IOMP HISTORY – ACTIVITY DEVELOPMENT AND MAIN DOCUMENTS

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Abstract – The paper presents briefly the beginning of the IOMP History activity: the creation of the IOMP History Sub Committee, the development of the History Tables, the update of the relevant information. Additionally, a number of materials are presented which can now be seen as tracing the history of the professional development of medical physics in all continents. The paper is used as an introduction to this MPI Special Issue 7, dedicated to the History of IOMP.

Keywords— Medical Physics History, IOMP History

The global development of medical physics is strongly connected with the International Organization for Medical Physics (IOMP). Since its creation in 1963 IOMP has been pivotal for the global growth of the profession [1]. During the past almost 60 years of its existence, the global number of medical physicists had significant growth [2] - from about 6,000 in 1963 to close to 30,000 at present. What is more important – new medical physics societies were organised (even in small countries) and new educational courses were established, e-learning took its steady place in the medical physics, new professional projects were developed and implemented. This created the background for a steady growth during the years, as medical physics proved that it is now an important part of contemporary medicine and healthcare provision.

Hundreds of colleagues from the large established medical physics societies in North America and Western Europe took part in activities helping the professional development in other countries. A significant part of these activities of knowledge transfer was coordinated and supported by the IOMP. From 2000 onwards each IOMP triennial office includes 11 internationally elected ExCom members plus about 100-120 appointed members of various Committees. These colleagues come from all continents, usually from over 30 countries in term (in the last term of office these are from 38 countries). It is very important to underline that each one of the IOMP members contributes voluntarily to the aims of the Organisation. During the 2015-2018 term of office the legal status of IOMP was achieved, what would allow further presentation of the profession at various international levels and additional participation in funding activities and projects supporting the global growth of medical physics.

Until 1980s the coordinating activities of the IOMP were mainly fulfilled by the Officers of the Organisation (President, Vice President, Secretary General, Treasurer and Past President). The global growth of the profession required various specific IOMP activities/groups to be established, thus various Committees and Sub Committees were formed and IOMP grew as an organisation [3]. It was natural to create a separate IOMP Committee, which collects and preserves information related to the history of the Organization. Thus, the IOMP History Sub Committee (HSC) was established in 2008 - an activity led by Azam Niroomand-Rad (IOMP President 2003-2006), who became the first HSC Chair. The HSC founding members were: Colin Orton, Slavik Tabakov and Robert Gould.

It was Prof. Niroomand-Rad, who initiated and organised the first IOMP History Tables, with the support of all HSC members and ExCom at the time. This activity included contacting many colleagues and societies in order to collect the necessary information. The process took long time, but finally it presented an excellent history record, as well as an acknowledgement to the hundreds of IOMP contributors [4]. The first set of History Tables were uploaded to the IOMP Website as part of the preparation for the celebrations of the 50th Anniversary of the Organization. In 2019 these Tables passed through major update and new History Tables were formed, which were further updated in 2022.

Initially HSC also collected a number of video interviews with prominent medical physicists, but the technical challenges with the videoing and uploading large files at the time created a pause in these activities. The recent pandemic also delayed the videos, but surely, they will continue in the coming term of office.

In the period 2019-2022 the History Tables were updated by the current HSC - mainly by S Tabakov (HSC Chair 2018-2022), KY Cheung (HSC Chair 2015-2018) and C Orton (doyen member of HSC) – all of them IOMP Past-Presidents. These Tables were uploaded at the IOMP website. The current Special Issue of the MPI Journal (MPI SI 7) includes all these updated History Tables plus the history papers from HSC (the first published in 2013-2014).

Alongside the IOMP activities related to the history of the Organization, other papers described the history of the earliest and largest medical physics organisations: IPEM (Institute of Physics and Engineering in Medicine, UK) [5] and AAPM (American Association of Physicists in Medicine, USA) [5] - both Founding Members of IOMP. MPI also published the histories of the other two IOMP Founding members – Sweden [7] and Canada [8].

The six Regional Organisations (RO) of IOMP in all continents include in their Newsletters papers about the history of medical physics development in various societies within the RO geographical boundaries. These publications can be a valuable source of information for the growth of the profession in many countries. Such information is included also in the book from 1995 [9], which was published to boost medical physics education and played an important role for building new educational activities in Eastern Europe. This information is now a very good source for medical physics history. A similar book, published in 2011 [10], was very useful for building educational courses in Asia. It can also be seen now as a source for medical physics history. The information from both books could be compared with the current information about professional status at present in many countries from the IOMP Regional Organisations, compiled in MPI issues in the period 2019-2021 (an activity developed by S Tabakov): in Latin America (ALFIM) from 2019 [11]; in Africa (FAMPO) from 2019 [12]; in South-East Asia (SEAFOMP) from 2020 [13]; in Asia and Oceania (AFOMP) from 2020 [14]; in the Middle East (MEFOMP) from 2021 [15]; in Europe (EFOMP) from 2021 [16].

Since 1988 a very important role for the development of medical physics in Low and Middle Income (LMI) countries was played by the College on Medical Physics at ICTP, Trieste, Italy. About 1500 young colleagues from LMI countries were educated there and received full sets of information and Lecture Notes to start educational courses in their countries. This boost for medical physics development in LMI countries can be seen in the History of the ICTP College [17].

The assessment of the needs of the colleagues from the ICTP College was a significant catalyst for the development of the Encyclopaedia of Medical Physics and its Scientific Dictionary of Medical Physics Terms (now in 32 languages) - a free online resource [18]. The information, provided free to all LMI colleagues, was based on the e-learning resources pioneered in the profession through the free educational websites [19,20]. Such resources were also developed and distributed free by the IAEA – summative papers can be seen at [21,22], while the rich sources of IAEA can be downloaded free from the IAEA website [23]. The development of medical physics was also boosted by the various e-learning initiatives, accepted very well in the profession, its beginning being described in an e-book [24].

The History of Medical Physics project [25,26] was another activity, launched in 2017. The project aims to present not only the development of the profession, but also the development of various methods and instrumentations, their application in clinical practice and the background these created in medicine. By now this project has published 6 Special Issues with 26 papers (over 700 pages), which describe various historical developments in medical physics.

The current MPI Special Issue (SI 7) includes re-prints of the first two History papers of the HSC, published in MPI during 2013-2014 under the leadership of A Niroomand-Rad [1,3]. Additionally, a new paper about the IOMP History in the period 2012-2022 from S Tabakov and KY Cheung is printed here [31]. In an Annex to the SI 7 are included the updated History Tables of 2022 (for their update we are most grateful to all colleagues who contributed information).

The IOMP History paper from 2013 [1] includes a brief description of the initiation and the first steps of the IOMP. Detailed description of these exciting first years [27, 28, 29] can be downloaded from the IOMP website History section [30]. All History Tables can be downloaded from the same place (we are grateful to M Stoeva for the regular uploads).

Finally, I believe the current MPI Special Issue (SI7), which combines a lot of materials, will be a valuable source for the History of IOMP and its achievements over the past almost 60 years, as well as an acknowledgement and gratitude to the hundreds of colleagues from all over the world (listed in History Tables), who voluntarily contributed part of their precious time and knowledge to support the global development of our profession - medical physics.

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