaging Physics Section          Biomedical Physics Department          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>
<p><b>Dr Ibrahim Al-Jammaz</b>          Deputy Chairman,          Cyclotron &amp; Radiopharmaceuticals          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>	<p><b>Dr Imaddudin Kanaan</b>          Chairman,          Department of Neurosciences          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>
<p><b>Dr Yasser Khafaga</b>          Consultant Radiation Oncologist,          Oncology Centre          King Faisal Specialist Hospital and Research Centre          Riyadh, Saudi Arabia</p>	<p><b>Mr Fareed Mahyoub</b>          Head, Radiation Safety Office          Head, Health Physics Section          Biomedical Physics Department          King Faisal Specialist Hospital &amp; Research Centre          Riyadh, Saudi Arabia</p>
<p><b>Dr Nabil Maalej</b>          Associate Professor, Medical Physics          King Fahd University of Petroleum and Minerals          Dhahran, Saudi Arabia</p>	<p><b>Dr Essam Mattar</b>          Assistant Vice Rector,          Health Specialties for Development Affairs          King Saud University          Kingdom of Saudi Arabia</p>

<p><b>Dr Belal Mofthah</b>  Chairman, Sponsorship Committee  Head, Radiation Physics  Chairman, Biomedical Physics Department  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>	<p><b>Dr Mohammed Mohiuddin</b>  Director,  Oncology Centre  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>
<p><b>Dr Rami Niazy</b>  Scientist,  Molecular and Functional Imaging  Biomedical Physics Department  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>	<p><b>Prof Ibrahim Ali Alorainy</b>  Professor &amp; Consultant Radiologist,  King Saud University  Riyadh, Saudi Arabia</p>
<p><b>Mr Mohammed Al-Rowaily</b>  Acting Supervisor, Nuclear Medicine  Medical Imaging Services  King Faisal Specialist Hospital &amp; Research Center  Riyadh, Saudi Arabia</p>	<p><b>Dr Abelhamid Saudi</b>  Chief Medical Physicist,  Princess Norah Oncology Center (PNOCC)  KAMC-WR, NGH  Jeddah, Saudi Arabia</p>
<p><b>Dr Salem Sassi</b>  Senior Consultant  Director of Research and Training  Department of Medical Physics  Riyadh Military Hospital  Riyadh, Saudi Arabia</p>	<p><b>Prof Dr M. Gary Sayed</b>  Chairman, Scientific Committee  Head, Imaging Physics  Head, Molecular &amp; Functional Imaging  Head, Secondary Standard Dosimetry Laboratory  Biomedical Physics Department  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>
<p><b>Dr Ghazi Alsbeih</b>  Deputy Chairman / Senior Scientist,  Head, Radiation Biology Section  Biomedical Physics Department  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>	<p><b>Dr Hani Al-Sergani</b>  Deputy Director,  Cardiac Cath Lab  King Faisal Heart Institute  King Faisal Specialist Hospital &amp; Research Centre  Clinical Assistant Professor,  King Saud University  Riyadh, Saudi Arabia</p>
<p><b>Dr Mohammad Al-Shabanah</b>  Chairman, Sub-Committee for Radiation Oncology  Section Head, Radiation Oncology  Oncology Centre  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>	<p><b>Dr Mahmoud Tuli</b>  Consultant, Nuclear Medicine,  Medical Imaging Services  King Faisal Specialist Hospital &amp; Research Centre  Riyadh, Saudi Arabia</p>

## WORKSHOP INSTRUCTORS

Moheieldin Abouzeid	King Faisal Specialist Hospital & Research Centre (Riyadh)
Rana Abu Aish	King Faisal Specialist Hospital & Research Centre (Riyadh)
Ibrahim Al-Anazi	King Faisal Specialist Hospital & Research Centre (Riyadh)
Abdulrahman Alathel	King Faisal Specialist Hospital & Research Centre (Riyadh)
Emilie Beauchemin	King Faisal Specialist Hospital & Research Centre (Riyadh)
Mohamed Elbeltagi	King Faisal Specialist Hospital & Research Centre (Riyadh)
Julia Brown	King Faisal Specialist Hospital & Research Centre (Riyadh)
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Omar Chibani	King Faisal Specialist Hospital & Research Centre (Riyadh)
Mohammed Al-Dehaim	King Faisal Specialist Hospital & Research Centre (Riyadh)
Omer Demirkaya	King Faisal Specialist Hospital & Research Centre (Riyadh)
Slobodan Devic	McGill University Health Centre (Canada)
Khalid Aldossari	King Faisal Specialist Hospital & Research Centre (Riyadh)
Medhat El-Sebaie	King Faisal Specialist Hospital & Research Centre (Riyadh)
Naheed Gamali	King Faisal Specialist Hospital & Research Centre (Riyadh)
Bandar Alghamdi	King Faisal Specialist Hospital & Research Centre (Riyadh)
John Gueulette	Universite Catholique de Louvain (Belgium)
Tagea Hamidudeen	King Faisal Specialist Hospital & Research Centre (Riyadh)
Najla Al-Harbi	King Faisal Specialist Hospital & Research Centre (Riyadh)
Osama Hassad	King Faisal Specialist Hospital & Research Centre (Riyadh)
Zeinab Hassan	King Faisal Specialist Hospital & Research Centre (Riyadh)
Adnan Al-Hebshi	King Faisal Specialist Hospital & Research Centre (Riyadh)
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Imaduddin Kanaan	King Faisal Specialist Hospital & Research Centre (Riyadh)
Ehab Khalil	King Faisal Specialist Hospital & Research Centre (Riyadh)
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Fareed Mahyoub	King Faisal Specialist Hospital & Research Centre (Riyadh)
Fatimah Al-Marhoun	King Faisal Specialist Hospital & Research Centre (Riyadh)
Ahamad Masawi	King Faisal Specialist Hospital & Research Centre (Riyadh)
Osama Mawlawi	The University of Texas MD Anderson Cancer Center (USA)
Eman Meghad	King Faisal Specialist Hospital & Research Centre (Riyadh)
Connie Ming	King Faisal Specialist Hospital & Research Centre (Riyadh)
Belal Mofteh	King Faisal Specialist Hospital & Research Centre (Riyadh)
Huda Al-Mohammed	King Faisal Specialist Hospital & Research Centre (Riyadh)
Manal Mustafa	King Faisal Specialist Hospital & Research Centre (Riyadh)
Umar Maganda Mwidu	King Faisal Specialist Hospital & Research Centre (Riyadh)
Ghadeer Nazer	King Faisal Specialist Hospital & Research Centre (Riyadh)
Ahmed Nobah	King Faisal Specialist Hospital & Research Centre (Riyadh)

Ruchana Parker	King Faisal Specialist Hospital & Research Centre (Riyadh)
Sameha Pickford	King Faisal Specialist Hospital & Research Centre (Riyadh)
Joe Poon	King Faisal Specialist Hospital & Research Centre (Riyadh)
Nasser Al-Rajhi	King Faisal Specialist Hospital & Research Centre (Riyadh)
Mohammed Al-Rowaily	King Faisal Specialist Hospital & Research Centre (Riyadh)
Wedyan Safar	King Faisal Specialist Hospital & Research Centre (Riyadh)
M. Gary Sayed	King Faisal Specialist Hospital & Research Centre (Riyadh)
Ghazi Alsbeih	King Faisal Specialist Hospital & Research Centre (Riyadh)
Hind Al-Selham	King Faisal Specialist Hospital & Research Centre (Riyadh)
Khalled Alshalali	King Faisal Specialist Hospital & Research Centre (Riyadh)
Salih Shaleya	King Faisal Specialist Hospital & Research Centre (Riyadh)
Mamoun Shehadah	King Faisal Specialist Hospital & Research Centre (Riyadh)
Mona Al-Turaiki	King Faisal Specialist Hospital & Research Centre (Riyadh)
Amr Mousa Taha	King Faisal Specialist Hospital & Research Centre (Riyadh)
Francis Tse	King Faisal Specialist Hospital & Research Centre (Riyadh)
Lorcel Ericka Venturina	King Faisal Specialist Hospital & Research Centre (Riyadh)
Paula Yates	King Faisal Specialist Hospital & Research Centre (Riyadh)

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## INTERNATIONAL SPEAKERS' BIOGRAPHICAL DATA



HANI ABDEL-NABI, MD, PHD

Dr Abdel-Nabi earned his medical diploma from Alexandria University where he completed a residency in radiotherapy and nuclear medicine, earning a Master's Degree in the same field with emphasis on thyroid diseases.

Dr Abdel-Nabi was awarded a Fulbright scholarship to pursue advanced research at Ohio State University in Columbus, Ohio. He earned a PhD in Radiation Biology focusing on the effect of ionizing radiation of I-131 and I-125 on the thyroid gland by measuring single strand DNA damage and repairs. He also completed a residency and fellowship in Nuclear Medicine.

While at Ohio State, he had an opportunity to get involved in pre-clinical trials with radiolabeled antibodies and hand held gamma –probes, as well as clinical trials using dual labeled antibodies cocktails. Dr Abdel-Nabi continued his research with antibody conjugate for diagnosis and therapy for more than 3 decades.

Dr Abdel-Nabi became Professor of Nuclear Medicine at the State of New York University at Buffalo in 1990, where he served as Chairman of the Department from 2000 to 2010.

Dr Abdel-Nabi supervised various research projects by junior faculty and authored over 150 manuscripts and abstracts including radiolabeled antibodies,

Positron Emission Tomography with novel tracers such as C-11 choline, Iodine -124, C-11 PIB, and I-124 taxol as well as clinical studies with FDG PET, and PET/CT.

Dr Abdel-Nabi has been a reviewer for scientific journals, grant reviewer for national agencies and has been a member of the American Society of Nuclear Medicine since 1981.



WALTER CURRAN JR., MD

Walter J. Curran was appointed Executive Director of Winship Cancer Institute in September, 2009. He joined Emory in January, 2008, as the Lawrence W. Davis Chair of Radiation Oncology and Chief Medical Officer of Winship Cancer Institute.

Prior to joining Emory, Dr. Curran was Chairman of Radiation Oncology at Thomas Jefferson University in Philadelphia, Pennsylvania. He currently serves as Group Chairman and Principal Investigator of the Radiation Therapy Oncology Group (RTOG), a National Cancer Institute-funded cooperative group, a position he has held since 1997.

Dr. Curran, who is a Georgia Cancer Coalition Distinguished Scholar, has been a principal investigator on several National Cancer Institute grants and is considered an international expert in the management of patients with locally advanced lung cancer and malignant brain tumors. He has led several landmark clinical and translational trials in both areas and is responsible for defining a universally adopted staging system for patients with malignant glioma. He has authored or co-authored more than four hundred abstracts and scholarly papers, as well as numerous presentations, reviews and book chapters. He has been chairman or co-chairman of more than 40 clinical trials and a reviewer for twelve national/international journals.

He serves as the Founding Secretary/Treasurer of the Coalition of Cancer Cooperative Groups and a Board Member of the Georgia Center for Oncology Research and Education (GA CORE). Dr. Curran is the only radiation oncologist to serve as Director of a National Cancer Institute Designated Cancer Center.

Dr. Curran is a Fellow in the American College of Radiology and has been awarded honorary memberships in the European Society of Therapeutic Radiology and Oncology and the Canadian Association of Radiation Oncology. In 2006, he was named the leading radiation oncologist/cancer researcher in a peer survey by the journal Medical Imaging. Under Dr. Curran's leadership Emory's Radiation Oncology Department has been recently selected as a "Top Five Radiation Therapy Centers to Watch in 2009" by Imaging Technology News. This review recognizes the most forward-thinking, U.S.-based cancer treatment centers, which have adopted advanced technology to optimize treatment and make a difference in patient care.

Dr. Curran graduated cum laude from Dartmouth College, received his MD degree from the Medical College of Georgia and is a Board Certified Radiation Oncologist. Curran completed his residency in the Department of Radiation Therapy at the University of Pennsylvania Medical Center and his internship in internal medicine at Presbyterian University of Pennsylvania Medical Center in Philadelphia. Chief Medical Officer, Emory Winship Cancer Institute.





TOM DEPUYDT, PHD

Since 2009, Dr. Tom Depuydt is a certified medical physicist at the University Hospital of Brussels and is affiliated as a researcher to the Medical Imaging and Physical Science group of the Free University of Brussels, Faculty of Medicine. Currently he is involved in a research project supported by the Flemish government through the Hercules foundation to investigate new techniques for radiation therapy of moving tumors.

He holds a master degree in electrical engineering and a master degree in biomedical engineering and medical physics from the University of Leuven, and has worked as a medical physicist at the University Hospital of Leuven from 2004 until 2009. Currently, as a researcher and teaching assistant of Professor Dirk Verellen, he is preparing a PhD thesis on the subject of real-time tumor tracking techniques. He is also engaged as a lecturer in teaching courses of the European Society for Radiotherapy and Oncology.



SLOBODAN DEVIC, PHD

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 guided brachytherapy with particular interest 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.



JOHN GUEULETTE, PHD

After his master degree in Nuclear Physics and Radioprotection at the Université catholique de Louvain (Belgium), John Gueulette got his Ph.D. degree at the Université Paul Sabatier (Toulouse, France) in the department of Atomic Physics. His thesis on the "Relative Biological Effectiveness (RBE) of fast neutrons" oriented his researcher career towards radiobiology, especially towards the study of the biological effects of clinical hadron beams (fast and epithermal neutrons, protons and carbon ions).

During these last 25 years, he visited the majority of the hadron facilities worldwide where he performed different types of radiobiological experiments (e.g., RBE/LET, influence of dose fractionation, OER, etc.) that led to the development of a procedure for the radiobiological calibration / intercomparison of clinical hadron beams. The latter, based on intestinal crypt regeneration in mice after irradiation in a single fraction is nowadays recognized as a standard.

Besides of his teaching at the university, John Gueulette is a member of different international scientific committees promoting hadron therapy and radiobiological research in the field of high-LET radiations. He is the author of more than 50 peer-reviewed papers on pre-therapeutical and pre-clinical radiobiology researches and

contributed to several books summarizing the problematic of radiation therapy with hadrons.



LEONARD GUNDERSON, MD

Dr. Leonard Gunderson received his Bachelor of Science degree at Montana State University (1960-64, Bozeman, MT, USA) and Master of Science in Anatomy at the University of North Dakota (1964-66, Grand Forks, ND, USA). He received his M.D. degree at the University of Kentucky (1966-69, Lexington, KY) prior to completing a straight surgery internship at the University of Utah (1969-70, Salt Lake City, UT). His residency in Radiation Oncology was completed at LDS Hospital/Univ Utah (1970-74; Salt Lake City) with subsequent staff positions at LDS Hospital, Massachusetts General Hospital (MGH)/Harvard Medical School (1976-80) and Mayo Clinic (1980-2009).

Dr. Gunderson is the current Chair of the ASTRO Board of Directors, Vice-Chair for the AJCC Staging Hindgut Task Force and Emeritus Professor & Consultant, Radiation Oncology Department, Mayo Clinic Arizona. Dr Gunderson served in leadership positions at both Mayo Clinic in Rochester Minnesota (Chair, Radiation Oncology, 1989-96; Chair of Oncology, 1996-2001) and Mayo Clinic Arizona (Chair, Radiation Oncology, 2001-07; Deputy Director of Clinical Affairs, Mayo Clinic Cancer Center, AZ, 2001-09). He also served in Radiation Therapy Oncology Group leadership (Chair, Gastrointestinal Cancer Committee, 1987-94; Vice-Chair, Disease Sites, 1994-2001).



MOHAMMED SAIFUL HUQ, PHD

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.

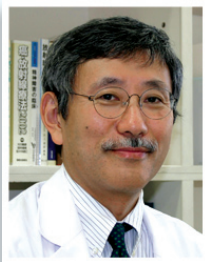
Dr. Huq has served in many capacities in various national and international organizations. He is a Fellow of both the British Institute of Physics and the American Association of Physicists in Medicine (AAPM) and is a recipient of AAPM's Farrington Daniels Award. He is past president of the AAPM Delaware

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 world-wide 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.



WASSIM JALBOUT, PHD

Dr. Wassim Jalbout is currently a Clinical Medical Physicist at the American University of Beirut Medical Center of the Radiation Oncology Department in Beirut, Lebanon. He earned his M.S. degree in Medical Physics at Wayne State University, Detroit Michigan in 1995 and his Ph.D. Degree in Medical Physics at the University of Surrey, UK in 2005. He was certified by the American Board of Medical Physics, in 1999. He is presently a Medical Physics teaching program director, Regional Consultant for starting new Radiotherapy Centers and IAEA Consultant for Medical Physics improvement project in the Middle East. Dr. Jalbout's main research interests, publications, and presentations involved Linac Photon Spectrum Reconstruction, and Secondary Cancers from Craniospinal Treatments.



TADASHI KAMADA, MD, PHD

Dr. Kamada received a Ph.D. from Hokkaido University for his study on radiotherapy of bile duct cancer in 1996. He has had 31 years of experience in clinical research on radiation oncology, including 17 years of experience in carbon ion radiotherapy at NIRS. He had been Director of the Particle therapy research group from 2006 to 2008 and Diagnosis and treatment advancement research group from 2006 to 2011. He has been Director of Research Center for Charged Particle Therapy, since 2008, and also the visiting professor of the national universities, such as Gunma, Hokkaido, Chiba, and Niigata University.



OSAMA MAWLAWI, PHD

Dr. Mawlawi is a Professor of imaging Physics and is the lead PET/CT physicist at MD Anderson Cancer Center (MDACC). Dr. Mawlawi started his career as a Medical Physicist at Memorial Sloan Kettering Cancer Center in New York where he worked as a research assistant from 1990-1998. He later moved to Columbia University School of Physicians and Surgeons where he worked as an Assistant Professor from 1998-2001. Dr. Mawlawi's has extensive expertise in PET/CT imaging of biomarkers and in Phase I/II clinical trials. His primary interest focuses on investigating factors affecting absolute quantification of PET/CT images. His ongoing research is aimed at developing novel techniques for PET/CT image acquisition, correction and reformation. Dr. Mawlawi has co-authored over 80 peer reviewed articles and book chapters and is the recipient of several grants from industry and professional societies. Dr. Mawlawi is a consultant for the IAEA and is an active member of several professional societies such as the SNM, AAPM, IEEE, and ACR. He is also the chair of the AAPM TG126 on PET/CT acceptance testing and QA. Dr. Mawlawi is board certified in Nuclear Medicine by the ABSNM as well as in Diagnostic Radiologic Physics by the ABR. He is currently the president of the American Board of Science in Nuclear Medicine.



AHMED MEGHIFENE, PHD

Ahmed Meghifene was born in Algeria in 1954. After a graduate degree in engineering in 1981, he entered the field of radiation dosimetry and obtained his PhD in 1989. He was awarded a post-doc research grant and worked as a research fellow at the French Henri Becquerel Laboratory (1989) and the Canadian National Research Council (1991) dosimetry laboratory. He has experience in both clinical radiotherapy physics and also in standardization at the level of primary and secondary standards laboratories. After an extensive involvement in the establishment of dosimetry and medical physics infrastructure in his home country, he joined the International Atomic Energy Agency (IAEA) in 1997 as a radiation physicist and in charge of the IAEA/WHO Network Secondary Standards Dosimetry Laboratories (SSDLs). In 2007, he was appointed Section Head of the Dosimetry & Medical Radiation Physics Section of the IAEA and also co-secretary of the IAEA/WHO Network of SSDLs. During the past 15 years, his profile has a dominant component of international activities, co-authoring publications and reports on radiotherapy physics and dosimetry. In the recent years, he has developed a special interest and commitment to promote the medical physics profession and support education and clinical training activities in IAEA Member States. He has published

over 20 papers, 2 book chapters and delivered numerous key note talks at international conferences.



DAUD MOHAMAD, PHD

Daud Mohamad was appointed Deputy Director General for Nuclear Sciences and Applications, effective 1 January 2011. Prior to joining IAEA Director General Amano's senior management team, Mr. Daud held the position of Director General of the Malaysian Nuclear Agency (Nuclear Malaysia) since September 2004. He had joined Nuclear Malaysia in 1978 and was one of the pioneer staff of the organization.

From 2008 to 2010, Mr. Daud served on the IAEA's Standing Advisory Group on Nuclear Applications (SAGNA), and from 2001 to 2010 on the Steering Committee on Training and Education in Radiation Protection and Waste Safety. He had taken up many expert missions to a number of Member States on self-reliance and sustainability programme of nuclear institutions in Asia and the Pacific under the framework of the IAEA.

Mr. Daud has been actively involved with non-governmental organizations in the field as the President of Malaysia Radiation Protection Association (MARPA) and the Malaysian Association of Research Scientist (MARS).

Mr. Daud holds a Bachelor of Science degree from the Universiti Kebangsaan in Malaysia, a Master of Science degree from the McMaster University in Canada, and a PhD in High Level Radioactive Waste Management from the University of Glasgow/Scottish Universities Research Reactor Centre in the UK. He has published more than 70 technical papers and was Chief Editor for the book entitled Nuclear Science and Technology.



SHINICHIRO MORI, PHD

Dr. Mori received his bachelor's degree from the Faculty of medicine, Osaka University for his study on Allied health sciences in 2000. After completing the master's programs there in 2002, he worked for NIRS, and he received a Ph.D. from Osaka University for his study on medicine in 2006. In 2007, he became a researcher of Medical physics research group, Research center for charged particle therapy at NIRS, which developed a compact accelerator facility for carbon ion therapy. Since 2011 he has been Team leader of Image Guided Radiotherapy Team.



KOJI NODA, PHD

Dr. Koji Noda received his bachelor's degree from the Department of nuclear engineering, Kyushu University in 1979. After completing the master's programs there in 1981, he worked for the development of a PET cyclotron from 1981 to 1989, and he also studied the accelerator physics from 1985 to 1989 in the Institute for nuclear study, University of Tokyo. In 1989, he joined the HIMAC project at NIRS, and he was engaged in construction and development of the HIMAC synchrotron. He received his Ph.D. in 1992 from Kyushu University for the study of energy-loss cooling. From 2006 to 2011 he was also Director of Medical physics research group, which developed a compact accelerator facility for carbon ion therapy and contributed to a next-generation irradiation system at NIRS.



FRIDTJOF NÜESSLIN, PHD

Dr Nusslin has successfully completed his studies in the field of Physics and Physiology at the University of Tübingen and University of Heidelberg, respectively. He received his post doctorate degree at Max-Planck-Institute for Nuclear Physics in Heidelberg and has served as Assistant Medical Physicist in the Radiotherapy Department at Medizinische Hochschule Hannover, Senior Medical Physicist at the Clinic for Radiooncology in Nord-West-Krankenhaus Frankfurt/Main. He also became a Full Professor and Chair Section Medical Physics in Radiotherap Department at the University Hospital Tübingen and Biomedical Physics Professor since 2004 in the Clinic for Radiotherapy & Radiation Oncology at Klinikum rechts der isar der Technischen Universität München. He is a honorary member of the Czech Association for Medical Physicists (CAMP), the European Federation of Organisations for Medical Physics (EFOMP), DEGRO (German Society of Radiooncology), OEGRO (Austrian Society of Radiooncology); Distinguished Affiliate Professor, Technische Universität München (TUM), Fellow Institute of Advanced Studies (TUM-IAS), Richard-Glockler Award DGMP.

Currently, Dr. Nüesslin is the President of Deutsche Gesellschaft für Medizinische Physik (DGMP) at the European Federation of Organization for Medical Physics (EFOMP) and also President of International Organization for Medical Physics (IOMP).

Dr. Nüesslin's scientific activities covers Dosimetry and Treatment Planning Optimization, Conformal Radiotherapy, Image Guidance, Advanced Technologies (particle beam therapy, laser application in imaging & particle beam therapy), Biological & Molecular Imaging including Modeling in Tumorbiology.



ROBERTO ORECCHIA , MD

Dr. Orecchia graduated from the University of Turin cum laude having obtained post doc degrees in Radiotherapy, Medical Oncology and Diagnostic Imaging. From 1980 to 1994 he conducted his medical and scientific activity as a physician and university researcher at the Radiology Institute of the University of Turin.

In 1994 he became a full professor in Radiotherapy and occupied the Chair of Radiotherapy at the University of Milan and Director of the Radiation Therapy Department at the European Institute of Oncology (IEO) in Milan up to date. He is also the Scientific Director of CNAO (Centro Nazionale di Adroterapia Oncologica) Foundation, in Pavia, where has been built the first Italian centre for proton and carbon ion therapy and Deputy Scientific Director at IEO. He is coordinators of ULICE project (Union of Light Center in European), funded in the frame of EU 7th Program with 8.4 M Euro, and involving 20 EU centres. He has been President of AIRO (Associazione Italiana di Radioterapia Oncologica) and Board member of the ESTRO (European Society of Treapeutic Radiology and Oncology). To date, he is President of ISIORT (International Society of Intraoperative Radiotherapy) and Board member of EUSOMA (European Society of Mastology).

Roberto Orecchia's scientific activity involves different aspects of radiotherapy and oncology related to both technical and clinical aspects, mainly on breast and prostate cancers, and on high-tech radiation therapy. He published more than 230 papers on peer reviewed journal with Impact Factor.



MARÍA DEL ROSARIO PEREZ, MD

Dr María del Rosario Pérez is a medical doctor who has worked at the Unit Interventions on Healthy Environments (IHE), Department of Public Health and Environment (PHE) of the World Health Organization (WHO) since April 2007.

Her main responsibility at WHO is the technical coordination of the WHO Global Initiative on Radiation Safety in Health Care Settings. Her work at WHO also includes the development of guidance, norms and standards on ionizing radiation and human health and the provision of technical support to preparedness and response in radiation emergencies.

Dr. Pérez has been involved in the revision of the International Basic Safety Standards (BSS) for Protection against Ionizing Radiation and for the Safety of Radiation Sources since her arrival at WHO. In June 2009 she was nominated to represent WHO at the Joint BSS Secretariat as well as at the IAEA Radiation Safety Standards Committee (RASSC). She also represents WHO at the Inter-Agency Committee on Radiation Safety (IACRS), and serves as WHO observer the ICRP Committee 3 on Medical Exposures, the Group of Scientific Experts referred to in Article 31 of the Euratom Treaty and its Working Party on Medical Exposures.

Dr Pérez received her M.D. in 1980 from the School of Medicine of Buenos Aires University in Argentina, where she later specialized on Radiation Oncology. In 1990 she obtained a diploma in Radiation Protection and Nuclear Safety at the IAEA post-graduate course jointly hosted by the School of Engineering of Buenos Aires University and the Argentine National Atomic Energy (CNEA), and completed her formation in Epidemiology in the National Academy of Medicine.

Her professional activity has been related with radiation protection and human health for more than twenty years. She contributed to the implementation of programs of education and training in radiation protection in Latin America, where she actively promoted regional cooperation on medical and public health response in emergencies.

Dr. Pérez was the head of the Radiopathology Laboratory at the Nuclear Regulatory Authority, director of the REMPAN Liaison Institution in Argentina, member of the National Advisory Council in Radioisotopes and Radiations, alternate representative of Argentina at United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) and consultant of UNSCEAR on Effects of Ionizing Radiation of the Immune System. She participated in international expert teams involved in the preparedness and response in radiation emergencies. She coordinated research projects on the effects of ionizing radiation on the immune system, foetal brain, and dermal endothelial cells, and co-authored more than 90 technical papers in her areas of expertise.



STEFAN RIEKEN, MD

Dr. Rieken went to schools in Germany and the USA. He studied medicine at the universities of Heidelberg (Germany), Denver (USA), Vienna (Austria) and Bern (Switzerland). He obtained his medical degree at the Medical Faculty, University of Heidelberg in November 2007, and has worked at the Department of Radiation Oncology, headed by Prof. Jürgen Debus, ever since. He completed his doctoral thesis on signal transduction in cell migration at the Department of Pharmacology in Heidelberg (Prof. Stefan Offermanns) in 2008.

His main scientific interest focuses on modifiability of tumor cell motility by photon and particle irradiation, high precision radiotherapy techniques, primary brain tumors and gynaecological malignancies. He has authored 8 scientific and peer-reviewed papers and co-authored 10 further publications.





TOSHIKAZU SUZUKI, PHD

He also serves as a member of the Nuclear Safety Commission of Japan.

Dr. Toshikazu Suzuki received the B.S. degree in 1979 from Hokkaido University of Engineering, the department of nuclear engineering.

He worked as an engineer in Hitachi for the development of a fast breeder reactor from 1979 to 1980.

In 1980, he joined the division of radiation instruments of Fuji Electric as a researcher of radiation detector.

There, he developed a BF3 proportional counter, a neutron rem-counter, a silicon semiconductor detector, a personal dose meter, a surface contamination monitor, a CsI based reactor emergency monitor during 1980 to 2000.

From 2000 to 2002, he was a marketing and development manager of Saint-Gobain Crystal & Detectors, Japan. A Labr3 scintillator and a CZT semiconductor detector for medical application were experienced in the company.

Since 2002, he took the current position, Section Head, External Dosimetry Section, Department of Radiation Emergency Medicine, Research Center for Radiation Emergency Medicine, at the National Institute of Radiological Sciences (NIRS), Chiba, Japan. At NIRS, he is in charge of external exposure assessment and detector development in radiation emergency medical preparedness.



HIDEO TATSUZAKI, MD, PHD

Dr. Hideo Tatsuzaki graduated from the University of Tsukuba, School of Medicine, Japan, in 1983 with a Medical Degree. After that, he finished a combined course of radiobiology and clinical radiation oncology at the University of Tsukuba Graduate School with Ph.D.

During his carrier, he worked as a Clinical Fellow in the Massachusetts General Hospital, U.S.A., as an assistant professor in the University of Tsukuba, Japan, as a First Officer in the International Atomic Energy Agency, and as a Section Head of International Co-operation Section of NIRS.

Since 2006, he has been on the current position, Section Head, Diagnosis Section, Department of Radiation Emergency Medicine, and Research Center for Radiation Emergency Medicine, at the National Institute of Radiological Sciences (NIRS), Chiba, Japan. At NIRS, he is in charge of many training courses in radiation emergency medical preparedness.

He also serves as a member of the International Commission on Radiation Units and Measurements, ICRU, and serves as a Visiting Professor of the University of Hiroshima.



ELWIN TILSON, PHD

Dr. Elwin Tilson began his career in radiologic sciences in the late 1960s when he received his initial radiography training though the U.S. Army. He earned his bachelor's degree in Radiologic Sciences from Arizona State University, his master's degree in Education from San Francisco State University, and his doctorate in a computer related area from the University of Georgia.

After seven years of full time clinical practice, Dr. Tilson became an Assistant Professor of Radiologic Technology but continued to be involved clinically. His clinical specialty is in the area of Computed Tomography and digital imaging. In 1982, he became the founding member and head of the Department of Radiologic Sciences at Armstrong Atlantic State University in Savannah, GA where he has been ever since.

Elwin has been very active professionally over the years and has held positions in professional societies for many years including Chair of the Board for the Association of Educators in Radiologic and Imaging Sciences. He has made over 60 professional presentations with over 30 at national and international meetings, as well as publishing over 50 articles in professional publications, and co-authored two books and one computer program. He also served as Editor of the journal Radiologic

Sciences & Education.

Dr. Tilson's current research interests are centered around the interplay between radiation dose and image quality.



HIROSHI TSUJI, MD, PHD

Dr. Tsuji received a Ph.D. from Tsukuba University for his study on proton radiotherapy of hepatocellular carcinoma in 1996. He has had 28 years of experience in clinical research on radiation oncology, including 16 years of experience in carbon ion radiotherapy at NIRS. From 2008 to 2011, he had been Director of the Particle therapy research group for developing advanced clinical therapy, which led to the present research program. He has been also the visiting professor of the Hiroshima University.



HIROHIKO TSUJI, MD, PHD

In 1968, Dr. Tsuji was graduated from Hokkaido University, Japan and trained at St. Vincent Medical Center, New York. He was involved in pi-meson therapy project at Los Alamos in 1978, and PSI in 1982. He received a Ph.D. from Hokkaido University for his study on radiation therapy in 1985. In 1988, he had been the Professor, Proton Medical Research Center of Tsukuba University. He had been Director of Research center for charged particle therapy in 1994, and Executive Director of NIRS in 2008. He has been Research fellow at NIRS, and also the visiting professor of Gunma University. He received the scientific awards; Princess Takamatsu cancer research fund in 2005, and NISTEP scientist in 2006. He acted as Chairman of PTCOG in 2006-09.



JACK VENSELAAR, PHD

Dr. Jack Venselaar received his PhD in 2000 at the Leiden University in The Netherlands on the topic of accuracy requirements of external beam therapy treatment planning. He is a senior specialist medical physicist with experience in the field of radiotherapy and brachytherapy physics, radiation protection and hyperthermia. He has pursued research in the field of dosimetry, quality assurance and technology of brachytherapy since the 80s. His contributions to brachytherapy physics and technology include dosimetry of high-activity sources, development and establishment of dosimetry protocols, advanced quality control procedures and systems, development of quality audit systems, and brachytherapy radiation protection data. He has been a board member of the Netherlands Commission of Radiation Dosimetry (NCS) and participated in several of the NCS committees including one chair position. From 2001 to 2008 he has been the chair of the Brachytherapy Physics Quality Systems (BRAPHYGS) group of GEC-ESTRO. Dr. Venselaar acts as a liaison between the GEC-ESTRO Committee of ESTRO and the AAPM Brachytherapy Subcommittee and the ABS Physics Committee. He has been the national coordinator of the Patterns of Care in Brachytherapy study project of GEC-ESTRO. He has been a consultant in several assignments for the International

Atomic Energy Agency (IAEA) for both teaching and advisory activities. From 2001 - 2009 he has been a teacher for brachytherapy physics lectures in the international ESTRO Teaching Course on Modern Brachytherapy Techniques.





SHADA WADI-RAMAHI, PHD

Shada Wadi-Ramahi, is a medical physicist specializing in radiation oncology. She obtained her PhD from Rush University Medical Center, Chicago, in 2003 and became certified by the ABR in 2006. Dr. Wadi-Ramahi is a 1998 Fulbright Scholar.

She has been working at the King Hussein Cancer Center (KHCC) in Amman, Jordan, since 2004, where currently she is the Head of the Medical Physics Section. Dr. Wadi-Ramahi established the Plaque brachytherapy service and 4DCT imaging and helped in initiating the IMRT program in the Radiation Oncology Department at KHCC. Nationally, she is very active with the Jordanian Nuclear Regulatory Commission (JNRC) in collaborative projects with the European Union (EU), to establish national quality assurance standards for radiation therapy and national radiation accidents reporting system. Very recently, in Sept 2011, she was elected as the president of the Jordan Association of Physicists in Medicine. Regionally, Dr. Wadi-Ramahi is actively involved in IAEA-sponsored projects for the strengthening of the profession of medical physics.



SHIGERU YAMADA, MD, PHD

Dr. Yamada received a Ph.D. from Chiba University for his study on Gastrointestinal oncology in 1994. He has been specializing in Gastrointestinal oncology since 1985, and he has carried out work in Space Radiation at NASA Johnson Space Center in Houston. He has had 18 years of experience in clinical research on radiation oncology, including 14 years of experience in carbon ion radiotherapy at NIRS. Since 2010, he has been Head, Treatment team 2, Radiation oncology section of Hospital, Research center for charged particle therapy.



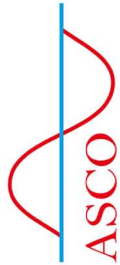
NAOYOSHI YAMAMOTO, MD,  
PHD

Dr. Yamamoto received a Ph.D. from Chiba University for his study on the pathological findings of the lung after carbon ion therapy in 2004. He has had 24 years of experience in pulmonary medicine and clinical research on radiation oncology, including 10 years of experience in carbon ion radiotherapy at NIRS. Since 2011, he has been Head of Radiation oncology section of Hospital, Research center for charged particle therapy.



TERRY YOSHIKUMI, PhD

Dr. Yoshizumi received his PhD degree in Physics from the University of Cincinnati in 1980. He completed Postdoctoral Training at the Memorial Sloan-Kettering Cancer Center in 1981. He subsequently joined Yale University; in 1997 he moved to Duke University where he is now full professor of Radiology and Radiation Oncology. He serves as Head of the Health Physics Group (HPG) at Duke. The group consists of Radiation Safety Office (clinical), Health Physics Graduate Program (academic), and Duke Radiation Dosimetry Laboratory, DRDL (research). Duke Radiation Safety Program is one of the largest and most complex academic radiation safety programs in the U.S. The HPG draws seven faculty members from various academic departments at Duke. DRDL supports medical radiation dosimetry, small animal dosimetry, and development of new nanoparticle radiation detectors. DRDL has been supported by various federal grants and industry grants and contracts. DRDL is known as the leading CT dosimetry laboratory in the world, and also recognized as leader in small animal dosimetry by NIAID/NIH. Dr. Yoshizumi is board certified by the ABR, ABMP and ABSNM. He has been active in various professional societies and served as President of the Medical Health Physics Section of the Health Physics Society (HPS) and as Board of Directors in HPS. He has published over 98 papers in peer-reviewed journals, has over 190 abstracts, and has 10 award winning papers. He was elected to the Fellow of the American Association of Physicists in Medicine in 2011.



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## SESSION MODERATORS

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Belal Moftah	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
M. Gary Sayed	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Abdulaziz Al-Sugair	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA

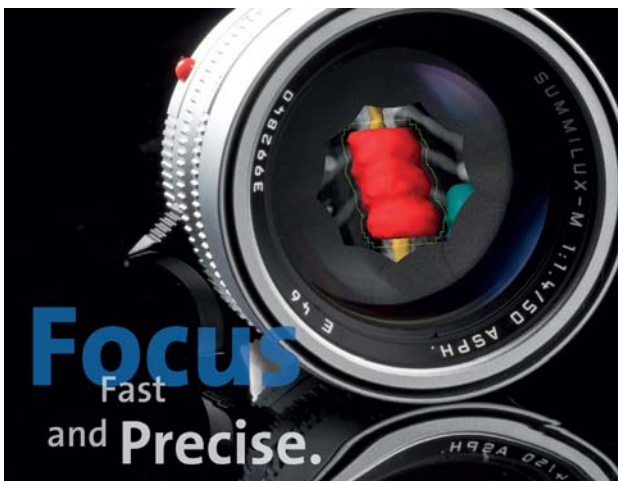
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Moheieldin Abouzied	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Omer Demirkaya	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Peter Hall	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Zeinab Hassan	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Adnan Al-Hebshi	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
M. Abrar Hussain	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Yasser Khafaga	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Fareed Mahyoub	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Belal Moftah	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Ahmed Nobah	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
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M. Gary Sayed	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
Ghazi Alsbeih	King Faisal Specialist Hospital & Research Centre, Riyadh, KSA
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## SCIENTIFIC PROGRAM



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# 2012 INTERNATIONAL CONFERENCE ON RADIATION MEDICINE (ICRM2012)

## Clinical Applications and Innovative Approaches

King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia, 26 February – 01 March 2012

### SCIENTIFIC PROGRAM

**SUNDAY, 26 FEBRUARY 2012**

**IAEA/KFSH&RC Regional Training Course on Medical Physics Aspects in Low and High Dose Rate Brachytherapy**

**VENUE: : RESEARCH CENTRE 304**

Time	8:00 - 8:45AM	8:45 - 9:30AM	COFFEE BREAK	10:00 - 10:40AM	10:40 - 11:20AM	11:20 - 12:00NN	1:30 - 2:10PM	2:10 - 2:50PM	2:50 - 3:30PM	4:00 - 5:00PM	5:00 - 6:00PM
<b>COURSE TITLE</b>	Registrations, Administrative Formalities and Inauguration	L1: Introduction to Brachytherapy (Belal Mofatih)		L2: Radiobiology of Low and High Dose Rate Brachytherapy (Ghazi Alsbeih)	L3: Clinical Aspects and Indications for Brachytherapy (Rana Mahmoud)	L4: Sources and Equipment (Jack Venslaan)	L5: Calibration of Sources (Wassim Jalbout)	L6: Conventional TPS Calculations (Jack Venslaan)	L7: QA Procedures for HDR/LDR (Zeinab Hassan)	Practical Session 1 & 2 (Choose one) P1: QA Procedures for HDR Unit (Siobodan Devic) P2: QA Procedures for LDR Unit (Zeinab Hassan)	Practical Session 2 & 1 (Choose one) P1: QA Procedures for HDR Unit (Siobodan Devic) P2: QA Procedures for LDR Unit (Zeinab Hassan)

### PRE ICRM2012 COURSE

Introduction to Medical Physics and Radiation Protection

VENUE: ONCOLOGY LECTURE HALL

Chairperson: Musaed Al-Malki		Chairperson: Ibrahim Al-Anazi		Chairperson: Fareed Mahyoub							
<b>Time</b>	9:00 - 9:15AM	9:15 - 9:45AM	9:15 - 9:45AM	10:30 - 11:00AM	11:00 - 11:30AM	11:30 - 12:00NN	1:30 - 1:45PM	1:45 - 2:15PM	2:15 - 2:45PM	2:45 - 3:15PM	3:15 - 3:45PM
<b>COURSE TITLE</b>	Course Overview	Radiation Protection I (Ibrahim Al-Duhaimi)	Radiation Protection II (Ibrahim Al-Anazi)	Diagnostic X-ray (Ibrahim Al-Anazi)	Radiation Therapy/Physics (Belal Mofatih)	Radiation Biology (Ghazi Alsbeih)	Prayer	CT (Nabil Iqelitan)	Nuclear Medicine (Omer Demirkaya)	Examination and Concluding Remarks (ALL Speakers)	

Evening presentation and dinner (by invitation) sponsored by: Attieh Medico Co.

A presentation by Dr. Tom Depuydt, The VERO System

8:00 - 10:00PM

**DAY 1 (MONDAY, 27 FEBRUARY 2012)**

**ON-SITE REGISTRATION**  
**VENUE: PRINCE SALMAN AUDITORIUM AND RESEARCH CENTRE LOBBY**

**7:00 AM**

**Breakfast**  
**VENUE: PRINCE SALMAN AUDITORIUM FOYER, RC 1<sup>ST</sup> FLOOR, POST GRADUATE CENTER, RC 304**

**7:30-8:30AM**

**SESSION 1: CONTINUING EDUCATION COURSES (PART I)**

Course Number	CEC2	CEC3	CEC4	CEC5	CEC6	CEC7
<b>Course Title</b>	<b>Advanced Radiotherapy Clinical Applications</b>	<b>IAEA Brachytherapy</b>	<b>Radiography</b>	<b>Advanced Nuclear Medicine Techniques</b>	<b>Radiobiology &amp; Radiation Protection</b>	<b>Writing &amp; Publishing</b>
<b>Venue</b>	Prince Salman Auditorium	RC 304	PGC CR8	PGC Auditorium	PGC CR1	PGC CR7
<b>Coordinator</b>	Adnan Al-Hebshi	Belal Mofteh	Gary Sayed	Mahmoud Tuli	Ghazi Alsbeih	Peter Hall
<b>Chairperson</b>	Majid Al-Othman	Camelia Constantinescu	Naheed Gamali	Ahmad Al-Mohaydeb	Musaeed AlMalki	Fouad Al-Dayel
<b>8:00AM</b>		<b>L8: Dose Calculations- TG 43 (Shada Wadi-Ramahi)</b>				
<b>CEC Lecture 1 8:30-8:50AM</b>	<b>Radiation in Medicine : Introduction (Mohammad Shabaneh)</b>	<b>IORT: Rationale and Historical Perspective (Leonard Gunderson)</b>	<b>An Overview of Radiologic Technology Professions (M. Gary Sayed)</b>	<b>Clinical Applications of SPECT/CT (Mahmoud Tuli)</b>	<b>Introduction to Biology (Ghazi Alsbeih)</b>	<b>The Changing World of Scientific Publishing (Peter Hall)</b>
<b>CEC Lecture 2 8:50-9:10AM</b>	<b>Radiation Oncology Process (Yasser Khafaga)</b>	<b>A Novel IGR T device for SBRT: the UZ Brussel experience (Tom Depuydt)</b>	<b>I am a recently graduated technologist or a radiographer or a technologist - what comes next? (Erwin Tilson)</b>	<b>Advances in Non-invasive Cardiac Imaging (Ahmad Feathala)</b>	<b>Biological Effects of ionizing radiation (Ghazi Alsbeih)</b>	<b>How To Get Your Work Published: An Overview (Peter Hall)</b>
<b>CEC Lecture 3 9:10-9:30AM</b>	<b>Nuclear Cardiology (Hani Alsergani)</b>	<b>MRI: Simulation for Radiotherapy Treatment Planning (Slobodan Devic)</b>	<b>Radiography Education and Professional Societies in Saudi Arabia (Essam Mattar)</b>	<b>Quantification in PET/CT imaging: barriers and solutions (Osama Mawlawi)</b>	<b>Biological Effects of Non-ionizing Radiation (Abdellah Aboussekhtra)</b>	<b>Choosing the Right Journal (Peter Hall)</b>
<b>9:30-10:00AM</b>	<b>COFFEE BREAK</b>					

**SESSION 2: ICRM2012 OPENING CEREMONY****VENUE: PRINCE SALMAN AUDITORIUM**

Broadcast to PGC Auditorium and Research Centre 1st Floor Lobby

	Recitation of the Holy Quran	<b>Dr. Mohammad Samman</b> , Senior Scientist, Research Centre
	Opening Remarks	<b>Dr. Belal Mofteh</b> , Chairman, ICRM Organizing Committee
<b>10:00-10:30 AM</b>	Speaker's Keynote Address	<b>Interlinkage of Radiation Medicine Professional Groups in Successfully Combating Cancer</b> <b>Prof. Fridtjof Nusslin</b> , President, International Organization for Medical Physics
	Co-Organizers Welcome Addresses	<b>Dr. Maria del Rosario Perez</b> , Responsible Officer for the Global Initiative on Radiation Safety in Health Care Settings, World Health Organization (WHO)
	Patronage Welcome Addresses	<b>H.E. Dr. Daud Mohamad</b> , Deputy Director General, International Atomic Energy Agency (IAEA)
		<b>H.E. Dr. Mohammed Al Kanhal</b> , President, Saudi Food and Drug Authority (SFDA)
		<b>H.E. Dr. Gasim Al Gasabi</b> , Chief Executive Officer, King Faisal Specialist Hospital and Research Centre (KFSH&RC)

**SESSION 3: PLENARY STATE-OF-THE-ART LECTURES A****VENUE: PRINCE SALMAN AUDITORIUM**

Chairpersons: Ali S. Al-Zahrani and Mohammad Al-Shabanah

<b>10:45AM-12:10PM</b>	SoA Lecture 1	Title: "IAEA Support to Medical Radiation Physics" Lecturer: <b>Ahmed Meghzifene</b>
<b>10:45-11:10AM</b>	SoA Lecture 2	Title: "Imaging and Radiation Therapy: Impact on the Process Phases" Lecturer: <b>Roberto Orecchia</b>
<b>11:10-11:35AM</b>	SoA Lecture 3	Title: "Overview of Carbon Ion Radiotherapy" Lecturer: <b>Hirohiko Tsujii</b>
<b>12:10 -1:30 PM</b>	Lunch Break (Al-Maather Cave Park) and Prayer	Poster Viewing Session opens at Post Graduate Center



**DAY 1 (MONDAY, 27 FEBRUARY 2012)**

**SESSION 4: PARALLEL SESSIONS I**

<b>1:30 - 3:30PM</b>	<p><b>SESSION 4 A: RADIATION ONCOLOGY</b> Chairpersons: Essam Senan and Jihad Alsadah</p>	<p><b>SESSION 4 B: DIAGNOSTIC IMAGING</b> Chairpersons: Hamad Alsubhani and Kostas Chantziantoniou</p>	<p><b>SESSION 4 C: RADIOBIOLOGY, RADIATION PROTECTION &amp; OTHER TOPICS</b> Chairpersons: Anan Al-Karmi and Mohammed Alsubael</p>
<b>Venue</b>	Prince Salman Auditorium	Post Graduate Centre Auditorium	Post Graduate Centre (Class Room 1)
<b>1:40 - 2:05 PM</b>	<p>RO Lecture 1 Title: "New Technologies in Modern Radiation Therapy: Advanced Techniques" Lecturer: <b>M. Saiful Huq</b></p>	<p>DI Lecture 1 Title: "Review of recent CT perfusion accidents in the US: dosimetry, risk analysis, and lessons learned" Lecturer: <b>Terry Yoshizumi</b></p>	<p>RRPO Lecture 1 Title: "Measurement of Internal Radiation Contamination" Lecturer: <b>Toshikazu Suzuki</b></p>
<b>2:05 - 2:30 PM</b>	<p>RO Lecture 2 Title: "The Role of Chemo-radiation for Colorectal and Anal Cancer" Lecturer: <b>Leonard Gunderson</b></p>	<p>DI Lecture 2 Title: "Role of I-124 PET/CT" Lecturer: <b>Hani Abdel Nabi</b></p>	<p>RRPO Lecture 2 Title: "Carbon Ion Radiotherapy in a Hypo-fraction Regimen for Stage I Non-Small Cell Lung Cancer" Lecturer: <b>Nooyoshi Yamamoto</b></p>
<b>2:30 - 2:55 PM</b>	<p>RO Lecture 3 Title: "Advances in Malignant Glioma Care Based on International Research" Lecturer: <b>Walter Curran</b></p>	<p>DI Lecture 3 Title: "PET/CT QA/QC and Acceptance Testing" Lecturer: <b>Osama Mawlawi</b></p>	<p>RRPO Lecture 3 Title: "Radiobiological characterization of clinical high-LET radiation beams" Lecturer: <b>John Guelette</b></p>
<b>2:55 - 3:20 PM</b>	<p>RO Lecture 4 Title: "Carbon Ion Radiotherapy for Bone &amp; Soft Tissue Sarcomas, Head &amp; Neck (Skull Base)" Lecturer: <b>Tadashi Kamada</b></p>	<p>DI Lecture 4 Title: "Current Trends in CT Applications: 2D &amp; 3D Imaging" Lecturer: <b>Elwin Tilson</b></p>	<p>RRPO Lecture 4 Title: "Accidents in Radiation Therapy – First Do No Harm" Lecturer: <b>M. Saiful Huq</b></p>
<b>3:20 - 3:30 PM</b>	Discussion	Discussion	Discussion
<b>3:30 - 4:00 PM</b>	<b>ASR PRAYER AND COFFEE BREAK</b>		

## DAY 1 (MONDAY, 27 FEBRUARY 2012)

### SESSION 5: PANEL DISCUSSIONS

**SESSION 5 A: INNOVATIVE APPROACHES IN RADIATION THERAPY**  
Moderators: Belal Mofiah and Mushabab Assiri

**SESSION 5 B: INNOVATIVE APPROACHES IN DIAGNOSTIC IMAGING, RADIOBIOLOGY & RADIATION SAFETY**  
Moderators: Abdulaziz Al-Sugair and M. Gary Sayed

Venue	Prince Salman Auditorium	Post Graduate Centre Auditorium
<b>4:00 - 5:30 PM</b>	RT PD1 Title: "IMRT with Ion Beams" Presenter: <b>Hirohiko Tsuji</b>	DIIRS PD1 Title: "Current Approaches in Neuro Radiology" Presenter: <b>Ibrahim Alorainy</b>
	RT PD2 Title: "Intraoperative Irradiation Techniques/Dose: Electron Beam(IOERT) and High Dose Rate Brachytherapy (HDR-IOERT)" Presenter: <b>Leonard Gunderson</b>	DIIRS PD2 Title: "CT Doses and Impacts on Population Health" Presenter: <b>Elwin Tilson</b>
	RT PD3 Title: "The Role of Radiation Therapy in the Treatment of Recurrent/Metastatic Tumors" Presenter: <b>Roberto Orecchia</b>	DIIRS PD3 Title: "Innovative Approaches in Nuclear Medicine" Presenter: <b>Hani Abdel Nabi</b>
	RT PD4 Title: "Chemo/Radiation in Cancer Management" Presenter: <b>Walter Curran</b>	DIIRS PD4 Title: "Advances in PET Imaging" Presenter: <b>Osama Mawlawi</b>
	RT PD5 Title: "Stereotactic Body Radiation Therapy (SBRT) : Physical Aspects and Associated Challenges" Presenter: <b>Saiful Hug</b>	DIIRS PD5 Title: "Radiobiology" Presenter: <b>John Gueulette</b>
	RT PD6 Title: "Novel technologies in imaging and particle beam radiotherapy using high intense short pulsed laser technology" Presenter: <b>Fndjiof Nusslin</b>	DIIRS PD6 Title: "Patient Dose Measurements" Presenter: <b>Terry Yoshizumi</b>
	RT PD7 Title: "Novel IGRt devices" Presenter: <b>Tom Depuydt</b> Discussions Presenters: <b>All Panelists</b>	DIIRS PD7 Title: "Radiation Protection in Health Care – Challenges and Opportunities" Presenter: <b>Mania del Rosario Perez</b> Discussions Presenters: <b>All Panelists</b>
<b>7:30 PM</b>	<b>Bus Pick-up for Gala Dinner (In front of North Tower Entrance)</b>	
<b>8:00-10:00PM</b>	Gala Dinner and Evening Presentation Sponsored by <b>Al-Faisaliah Medical Systems</b> Venue: <b>Carlton Ritz</b>	

## DAY 2 (TUESDAY, 28 FEBRUARY 2012)

### SESSION 6: CONTINUING EDUCATION COURSES (PART II)

Course No	Course Title	Venue	Coordinator	Chairperson	CEC1	CEC2	CEC3	CEC4	CEC5	CEC6	CEC7
<b>8:00-9:30AM</b>											
	Introduction to Radiation Medicine	PGC CR3	Yasser Khafaga	Osman Elhanafi							
	Advanced Radiotherapy Clinical Applications	Prince Salman Auditorium	Adnan Al-Hebshi	Jazi Al-Mokhtef							
	IAEA Brachytherapy	RC 304	Beial Mofteh	Sameer Natoo							
	Radiobiology & Radiation Protection	PGC CR1	Ghazi Alsbeih	Ibrahim Al-Anazi							
	Advanced Nuclear Medicine Techniques	PGC Auditorium	Mahmoud Tuli	Mohei Abouzeid							
	Writing & Publishing	PGC CR7	Peter Hall	Abdellilah Aboussekhra							
	How Not To Annoy the Editors and Reviewers: Read the Instructions	(Peter Hall)									
	Get it Right First: Timel Language, Structure, Phrasing, Format etc	(Peter Hall)									
<b>CEC Lecture 4 8:00-8:20AM</b>	Radiobiology	(Ghazi Alsbeih)									
	Nuclear Medicine	(Mahmoud Tuli)									
<b>CEC Lecture 5 8:20-8:40AM</b>	Medical Imaging	(Nabil Maailej)									
	Radiopharmaceuticals and Tracers	(Ibrahim Aljamraz)									
<b>CEC Lecture 6 8:40-9:00AM</b>	Recent Developments in Nuclear Medicine Technology – Updates	(Mohammed Al-Rowaily)									
	Characterization of Single Pulmonary Nodules With Standard Uptake Values: Myth or Reality	(Hani Abdel Nabi)									
<b>CEC Lecture 7 9:00-9:20AM</b>	Applications of Ultrasound Imaging	(Nabil Iqelien)									
	Recent Developments in Nuclear Medicine Technology – Updates	(Mohammed Al-Rowaily)									
	Characterization of Single Pulmonary Nodules With Standard Uptake Values: Myth or Reality	(Hani Abdel Nabi)									
<b>9:20-10:00AM</b>	<b>COFFEE BREAK</b>										

**DAY 2 (TUESDAY, 28 FEBRUARY 2012)**

**SESSION 7: PLENIARY STATE-OF-THE-ART LECTURES B**

VENUE: PRINCE SALMAN AUDITORIUM

Chairperson: Tarek Amin and Ali M. Al-Zahrani

**10:00-12:30PM**

SoA Lecture 4

Title: "Atoms for Peace: Meeting Basic Human Needs through Science and Technology"

Lecturer: Daud Mohamed

**10:00-10:30AM**

SoA Lecture 5

Title: "The Radiation Therapy Oncology Group (RTOG): Recent History and Future Opportunities"

Lecturer: Walter Curran

**10:30- 11:00AM**

SoA Lecture 6

Title: "Labeled monoclonal antibodies in diagnosis and therapy: Past, present and future"

Lecturer: Hani Abdel Nabi

**11:00-11:30AM**

SoA Lecture 7

Title: "Molecular image guidance in the radiation therapy process"

Lecturer: Fridtjof Nuesslin

**11:30AM-12:00NN**

SoA Lecture 8

Title: "Intraoperative Irradiation as a Component of Treatment for Locally Unresectable/Locally Recurrent Cancers"

Lecturer: Leonard Gunderson

**12:00-12:30PM**

**12:30-1:45PM**

**PRAYER AND LUNCH BREAK  
(AL-MAATHER CAVE PARK)**

**DAY 2 (TUESDAY, 28 FEBRUARY 2012)**

**SESSION 8: PARALLEL SESSIONS II**

<b>1:45-3:30PM</b>	<b>SESSION 8 A: RADIATION ONCOLOGY</b> Chairpersons: Eyad Alsaad and Ueber Miola	<b>SESSION 8 B: DIAGNOSTIC IMAGING</b> Chairpersons: Ahmed Alenezi and Sulliman Alghamdi	<b>SESSION 8 C: RADIOBIOLOGY &amp; RADIATION PROTECTION &amp; OTHER TOPICS</b> Chairpersons: Saad Aldelajjan and Khaled Al-Yousef
<b>Venue</b>	Prince Salman Auditorium	Post Graduate Centre Auditorium	Post Graduate Centre (Class Room 1)
<b>1:45- 2:15 PM</b>	RO Lecture 5 Title: "Innovations in Brachytherapy: Moving from 2D to 3D, and on to IGABT, A Medical Physicist Perspective" Lecturer: <b>Jack Venselaar</b>	DI Lecture 5 Title: "4D PET/CT Imaging and its Application" Lecturer: <b>Osama Mawlawi</b>	ARPO Lecture 5 Title: "Biological Applications of Radio Induction Therapy" Lecturer: <b>Mohammed Mohiuddin</b>
<b>2:15-2:40 PM</b>	RO Lecture 6 Title: "Principles and Technique of PBI (Partial Breast Irradiation) and ELIOT" Lecturer: <b>Roberto Orecchia</b>	DI Lecture 6 Title: "Personalized Medicine: The Role of Molecular Imaging" Lecturer: <b>Salem Sassy</b>	ARPO Lecture 6 Title: "Intestinal Crypt Regeneration in Mice as a Biological System for Clinical Hadron Beam Intercomparison: Rationale, Procedure and Results" Lecturer: <b>John Gueulette</b>
<b>2:40 - 3:05 PM</b>	RO Lecture 7 Title: "Esophago-Gastric Cancer: Chemoradiation, Indications & Results" Lecturer: <b>Leonard Gunderson</b>	DI Lecture 7 Title: "New development in MRI guided radiation therapy(MRGRT)" Lecturer: <b>Abdelhamid Saoudi and Sulliman Alghamdi</b>	ARPO Lecture 7 Title: "Carbon Ion Radiotherapy for Patients with Locally Recurrent Rectal Cancer and Pancreatic Cancer" Lecturer: <b>Shigeru Yamada</b>
<b>3:05- 3:30 PM</b>	RO Lecture 8 Title: "Challenges of the Medical Physicist as a team player in a Radiotherapy Department" Lecturer: <b>Fridtjof Nusslin</b>	DI Lecture 8 Title: "Monitoring of effective dose in interventional and cardiac catheterization procedure" Lecturer: <b>Terry Yoshizumi</b>	ARPO Lecture 8 Title: "Carbon Ion Radiotherapy for Prostate and liver" Lecturer: <b>Hiroshi Tsuji</b>
<b>3:30 - 4:00 PM</b>	<b>PRAYER &amp; COFFEE BREAK</b>		

**DAY 2 (TUESDAY, 28 FEBRUARY 2012)**

**SESSION 9: PARALLEL SESSIONS**

<p><b>4:00 - 5:30 PM</b></p>	<p><b>SESSION 9A: WHO'S WHO AT ICRM 2012</b> Chairpersons: Sultan Al-Sedairy and Adnan Ezzat</p>	<p><b>SESSION 9B: RADIATION ONCOLOGY TRACK</b> Chairpersons: Rana Mahmood and Yassir Al Barakati</p>	<p><b>SESSION 9C: RADIATION ONCOLOGY PHYSICS TRACK</b> Chairpersons: Nabil Maalej and Noor Mail</p>	<p><b>SESSION 9D: DIAGNOSTIC IMAGING TRACK</b> Chairpersons: Saleh Othman and Fahd Abdulkhalq</p>	<p><b>SESSION 9E: RADIATION BIOLOGY AND SAFETY TRACK</b> Chairpersons: Ibrahim Alenazi and Saliman Milliebari</p>
<p><b>Venue</b></p>	<p>Prince Saliman Auditorium</p>	<p>Post Graduate Centre Auditorium</p>	<p>Post Graduate Centre (Classroom 1)</p>	<p>Post Graduate Centre (Classroom 3)</p>	<p>Post Graduate (Classroom 8)</p>
<p><b>4:00 - 4:10 PM</b></p>	<p>King Faisal Specialist Hospital and Research Centre (KFSH&amp;RC); Prof. Dr. Rashed AlRashed AlHtmad</p>	<p>RO Abstract 1 Combination of Advanced Radiation Techniques of Adaptive IMRT/IGRT with CyberKnife SPS and Volume Based 3D HDR Brachytherapy in a Single Case With Critical Challenges R. Mahmood, A. Hebshi and M. Aldehaim</p>	<p>ROP Abstract 1 Commissioning a Monte Carlo Based Treatment Planning System at King Fahad Specialist Hospital Dammam L.A. Abdullah, B. Jalal, N. Maalej and W. AbdehRahman</p>	<p>DI Abstract 1 An Observer Performance Study With Two CAD Systems Having The Same Standalone Performance: Can Reader's Aided Performances With The Two Systems Differ? O. Demirkaya and B. Sahiner</p>	<p>RBS Abstract 1 Computer- Software for Radiation Safety training in Hospitals M. Ahmed</p>
<p><b>4:10 - 4:20 PM</b></p>	<p>Saudi Food and Drug Authority (SFDA); Dr. Saleh Al Tayyar</p>	<p>RO Abstract 2 RapidArc: Two Years Clinical Experience Y. Albarakati, E. Khawandanaah, Y. Khan, M. Khan, F. Saeedi, N. Mail, N. Al-Safadi, S. Al-Ghai and A. Saoudi</p>	<p>ROP Abstract 2 The Impacts of Dental Filling Materials on RapidArc Treatment Planning and Dose Delivery: N. Mail, Y. AlBarakati, M. Khan, F. Saeedi, N. Safadi, S. AlGhai, A. Saoudi</p>	<p>DI Abstract 2 Assessment of ASIR Reconstruction Algorithm in Terms of Image Quality and Patient Dose F. Abdulkhalq, N. Mail and A. Saoudi</p>	<p>RBS Abstract 2 Software for the Management of Health Physics and Radiation Safety Program M. Ahmed</p>
<p><b>4:20 - 4:30 PM</b></p>	<p>World Health Organization (WHO); Dr. Mariana del Rosario Perez</p>	<p>RO Abstract 3 IORT for Breast Cancer; King Abdulaziz University Hospital Experience Y. Bahadur, A. Constantinescu, E. Pawzy, M. Ezzat and A. Hassona</p>	<p>ROP Abstract 3 Radiochromic Film Dosimetry of HDR Ir-192 Source Radiation Fields S. Aldelailan, H. Mohammed, N. Tomic, L. Liang, F. DeBlosis, A. Sarfehnia, W. AbdehRahman, J. Seuntjens and S. Devic</p>	<p>DI Abstract 3 Role of Magnetic Resonance in Breast Cancer H. Serrai, A. Saoudi, A. AlShehri and S. Al-Ghai</p>	<p>RBS Abstract 3 Biodistribution and Internal Dosimetry of Technetium 99m Pertechnetate in Thyroid Scintigraphy: In Vivo and Phantom Study A. Hei and D. Soejoko</p>
<p><b>4:30 - 4:40 PM</b></p>	<p>International Atomic Energy Agency (IAEA); Prof. Daud Mohammed</p>	<p>RO Abstract 4 Intensity Modulated Radiotherapy (IMRT) versus Conventional 3-DRT for Pediatric Abdominal Neuroblastoma M. El Beltagi and Y. Khafaga</p>	<p>ROP Abstract 4 Spatially Fractionated Grid Radiation Therapy (SFGR): The first Grid Block Fully Clinically Integrated with Treatment Planning System A. Nabah, M. Mohiuddin and B. Mofzah</p>	<p>DI Abstract 4 Classification of Sub-masses in malignant breast ultrasound image: A case study W. Basheer and O. Hamid</p>	<p>RBS Abstract 4 King Abdulaziz Medical City Patient Reference Dose Levels in Fluoroscopic Procedures A. Senhou, A. Al Suwayyan and S. Penn</p>

4:40 - 4:50 PM	<p><b>American Association for Radiation Oncology (ASTRO):</b> Prof. Leonard Gunderson</p>	<p>RO Abstract 5 Systematic Re-planning During Volumetric Modulated Arc Therapy (VMAT) in the Treatment of Nasopharyngeal Cancer M. Khan, N. Safadi, S. AlGhrai, N. Mail and A. Saoudi</p>	<p>ROP Abstract 5 Quality Assurance Using 3D Gel at KFSHRC A. AlMousa, Moh'd A., Al Kafi, K. Rabaeh, A. Bastar and Belal Mofteh</p>	<p>DI Abstract 5 Image Quality and Dose Management for Chest X-rays in Digital Radiology A. Alshafea, A. Sulleman, H. Osman</p>	<p>RBS Abstract 5 The Multi-transmit Approach in Localized Magnetic Resonance Spectroscopy: Feasibility and Applications Hacene Serrai</p>
4:50 - 5:00 PM	<p><b>American Association of Physician in Medicine (AAPM):</b> Prof. Saiful Huq</p>	<p>RO Abstract 6 Stereotactic Radiosurgery for Idiopathic Trigeminal Neuralgia : Is CyberKnife Safe? A. Al-Habshi, A. Mousa, M. AlDeham, A. Hussain and F. AlDabai</p>	<p>ROP Abstract 6 Novel Composition of Normoxic 3D Polymer Gel Dosimeters for Radiation Therapy Planning K. Rabaeh, A. Basfar, A. Al Mousa, Moh'd A. Al-Kafi and B. Mofteh</p>	<p>DI Abstract 6 PET and Breast Lesions A. Zyfoon and K. Murakami</p>	<p>RBS Abstract 6 Dosimetry of Radiobiological Irradiations Using Radiochromic Film S. Aldalajlan, A. Nobah, I. Aldahawi, N. Tomic, G. Alsheih, B. Mofteh and S. Devic</p>
5:00 - 5:10 PM	<p><b>The European Society for Therapeutic Radiology and Oncology (ESTRO):</b> Prof. Roberto Orecchia</p>	<p>RO Abstract 7 Palliative Radiotherapy for Patients Hospitalized in a Palliative Care Unit: A Report from Saudi Arabia Al-Shahri, M., Al-Omir, A., Al-Shabanah, M., El-Sebaei, M.</p>	<p>ROP Abstract 7 Lineazation of the Radiochromic Film Dosimetry System Dose Response S. Devic, N. Tomic, S. Aldalajlan, F. Deblois, J. Seuntjens, D. Lewis</p>	<p>DI Abstract 7 Gated SPECT Phase Analysis for Predicting CRT Response S. Ohman</p>	<p>RBS Abstract 7 Relationship Between Genetic Polymorphic Variations and Complications to Radiotherapy in Head and Neck Cancer Patients N. Al-Harbi, M. Al-Buhairi, K. Al-Hadyan, M. ElSebale, Nasser AlRehi and G. Alsheih</p>
5:10 - 5:20 PM	<p><b>Saudi Cancer Society (SCS):</b> Dr. Abdullah Al-Amro</p>	<p>RO Abstract 8 Pretargeted Radionuclide Therapy in Breast Cancer M. Al-Hrowaily, M. Chico</p>	<p>ROP Abstract 8 Application of Gold Nanoparticles in Radiation Therapy A. Alenzazi</p>	<p>DI Abstract 8 Classics of Myocardial Perfusion Imaging: A History of the Most Frequently Cited Articles (1973-2010) M. G. Sayed and M. Tuli</p>	<p>RBS Abstract 8 Establishing a Reference Biological Dosimetry Laboratory for the Assessment of Radiation Overexposure in Saudi Arabia G. AlSheih, K. Al-Hadyan, A. Venturina, M. Shoukri, B. Mofteh and A. Al Zahrani</p>
5:20 - 5:30 PM	<p><b>Saudi Oncology Society (SOS):</b> Dr. Esam Murrshid</p>	<p>RO Abstract 9 Helical Tomotherapy Versus Conventional Planning for Post Mastectomy Breast Cancer Z. Hassan, O. Hassad, M. Elsebaei, M. Al Shabana, and B. Mofteh</p>	<p>ROP Abstract 9 Significance of Bright and Dark Streaking in CT Images of KV and MV Qualities A. Hussain, B. Mofteh, N. Mail and A. Saoudi</p>	<p>DI Abstract 9 Investigating the Role of PACS in MRI Quality Control M. Bayoumi, A. Bahri, A. Rahman, A. Abdouli, N. Al Shibli, S. Buhumaid and J. Al-Suwaidi</p>	<p>RBS Abstract 9 Establishing a PET Radiopharmaceutical Production Facility S. Millebani and K. Al-Safi</p>

**Bus Pick-up for King Abdulaziz Museum (In front of North Tower Main Entrance)**

King Abdulaziz Museum Visit  
Evening Presentation and Dinner Sponsored by: **Gulf Medical Co.**  
Presentation by: **Dr. Stefan Rieken**  
Venue: **Marriott Hotel**

7:30 PM

8:00-10:30PM

**DAY 3 (WEDNESDAY, 29 FEBRUARY 2012)**

**SESSION 10: CONTINUING EDUCATION COURSES (PART III)**

Course No	Course Title	Venue	Coordinator	Chairperson	CEC1	CEC2	CEC3	CEC4	CEC5	CEC6	CEC7	
8:00-9:30AM	Introduction to Radiation Medicine	PGC CR3	Yasser Khafaga	ismail Al-Dahlawi	Advanced Radiotherapy Clinical Applications	IAEA Brachytherapy	Radiography	Advanced Nuclear Medicine Techniques	Radiobiology & Radiation Protection	Writing & Publishing		
		PGC CR3	Prince Saliman Auditorium	Adnan AH-Hebshi	RC 304	Belal Mofteh	Gary Sayed	PGC Auditorium	PGC CR1	PGC CR7		
		PGC CR3	Adnan AH-Hebshi	Fathi Alsaeedi	Belal Mofteh	Hassan Al Ghamdi	Gary Sayed	Mahmoud Tuli	Ghazi Alsbeih	Peter Hall		
		PGC CR3	Adnan AH-Hebshi	Fathi Alsaeedi	Hassan Al Ghamdi	Hassan Al Ghamdi	Mohammed AH-Rowaily	Mohieeldin Abouzied	Abdeillah Aboussekhra	Brian Meyer		
CEC Lecture 8 8:00-8:20AM	Applications of Non-ionizing Radiation	(Abdeillah Aboussekhra)	SRS Clinical Aspects	(Adnan AH-Hebshi)	L12: Radiation Protection Room Planning & Regulatory Aspects	(Thammamadar Ganesh)	Recent Developments in MRI	(Rami Niazi)	FDG-PET based differential Uptake Volume Histograms in NSCLC patients	(Slobodan Devic)	CT Dose Concerns and Future (Size Specific Dose Estimate in Pediatric and Adult body CT Examination)	(Nabil Iqeliani)
CEC Lecture 9 8:20-8:40AM	Medical Physics	(Belal Mofteh)	Analogy between Stereotactic Radiosurgery & Microsurgery	(Imaddudin Kanaan)	IGRT Based Helical Tomotherapy	(Saeian Rieken)	Professional Certification and Registration	(Elwin Tilson)	Value of FDG PET following first chemotherapy cycle in patients with newly diagnosed Non-Hodgkin's Lymphoma.	(Ham Abdel Nabi)	Intestinal Crypt System for Hadron Beam Intercomparison?	(John Gueulette)
CEC Lecture 10 8:40-9:00AM	Radiation Protection and Emergencies	(Ibrahim Dunaini)	Challenges Associated With Small Field Dosimetry	(M. Saiful Hug)	Incidents & Accidents in Brachytherapy	(Jack Venselaar)	MS Degree Programs in Radiological and Imaging Sciences	(Gary Sayed)	Radiation Protection & Safety at the SFDA	(Nasser Alabboudi)	Dealing With Rejection	(Peter Hall)
CEC Lecture 11 9:00-9:20AM	Future Opportunities in Radiation Medicine	(Gary Sayed)	An Interactive Q&A Session	(Tilson, Mattar Rowaily, Iqeliani and Sayed)	An Interactive Q&A Session	(Tilson, Mattar Rowaily, Iqeliani and Sayed)	PET/CT QA/QC	(Osama Mawlawi)	CT Scanner Shielding Methods	(Terry Yoshizumi)	General Discussion	

**COFFEE BREAK**

9:20-10:00AM



**DAY 3 (WEDNESDAY, 29 FEBRUARY 2012)**

**SESSION 10: PLENARY STATE-OF-THE-ART LECTURES C**

VENUE: PRINCE SALMAN AUDITORIUM

Chairperson: **Yassin Bahader and Hadeer Mair**

**10:00-12:30AM**

SoA Lecture 9

Title: **"Overview of TEPCO Fukushima Daiichi NPP Accident"**

Lecturer: **Toshikazu Suzuki**

**10:00-10:30AM**

SoA Lecture 10

Title: **"KFMC Proton Therapy Facility"**

Lecturer: **Abdullah Al Amro**

**10:30- 11:00AM**

SoA Lecture 6

Title: **"Advances in PET Imaging and their Applications in Oncology"**

Lecturer: **Osama Mawlawi**

**11:00-11:30AM**

SoA Lecture 7

Title: **"CT Doses and Impacts on Population Health"**

Lecturer: **Elwin Tilson**

**11:30AM-12:00PM**

SoA Lecture 8

Title: **"Patient dose management and operator radiation protection in vascular procedures"**

Lecturer: **Terry Yoshizumi**

**12:00-12:30PM**

**12:30-1:30PM**

**PRAYER AND LUNCH BREAK  
(AL-MAATHER CAVE PARK)**

**DAY 3 (WEDNESDAY, 29 FEBRUARY 2012)**

**SESSION 11: WORKSHOPS (PART I)**

1:30 - 5:00PM	IAEA LDR/HDR Brachytherapy	Introduction to Radiation Medicine	Tomotherapy	RapidArc	CyberKnife	Radiography - Updates and Trends	PET/CT Applications on Treatment Planning	PET/CT QC/QA	Radiobiology & Radiation Protection
<b>Workshop Title</b>	Room 304, ORA (adjacent to room 304) - 3rd floor of the Research Building	Radiotherapy Large Planning Room	Tomotherapy Planning Station and Treatment Unit	Radiotherapy Conference Room, 2100EX (T2) Treatment Unit	Cyberknife Treatment Unit, Stereotactic Planning Station Area	Radiology Conference Room	PET/CT Imaging Unit, Small Planning Room (Dosimetry Unit)	PET/CT Center in the Department of Radiology	Radiation Biology Section, Room B29, Radiation Safety Office, Room B51, Biomedical Physics Dept., Research Centre
<b>Venue</b>									
<b>Coordinator</b>	Zeinab Hassan	M. Gary Sayed	Sameha Julie Pickford	Ahmed Nobah	M. Abrar Hussain	M. Gary Sayed	Moheieldin Abouzied	Omer Demirkaya	Fareed Mahyoub, Ghazi Alsbeih
<b>Instructors</b>	Belal Mofizah, Zeinab Hassan, Slobodan Dovic, Hind Al-Selham, Rana Mahmood, Mohammed Al-Dehaim, Eman Meghad, Umar Maganda Mwidi	Medhat El-Sebaei, Ghadeer Nazer, Mona Al-Turaiqi, M. Gary Sayed	Ehab Khaili, Omar Chibani, Mamoun Shehadah, Wedyan Satar, Paula Yates, Sameha Pickford, Connie Ming, Emilie Beauchemin	Ahmed Nobah, Mohammad Beltagi, Umar Mwidi, Loncel Ericka Ventruina, Francis Tse, Julia Brown	Adnan Al-Hebshi, M. Abrar Hussain, Imeduddin Kanaan, Amr Mousa Taha, Joe Poon, Fatimah AHMarhoun, Abdullah Al-kafi	M. Gary Sayed, Naheed Gamali, Bandar Alghamdi, Edna Camino, Khalid Aldossari, Abdulrahman Alathel, Ahmad Masawi, Khalid Aishalali, Manal Mustafa, Rana Abu Aish, Mohammed Al-Rowaily, Tagea Hamidudeen	Moheieldin Abouzied, Nasser Al-Rajhi, Osama Hassad, Ruchana Parker	Osama Mawlawi, Omer Demirkaya and Salf Shaleya	John Gueulette, Fareed Mahyoub, Ghazi Alsbeih, Ibrahim Al-Anazi, Najla Al-Harbi, Celestino Legarde
<b>1:30 - 3:30PM</b>	Session I	Session I	Session I	Session I	Session I	Session I	Session I	Session I	Session I

**PRAYER & COFFEE BREAK**

<b>3:30 - 4:00 PM</b>									
<b>4:00 - 5:30PM</b>	Session II	Session II	Session II	Session II	Session II	Session II	Session II	Session II	Session II

**DAY 4 (THURSDAY, 1 MARCH 2012)**

**SESSION 12: WORKSHOPS (PART 1)**

Workshop Title	IAEA LDR/HDR Brachytherapy	Introduction to Radiation Medicine	Tomotherapy Planning Station and Treatment Unit	RapidArc	CyberKnife	Radiography - Updates and Trends	PET/CT Applications on Treatment Planning	PET/CT QC/QA	Radiobiology & Radiation Protection	
<b>8:00AM - 12:00Noon</b>	Room 304, ORA (adjacent to room 304) - 3rd floor of the Research Building	Radiology	Tomotherapy Planning Station and Treatment Unit	Radiotherapy Conference Room, 2100EX (T2) Treatment Unit	Cyberknife Treatment Unit, Stereotactic Planning Station Area	Radiology Conference Room	PET/CT Imaging Planning Room (Dosimetry Unit)	PET/CT Center in the Department of Radiology	Radiation Biology Section, Room B29, Radiation Safety Office, Room B51, Biomedical Physics Dept., Research Centre	
<b>Coordinator</b>	Zeinab Hassan	Gary Sayed	Sameha Julie Pickford	Ahmed Nobbah	M. Abrar Hussain	M. Gary Sayed	Moheleidin Abouzied	Omer Demirkaya	Mr. Fared Mahyoub, Dr. Ghazi Alsbeih	
<b>Instructors</b>	Belal Mofteh, Zeinab Hassan, Sibobdan Devic, Hind Al-Selham, Rana Mahmood, Mohammed Al-Dehaim, Eman Meghad, Umar Meganda Mwidu	M. Gary Sayed, Naheed Gamali, Bander Alghamdi, Edna Carmino, Khalid Aldossan, Abdurahman Alathel, Ahamad Masawi, Khalled Alshalali, Mianal Mustafa, Rana Abu Aish, Mohammed Al-Rowaily, Tangea Hamidudeen, Ruchana Parker	Ehab Khaili, Omar Chibani, Miamoun Shehadah, Weyan Safar, Paula Yates, Sameha Pickford, Connie Mling, Emilie Beauchemin	Ahmed Nobbah, Mohammad Beltagi, Umar Mwidu, Lorcel Ericka Ventruina, Francis Tse, Julia Brown	Adnan Al-Hebshi, M. Abrar Hussain, Amr Mousa Taha, Joe Poon, Fatimah Al-Marhoun, Abdullah Al-kafi	M. Gary Sayed, Naheed Gamali, Bander Alghamdi, Edna Carmino, Khalid Aldossan, Abdurahman Alathel, Ahamad Masawi, Khalled Alshalali, Mianal Mustafa, Rana Abu Aish, Mohammed Al-Rowaily, Tangea Hamidudeen	M. Gary Sayed, Naheed Gamali, Bander Alghamdi, Edna Carmino, Khalid Aldossan, Abdurahman Alathel, Ahamad Masawi, Khalled Alshalali, Mianal Mustafa, Rana Abu Aish, Mohammed Al-Rowaily, Tangea Hamidudeen	Moheleidin Abouzied, Nasser Al-Rajhi, Osama Hassad, Ruchanna Parker	Osama Mawlawi, Omer Demirkaya and Saif Shaleya	John Gueulettz, Fared Mahyoub, Ghazi Alsbeih, Ibrahim Al-Anazi, Najla Al-Harbi, Celestino Legarde
<b>8:00-9:30 AM</b>	Session I	Session I	Session I	Session I	Session I	Session I	Session I	Session I	Session I	
<b>9:30-10:00 AM</b>			<b>PRAYER &amp; COFFEE BREAK</b>							
<b>10:00 AM- 12:00 PM</b>	Session II	Session II	Session II	Session II	Session II	Session II	Session II	Session II	Session II	
<b>12:00 PM</b>	<b>CLOSING CEREMONY/DISTRIBUTION OF CERTIFICATES</b>									
	<b>VENUE: PRINCE SALMAN AUDITORIUM</b>									
<b>12:30-1:30 PM</b>	<b>PRAYER AND LUNCH</b>									
	Venue: Prince Salman Auditorium Foyer									
<b>1:30-8:00 PM</b>	Bus Pick-up (Venue: North Tower Entrance) to Al-Thumama Desert Camp, Falcon Show and Dinner									

**DAY 1-3 (MONDAY - THURSDAY, 27 FEBRUARY – 29 FEBRUARY 2012)**

**12:30 - 1:30 PM**

**SESSION 13: POSTER VIEWING SESSIONS**

**RESEARCH CENTRE GROUND FLOOR LOBBY OR PRINCE SALMAN AUDITORIUM FOYER**

**POSTER SESSION 13A: RADIATION ONCOLOGY TRACK**

**Poster 1** Anaplastic Thyroid Cancer - Retrospective Review of 120 Cases, R. Mahmood, M. AlDehaim, F. Hussain, A. Memon and A. AlHebshi

**Poster 2** DWI and SWI Sequences as MRI Biomarkers for the Early Detection of Tumor Recurrence from Treatment Induced Brain Injury, A. Al Sayyari

**Poster 3** Risks of Lung Fibrosis and Pneumonitis Using Electron for Postmastectomy Radiotherapy, H. Omer, A. Sulleiman, C. Kappa, K. Theodoru, L. Tsougous and zz.T. Kilindris

**Poster 4** Commissioning of a Total Skin Electron Therapy (TSET) Technique, M. AlHassan, I. AlDahwai, N. Maalej, W. Abdelrahman

**Poster 5** Comparison of Dose Distribution in Total Body Irradiation with Two Lateral-Opposed Fields for 6 and 18 MV Photon Beams, M. AlKhalidi, I. AlDahlawi, B. Jalal, W. Abdel-Rahman

**Poster** A Qualitative Study of RapidArc TM Radiotherapy Planning in the Treatment of Nasopharynx Patients, E. Khawandanah, Y. Khan, Y. Albarakati, N. Mail, S. AlGhamdi, and A. Saoudi

**Poster 7** A Comparison Between Volumetric Modulated Arc Therapy (VMAT: RapidArc) and 3-D Conformal Radiotherapy in Cranio-Spinal Irradiation (CSI), T. Alawi, N. Safadi, S. Al-Ghamdi and A. Saoudi

**Poster 8** New Development in MRI Guided Radiation Therapy (MRgRT), A. Saoudi and S. Al-Ghamdi

**Poster 9** Cervical Cancer High Dose Rate (HDR) Brachytherapy: From Orthogonal to 3-D Image-Based Treatment Planning KAUH-Jeddah Experience, Y. Bahadur, A. Hassouna, M. El Sayed, C. Constantinescu, M. Naseem, A. Naga and N. Ghassal

**Poster 10** Intracranial Arteriovenous Malformations Treated Using A Linear Accelerator-Based Radiosurgery System, A Single Institution Experience, A. Mousa, A. Hebshi, J. AlWadban, M. Alsbaile, and I. Kanaan

**Poster 11** 3D Anatomy-based Planning Optimization for High Dose Rate Vaginal Vault Brachytherapy, Y. Bahadur, A. Hassouna, C. Constantinescu, A. Naga, N. Ghassal and M. Ezzat

**Poster 12** Volumetric Modulated Arc Therapy (VMAT) for Endometrial Cancer; R. Mahmood and L.E.T. Venturina

**Poster 13** The Image Base 3D High Dose Rate Brachytherapy for Cervix Cancer - KFSH&RC Experience, R. Mahmood, U. Mwuidu, M. AlDelhaim, Z. Hassan, H. AlMuhammad and F. Mahyoub

**Poster 14** CNS metastasis of breast cancer origin: prevalence, risk assessment, and endurance subsequent to it; M. El-Sebate, M. Al-Shabanah, D. Ajarim, T. Al-Twegri, A. Al-Sayed, M. Nabeil, M. A. Al-Salam, A. Darwish, A. El-Tegani, E. Khalil and A. Al-Hebshi

<b>Poster 15</b>	I-131 and I-131 MIBG Therapy at KFSH&RC Riyadh, F. Mahyoub and M. Tuli
<b>Poster 16</b>	Comparison Between Varian High Definition (HD-MLC) and Millennium MultiLeaf Collimators in Terms of Conformity and Dose Homogeneity in VMAT Treatment Planning, S. Jaber, Y. Albarakati, N. Mail and A. Saoudi
<b>Poster 17</b>	Spatially Fractionated Grid Radiation: A Novel approach in the management of unresectable Sarcomas-A KFSH&RC Experience, M. Rana, A. Nobah, M. Mohiuddin, B. Mofatah, R. Pant, M. Shaheen
<b>Poster 18</b>	Comparison of TomoTherapy and RapidArc in hippocampal sparing brain radiotherapy in pediatrics, G. Nazer, M. Nazmy, B.Mofatah, Y. Khafaga
<b>POSTER SESSION 13B: DIAGNOSTIC IMAGING TRACK</b>	
<b>Poster 19</b>	Molecular Imaging: Current Status of Radiopharmaceuticals (An Overview), S. Imam, T. ElMaghraby, S. Altuwajiri
<b>Poster 20</b>	Sonographic Features of Benign and Malignant Breast(s) Masses, M. Mahmoud, B. Ahmed, M. Mohamed, M. Abdelaziz, O. Hamid, O. Osman and A. Sulleman
<b>Poster 21</b>	Effective Dose Estimation During Pediatric Conventional Radiography, Omer Saeed, Abdelmoneim Sulleman and H. Osman
<b>Poster 22</b>	Estimation of Entrance Surface Dose for the Adult Patients During Common Diagnostic Xray Examination, Mohamed Yousef, Abdelmoneim Sulleman, Khadija Mokhtar and Hamid Osman
<b>Poster 23</b>	Evaluation of Patients Doses in Different Multi Slice Computed Tomography Modalities, Abdelfatah Nemer, Abdelmoneim Sulleman, Hamid Osman
<b>Poster 24</b>	Fetal Femoral Length as a Parameter for Estimation of Fetal Weight Using Ultrasound, Mustafa Mahmoud, Bushra Ahmed, Elisir Saeed; Omer Hamid, and Abdelmoneim Sulleman
<b>Poster 25</b>	Entrance Dose Measurement for Routine X-ray Examination in Al Obied City, G. Tayseer, A. Sulleman and H. Osman
<b>Poster 26</b>	Conventional and Color Doppler Sonography in Predicting Malignancy in Thyroid Nodules, Mohammed Rania, Awad Elkareem, H. Osman
<b>Poster 27</b>	Orthopedist Radiation Exposure : State of Art and Future Prediction, H. Osman; A. Sulleman; Hanan Elhour; Mustafa Mahmoud; M. Elsamani; Adam Sam
<b>POSTER SESSION 13C: RADIATION BIOLOGY AND SAFETY TRACK</b>	
<b>Poster 28</b>	Aspects of Radiopharmaceuticals Production, S. Milliebari and A. Deya
<b>Poster 29</b>	Role of Research Coordinator in Organizing Project Involving Cervical Cancer Patients, A. Venturina, S. AlGahtani, M. AlDehaim, M. ElSebateh, M. Medhat, R Mahmoud and G. AISbeih
<b>Poster 30</b>	Comparison of KFSH&RC Internal & External TLD Monitoring Services from 2008 until 2011 Using 6600 Plus and Lite TLD, F. Mahyoub and I. Al-Gain
<b>Poster 31</b>	A Bibliometric Analysis of One-Hundred Most Cited Articles, including a Classic, in Radiation Dosimetry A. Helmi, H. Al-Humaidan, N. Al-Mulhem and G. Sayed
<b>Poster 32</b>	Radiogenic Risks From Diagnostic Radiology, Osman H., Sulleman. A., El-Nour H.
<b>Poster 33</b>	The Top 10 at 10: Most-Cited Articles in Medical Dosimetry. G. Nazer, P. Yates and M. G. Sayed

## ACRONYMS USED IN THE SCIENTIFIC PROGRAM

<b>AAPM:</b>	American Association of Physicist in Medicine
<b>ASTRO:</b>	American Society for Radiation Oncology
<b>CEC:</b>	Continuing Education Course
<b>DI:</b>	Diagnostic Imaging
<b>DIRS:</b>	Diagnostic Imaging Radiobiology and Radiation Safety
<b>ESTRO:</b>	European Society for Therapeutic Radiology and Oncology
<b>IAEA:</b>	International Atomic Energy Agency
<b>KFSH&amp;RC:</b>	King Faisal Specialist Hospital and Research Centre
<b>MoH:</b>	Ministry of Health
<b>NIRS:</b>	National Institute of Radiological Sciences
<b>RC 304:</b>	Research Centre 304
<b>PGC:</b>	Post Graduate Center
<b>PGC CR1:</b>	Post Graduate Center Classroom #1
<b>PGC CR3:</b>	Post Graduate Center Classroom #3
<b>PGC CR7:</b>	Post Graduate Center Classroom #7
<b>PGC CR8:</b>	Post Graduate Center Classroom #8
<b>PGC Auditorium:</b>	Post Graduate Center Auditorium
<b>PSA:</b>	Prince Salman Auditorium
<b>RBS:</b>	Radiation Biology and Safety
<b>RC 304:</b>	Research Centre 304
<b>RO:</b>	Radiation Oncology
<b>ROP:</b>	Radiation Oncology Physics
<b>RRPO:</b>	Radiobiology, Radiation Protection & Others
<b>RT:</b>	Radiation Therapy
<b>SCS:</b>	Saudi Cancer Society
<b>SFDA:</b>	Saudi Food and Drug Authority
<b>SoA:</b>	State-of-the-art
<b>SOS:</b>	Saudi Oncology Society
<b>SSMRT:</b>	Saudi Society of Medical Radiologic Technology
<b>T2:</b>	Treatment Unit 2
<b>WHO:</b>	World Health Organization



**Pharm Research MD**

## ACKNOWLEDGEMENTS

### Co-Organizers:

Our special appreciation to

- International Atomic Energy Agency (IAEA)
- World Health Organization (WHO)
- Saudi Food and Drug Authority (SFDA)
- National Institute of Radiological Sciences (NIRS)

for their support of this international conference as the co-organizers.

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We would like to thank the following international and national organizations for endorsing and supporting this conference.

- The American Association of Physicist in Medicine (AAPM) American Society for Radiation Oncology (ASTRO)
- European Society for Therapeutic Radiology and Oncology (ESTRO)
- European Association of Nuclear Medicine (EANM)
- Radiological Society of Saudi Arabia (RSSA)
- Saudi Cancer Society (SCS)
- Saudi Oncology Society (SOS)
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- World Federation of Nuclear Medicine and Biology (WFNMB)

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- Oncology Center
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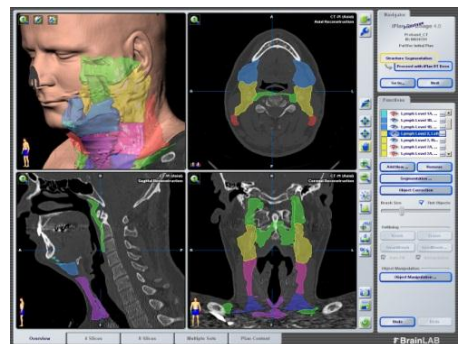
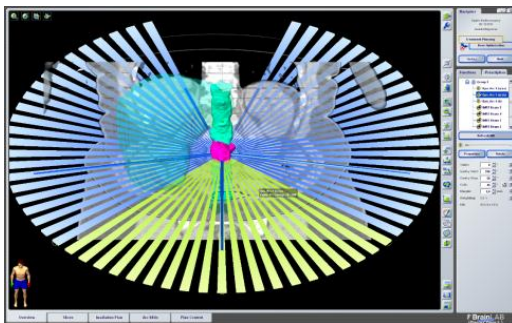
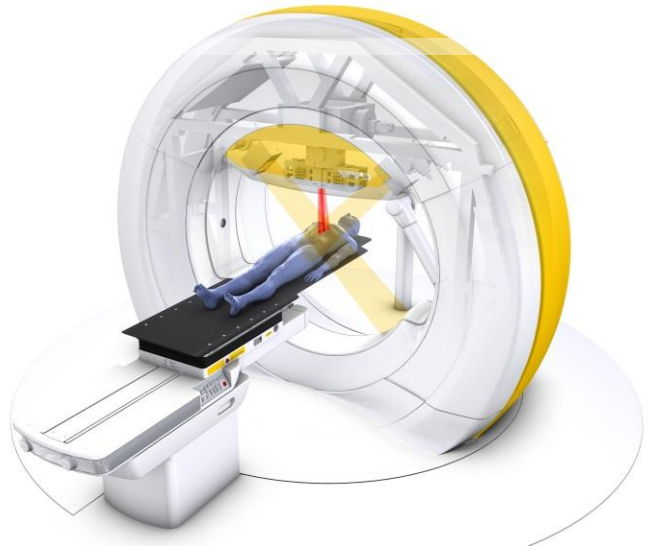




عطية الطبية

ATTIEH MEDICO

Leading  
The  
Fight  
Against  
Cancer



**vero**

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IMAGES FROM THE PREVIOUS CONFERENCE







# BRAINLAB



شركة فيصل مسعود السيف وشركاه المبدونة  
Faisal Musaed El Seif & Partner's Co.

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**INTRAOP**

FIGHTING CANCER AT ITS CORE

**MOBETRON**



شركة فيصل مساعد السيف وشركاه المندوبة  
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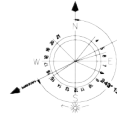
PRINCE TURKI BIN ABDULAZIZ AL-AWAL

PRINCE TURKI BIN ABDULAZIZ AL-AWAL ROAD

MAKKAH ROAD

ZAHRAWI STREET

ZAHRAWI STREET

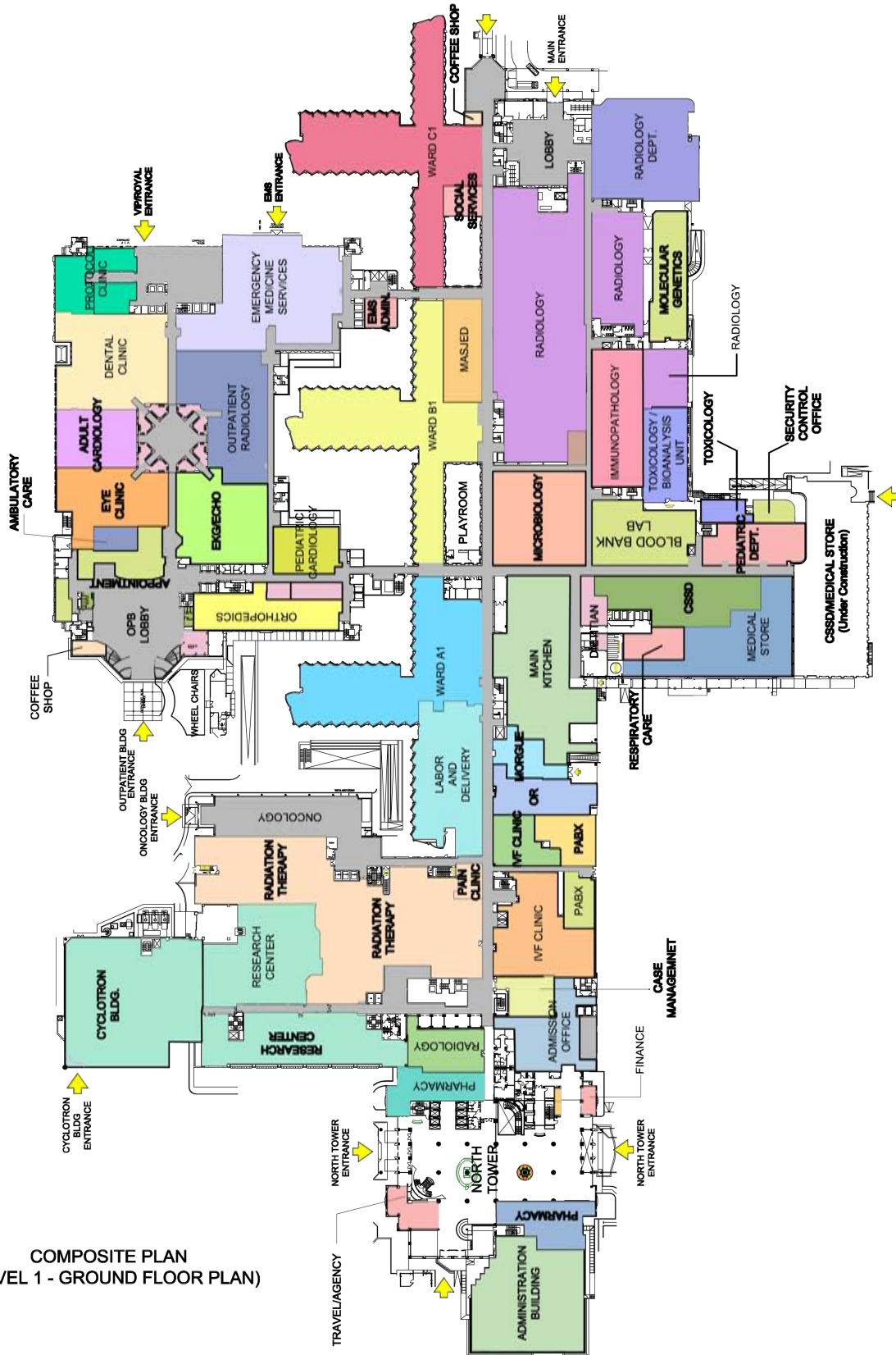


### KFSH & RC EXISTING SITE PLAN

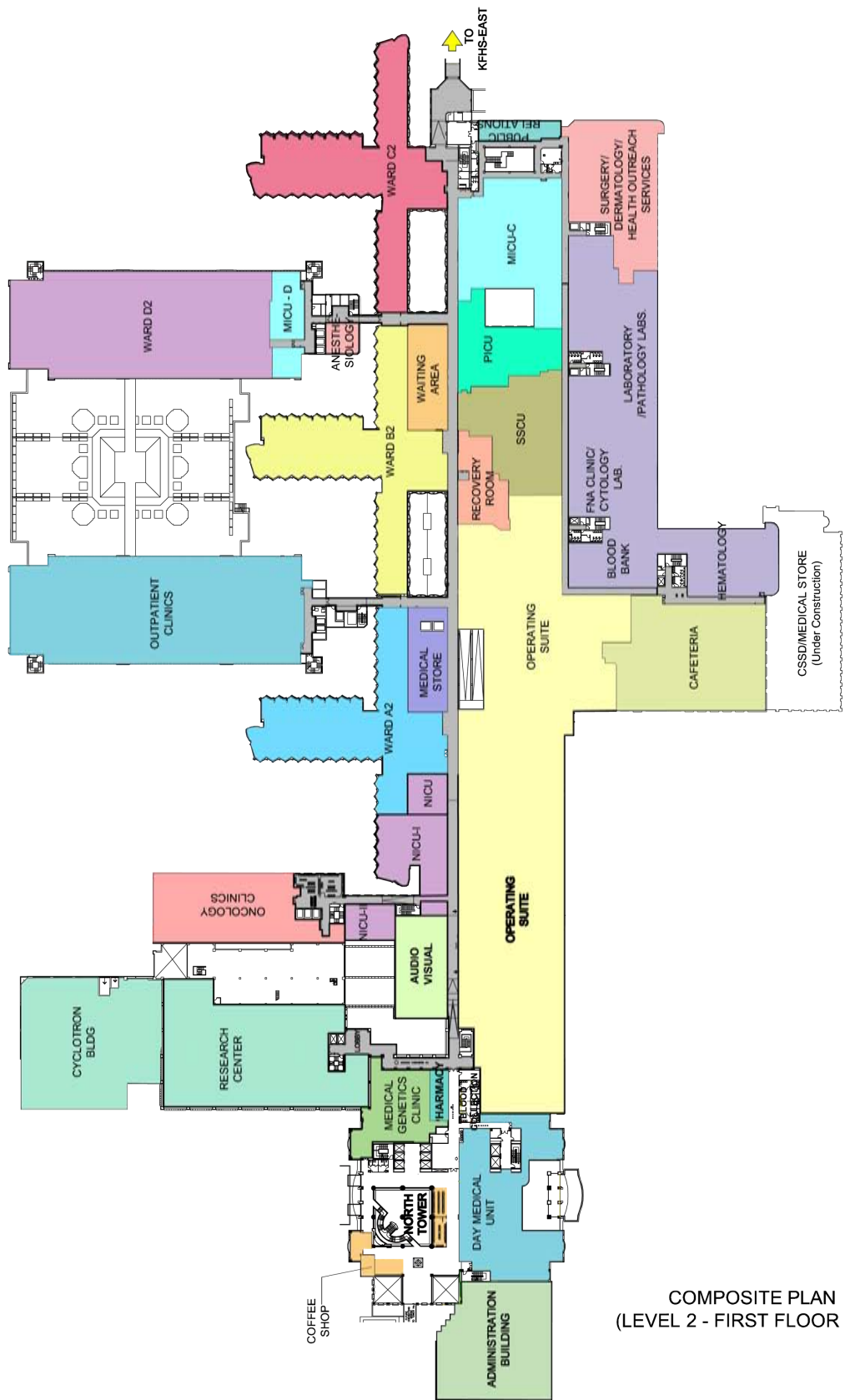
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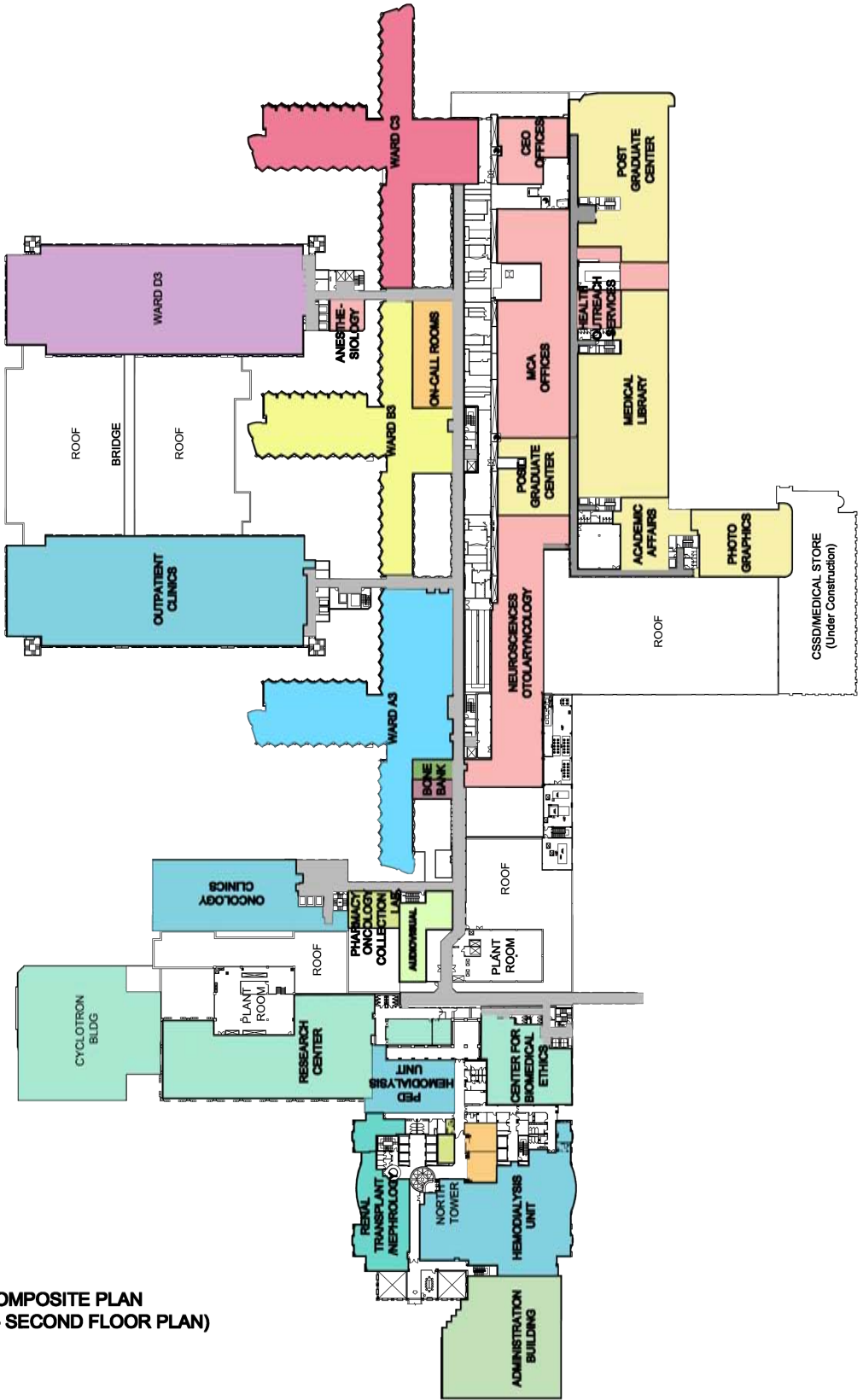
COMPOSITE PLAN  
(LEVEL 1 - GROUND FLOOR PLAN)



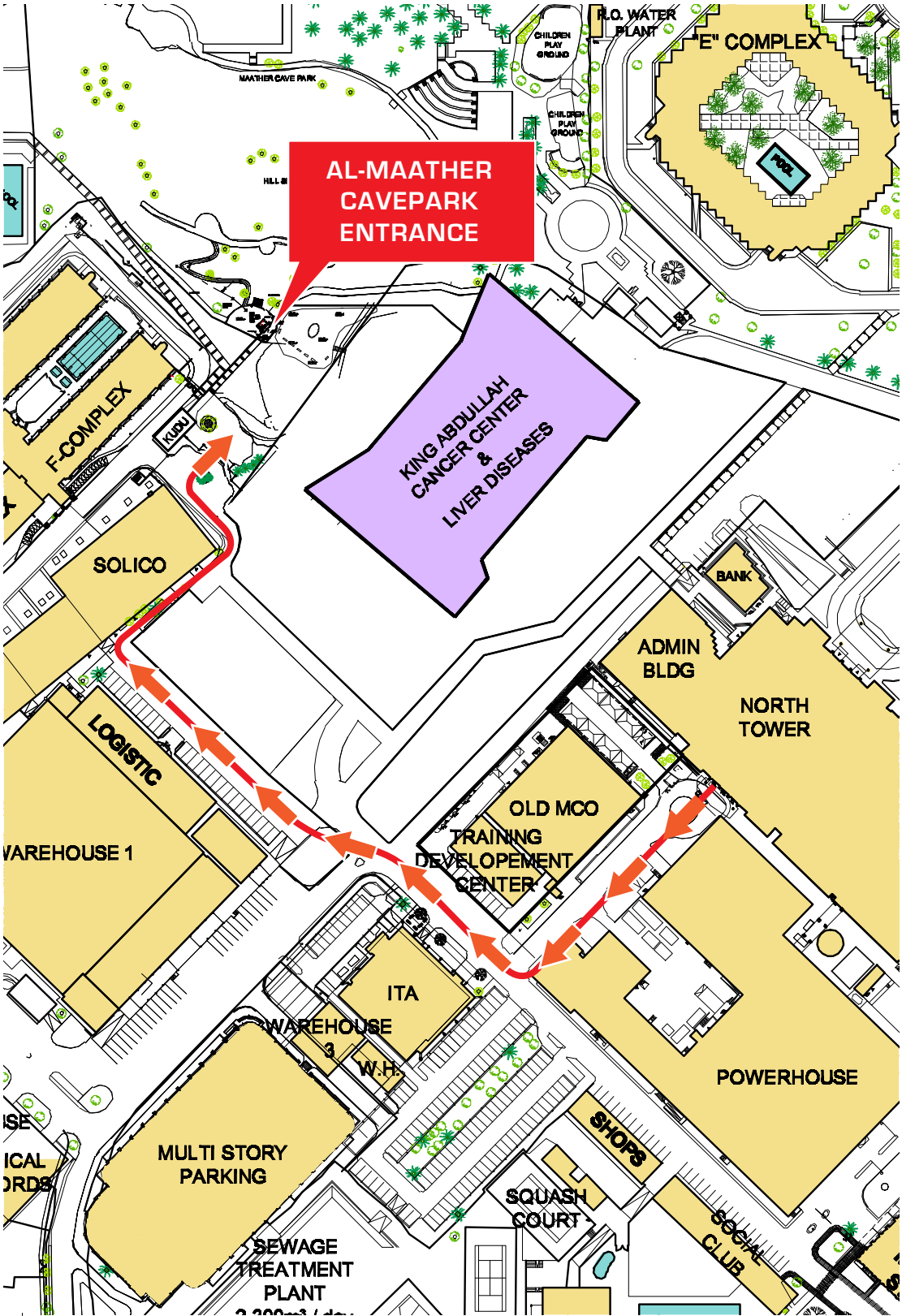




COMPOSITE PLAN  
(LEVEL 2 - FIRST FLOOR PLAN)



**COMPOSITE PLAN  
(LEVEL 3 - SECOND FLOOR PLAN)**



**AL-MAATHER  
CAVEPARK  
ENTRANCE**

**KING ABDULLAH  
CANCER CENTER  
&  
LIVER DISEASES**



# *NOTES*

The page features a decorative background consisting of several wide, overlapping diagonal bands in shades of light gray. Overlaid on these bands are numerous thin, horizontal black lines that span the width of the page, creating a template for taking notes.



















