EDITORIALS

Slavik Tabakov, MPI Co-Editor in Chief

This issue of the Journal, Medical Physics International (Dec 2019), has a focus on the countries of Africa, on the 10th Anniversary of the creation of FAMPO (Federation of African Medical Physics Organizations). It continues the focus on specific Regions of our profession - the focus in the previous issue of MPI (May 2019) was South and Central America and the Caribbean Region. Africa needs many more medical physicists, as it currently has less than 0.5 medical physicists per million of inhabitants. This MPI issue also presents abstracts of several PhD theses from African colleagues, and introduces the new African Journal of Medical Physics (launched in 2019), that supports the professional development on the continent. We are grateful to Dr Taofeeq Ige and Dr Francis Hasford from FAMPO - our Contributing Co-Editors of the MPI Dec 2019 – who solicited the papers from the African continent.

This current MPI issue also presents papers associated with the 35th anniversary of the IOMP Newsletter Medical Physics World, and also the 35 anniversary of the CRC Press Series in Medical Physics and Biomedical Engineering - this continues to be a very effective collaboration between IOMP, IFMBE and CRC Press which has delivered so far 60 textbooks (40 of which in the past 10 years).

The collaboration of IOMP with the ISR (International Society of Radiology) is also discussed. Another closely collaborating organization is the IFMBE (International Federation of Medical and Biological Engineering) - a brief paper is included about its 60th anniversary. IOMP and IFMBE form the IUPESM (International Union for Physical and Engineering Sciences in Medicine). This Union had a very successful year creating several activities of collaboration between medical physicists and engineers. Through this collaboration we are presenting to the readers a paper related to Deep Learning for Chest X-Ray Screening. Another “How-To” paper is associated with PET performance measurements.

The Educational topics include, the ASEAN Accreditation and Certification Recommendations, a method to present physics information to diagnostic radiologists, and a full list of the CRC published textbooks.

The two invited papers are: one discussing the history and evolution of CT Dosimetry, the other one - a summary of the International Conference on Radiological Emergency Management [ICONRADEM-2019]. In an ANNEX we provide the readers with another very important digest from IAEA to the International Symposium on Standards, Applications and Quality Assurance in Medical Radiation Dosimetry (idos 2019).

We believe that many colleagues will find interesting information in the new issue of the MPI Journal. The consistently high number of our readers underlines the importance of the free MPI Journal aim -supporting of the global development of our profession.

Perry Sprawls, MPI Co-Editor in Chief

Every medical physics journal makes specific contributions to the profession and practice of medical physics around the world. Most journals provide opportunities for physicists to publish reports of their research in a peer-reviewed process that validates their scientific achievements and contributes to the advancement of the field of medical physics and related clinical applications. This journal, Medical Physics International, is different and publishes in many significant areas beyond research that is generally not within the scope of other journals. One of the major goals is enhancing medical physics education to meet the needs created by the many advances in clinically applied physics in both diagnostic imaging and therapy applications. With the many scientific and technological advances in radiology and radiation oncology and the more complex procedures, an effective knowledge of physics by the medical professionals, especially physicists and physicians, becomes a major element in the quality of medical care. A major factor is with the more complex methods, both diagnostic and therapeutic, quality is more dependent on the adjustment and optimization of the procedures by the medical professionals using their knowledge of physics.

This is creating an evolution in the medical physics education process both in content and educational methods. With the communications and connectivity provided by the internet there is now the opportunity for medical physicists around the world to collaborate with the sharing of their knowledge, experience, and educational resources. Medical Physics International is facilitating this effort by publishing a variety of articles including tutorials, links to resources for study and teaching, and guides for the development and delivery of effective educational activities. This provides an opportunity for medical physicists to use the published materials to enhance their educational programs and to consider publishing materials they have created that can be used by others.