



World Congress on Medical Physics and Biomedical Engineering

Workshop on Shielding of X-ray Radiotherapy Rooms

Presenters



Wayne Beckham

Wayne is the Provincial Medical Physics Leader for BC Cancer, the sole provider of comprehensive cancer care for the province of British Columbia on the west coast of Canada. He is the Director of BC Cancer's accredited Medical Physics Residency Training Program, one of the largest in North America. He served as the Regional Medical Physics Leader and site Radiation Safety Officer for Class II radiation devices and for PET/CT at BC Cancer from 1998-2023. Prior to that from 1996-1998 he chaired the New South Wales Hospital and University Radiation Safety Officers Group, served as the Southwestern Sydney Area Health Service, Area Advisor in Radiation Control and was a member of the New South Wales EPA Therapy Radiation Advisory Committee. He has overseen therapy room design/renovation for multiple megavoltage rooms.



Robin Hill

Robin is a clinical and research medical physicist from Sydney, Australia working in the Gosford Cancer Care Centre and Westmead Hospital. He is also an Adjunct Senior Lecturer in the School of Physics, The University of Sydney. Robin is passionate about training and education in medical physics as evident in the supervision of Masters and PhD students as well involvement in the clinical medical physics training programs. He is also involved in several regional radiation oncology projects within the IAEA supporting medical physics activities in Southeast Asia. More recently, he was the principal investigator for the first clinical trial of cardiac SABR in Australia. When he is not working, Robin enjoys bike riding, travelling with his family and finding good coffee shops.



Melissa C. Martin

Melissa has a 40-year+ career in Radiological Physics, initially working in hospitals in the Los Angeles area. Since 1995 she has grown a consulting medical physics company, Therapy Physics, Inc., in Southern California. She developed software programs for shielding calculations of all types and has now designed shielding for over 1000 linac vaults and 15 proton therapy centers. She was part of the ISO/Technical Committee writing the standards on "Radiation Protection for Medical and Veterinary Use of Linear Accelerators". In 2020, she co-authored (with Patton McGinley) the 3rd edition of "Shielding Techniques for Radiation Oncology Facilities". She is a Fellow of AAPM, ACR, ACMP and IOMP and has worked over ten years with the ABR on written and oral exams in Diagnostic Imaging Physics.



David Thwaites

David is ex-Director of the Institute of Medical Physics, Sydney University, Australia, and ex-Head of Medical Physics and Engineering, Leeds Hospitals, UK. He now holds an Emeritus Professorship in Sydney, and an honorary/visiting Professorship in Leeds. His clinical career was mostly in the UK, in Radiotherapy Physics and Radiation Protection. He was lead physics editor for the ESTRO journal *Radiotherapy and Oncology*, 1995-2020. He has published 300 papers, book chapters and books (currently, with Jean Moran, editing the new IAEA Radiotherapy Physics handbook) and has received awards from IPEM (UK), RCR (UK), ESTRO and IOMP. He has participated in shielding design for 20+ linac rooms, plus other radiotherapy facilities, and has taught radiation protection modules on five Masters courses.



Christopher Trauernicht

Chris is the head of the medical physics division at Tygerberg Hospital and an associate professor at Stellenbosch University. He is the past president of the Federation of African Medical Physics Organizations, and the current chair of the South African Medical Physics Society. He also serves on the Accreditation Board of the IOMP. Chris has done shielding calculations for various radiotherapy facilities, including private and public radiotherapy centers in South Africa, as well as for installations in Nigeria, Namibia, and Mauritius.