



A Summary of Contributions and Achievements of Professor Kin Yin Cheung

Professor Kin Yin Cheung played a leading role in creating a platform through AFOMP and IOMP needed for networking, consultation and collaboration on development of medical physics in the AFOMP region and beyond. He has succeeded in motivating national and international collaborations on scientific exchange, dissemination of information and sharing of resources for improving medical physics globally.

Professor Cheung played a leading role in establishing an international consensus on the roles and responsibilities of medical physicists in healthcare and on the basic requirements for their education and training. While serving as President of IOMP, he personally chaired two working groups, one to develop a guidance document on roles and responsibilities of medical physicists and the other to develop a set of recommendations on education and training of medical physicists practicing in healthcare. These documents were published as IOMP Policy Statements No. 1 and No. 2 and they served as guidelines for all member organizations in the development and practice of medical physics around the world.

While serving as IOMP President, Professor Cheung played a key role in promoting the formal recognition of medical physicists as healthcare professionals by national authorities around the world. In year 2007, Professor Cheung representing IOMP participated in an IAEA consultation forum on updating the IAEA Safety Series No. 115 (Basic Safety Standards). The new document was later published as Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards 2014. He together with other participating medical physicists succeeded in convincing the IAEA to specify, for the first time, the roles of medical physicists in the section on medical exposure of this important document. In the definition of medical physicist, IAEA basically adopted the IOMP definition as specified in its Policy Statement No. 1 in the new “Basic Safety Standard”. As regulators and health authorities of IAEA Member States refer to the requirements of the Basic Safety Standards when setting safety requirement on practice using ionizing radiation, inclusion of medical physicist and its responsibilities in the new Basic Safety Standards is an important milestone in getting official recognition of the profession. Professor Cheung played a major role in drafting the IAEA guidance document “Roles and Responsibilities, and Education and Training Requirements for Clinically Qualified Medical Physicists” which was published in 2013. These two IAEA documents, which were endorsed by IAEA members States, have helped promoting the visibility and official recognition of the medical physic profession in all countries. These guidance documents together with the IOMP Policy Statements provided solid foundation and authoritative reference for national authorities and medical physics communities in planning and development of medical physics services in their countries.

To facilitate member countries in meeting IAEA standards and IOMP recommendations on professional accreditation of medical physicists, Professor Cheung, while serving as IOMP President, initiated a process in forming an independent international professional certification body. He played a key role in forming the International Medical Physics Certification Board to assume the role of accreditation of certification boards in IOMP member countries and certification of individual medical physicists in countries where certification boards did not exist.

Professor Cheung has made significant contributions to the development of radiation medicine and training of medical physicists in the AFOMP region and beyond. In year 2005, Professor Cheung participated in drafting the IAEA document “Clinical Training of Medical Physicists



Specializing in Radiation Oncology”. This competency-based training programme provided an effective and practical model for formal clinical training of medical physicists practicing in radiation oncology. While working as head of medical physics in Prince of Wales Hospital in Hong Kong, Professor Cheung had organized in his centre a number of training programmes for medical physicists from AFOMP countries. He had also collaborated with the IAEA on several projects on improving medical physics in the AFOMP region. In year 2005 he conducted an IAEA training course on “Implementation of 3DCRT” in Singapore with trainee participants coming from the Asia-Pacific regions. During 2005 to 2007, he participated in two IAEA QUATRO visits that aimed at improving the quality of radiotherapy service in the region. In October 2006, he conducted an IAEA/RCA training workshop in his hospital on “QA for Radiotherapy Treatment Planning Systems”. In October 2016, he conducted an IAEA training workshop in Singapore on Radiation Protection in Proton Beam Therapy.

Professor Cheung has been one of the leaders in the field of medical physics locally in Hong Kong and internationally. In his own work as a medical physicist, Professor Cheung has been actively engaged in research and development work initially in the field of radiation oncology physics and more recently in integration of imaging to radiation therapy, such as MRI-guided adaptive radiotherapy. He has also been working on a project in building a proton therapy facility in the past few years. He has published/presented more than 240 scientific peer-reviewed papers, abstracts and book chapters, and oral and poster presentations in major international conferences.

Professor Cheung has made outstanding contributions in training of radiation oncologists, clinical radiologists, medical physicists and radiation therapists in Hong Kong. He was a member of Education Committee of Hong Kong College of Radiologists during 1995-2011 and had organized and gave physics lectures and training sessions to residents taking the UK FRCR Part I Examinations in physics before 1997 and the Co-joint FRCR-HKCR Part I Examinations in physics thereafter. He had also served as local examiner in physics in these examinations. While serving as President of the Hong Kong Association of Medical Physics, he played a leading role in establishing the residency training programme in year 2000 for formal clinical training of medical physicists in the public hospital system in Hong Kong. He also implemented in 2004 a board certification scheme for professional certification of medical physicists practicing in the public hospital system. In year 2013 he implemented a board certification system for professional certification of medical physicists practicing in Hong Kong, Macau, China, other countries in the region.