

# A HISTORY OF THE INTERNATIONAL ORGANIZATION FOR MEDICAL PHYSICS – 50 YEARS ANNIVERSARY – PART I

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*Abstract*—In celebration of 50 years Golden Anniversary of the founding of the International Organization for Medical Physics (IOMP), Part I of this article is written to describe early development of events and discussions that led to the formation of the Organization in 1963, followed by early years expansion of the Organization. A summary of the major achievements over the last 50 years is included.

*Keywords*— IOMP, IUPESM, ICSU, ILO, IUPAP.

## I. INTRODUCTION

This article is written by past and present members of the International Organization for Medical Physics (IOMP) History subcommittee in recognition of the Golden Anniversary of the founding of the Organization in 1963. Starting with just four National Members representing a few hundred medical physicists, the organization has grown to over 80 National Member Organizations, six Regional Organizations, and over 18,000 individual members. This article highlights the major activities and accomplishments of the IOMP and recognizes the enormous time and effort donated by many of its voluntary members to promote the purposes and objectives of the Organization.

## II. IOMP EARLY HISTORY

In the early 1950s medical physicists, especially members of the only national society of medical physicists at the time, the Hospital Physicists' Association (HPA) in the UK, began to be interested in meeting colleagues from other countries to exchange ideas and promote medical physics but their only opportunities to meet had been at the International Congresses of Radiology in 1950 (in London) and 1953 (in Copenhagen). There were sessions on radiological physics at these congresses but relative few medical physicists attended. What were needed were international conferences that would attract far more medical physicists, maybe organized by an international organization of medical physicists.

The first concrete proposal to form such an international association of medical physicists was made by Norman Veale (Guy's Hospital, London, UK) at an HPA meeting in October 1954. This proposal was discussed at a meeting of Swedish medical physicists in December 1955 and, in September

1956, a written proposal to this effect was sent by Walter Moos (University of Illinois, Chicago, USA) to medical physicists in several countries.

Subsequently, in September 1957, HPA President Ray Wood wrote to Walter Moos, Sven Brenner (Sweden), Edith Quimby (USA), and Harold Johns (Canada) to propose a preliminary meeting to discuss the issue. Following this, in April 1958, HPA physicists met in Erlangen, Germany with Sven Brenner and Felix Wachsmann (Germany). They agreed that the HPA should be the organizing body for an international organization and called for another meeting the following year. Having been informed of this, medical physicists in the USA, John Laughlin, Gail Adams and Bob Loevinger, met informally in May 1958 to discuss this topic and agreed that an international organization was desirable and that it should be formed of medical physics national societies and not individuals. Then, in July 1959, the HPA held a special one-day meeting at the end of the IX<sup>th</sup> International Congress of Radiology in Munich. Over 80 people attended from 20 countries. The Chairman was Jack Boag (UK) and the Secretary Roy Ellis (UK). There were presentations by 26 speakers from 12 countries. Comments included:

- there was a need for an international organization so as to secure recognition by the International Council of Scientific Unions (ICSU)
- that more personal contact between medical physicists in different countries was needed and that the International Congresses of Radiology did not meet the needs
- that an international body could be of great assistance to those countries that did not have a national society
- that, in the event an International Union of Biophysics were to be formed, medical physicists might be linked with this
- that the ultimate objective be the formation of an organization covering both pure and applied biophysics.

Jack Boag proposed a Motion, which was approved unanimously, to the effect that they agreed to the formation of an international body covering the field of both pure and

applied biophysics, and that the HPA should form a committee called “The International Liaison Committee on Medical Physics” to correspond with all the national societies of medical physics represented at this meeting as well as those attendees from countries that had no such societies. There ensued considerable correspondence by John Mallard, HPA Honorary Secretary, to these national societies and to those from countries with no medical physics society encouraging them to form a national society.

In 1961, the HPA invited medical physicists to attend a meeting of the International Liaison Committee during the 2<sup>nd</sup> International Biophysics Congress in Stockholm. It was during this congress that the International Organization of Pure and Applied Biophysics (IOPAB) was formed. Over 50 medical physicists attended the meeting from 12 countries (Austria, Belgium, Czechoslovakia, Denmark, Germany, Holland, Hungary, Italy, Japan, Sweden, the UK and the USA). The Chairman was Len Lamerton (HPA President) and there was general consensus for the need to establish an International Organization for Medical Physics (IOMP), independently of whether or not it was to be affiliated with the newly-formed IOPAB, and that it should be formed as soon as possible. An International Steering Committee was formed to:

- draft a Constitution
- consider the problems of affiliation with the IOPAB
- consider holding a scientific conference within a reasonable time
- prepare a report within a year.

Sven Brenner (Sweden) was appointed Chairman, Len Lamerton (UK), Vice-Chairman, John Mallard (UK), Secretary, with members Monte Cohen (IAEA), Bo Lindell (Sweden), Bruno Schober (Czechoslovakia), and Rosalyn Yalow (USA), with an additional representative each from Canada, Germany, Holland, Hungary, and Japan to be appointed. *Physics in Medicine and Biology* (PMB) Editor Jo Rotblat suggested that, if the organization needed a journal, PMB might be suitable.

The International Steering Committee held its first meeting at the Xth International Congress of Radiology in Montreal in August 1962. It was agreed to form the IOMP, to be inaugurated on January 1<sup>st</sup>, 1963. The Steering Committee was to act as the provisional Council until elections could be held at the 1<sup>st</sup> International Conference. The Draft Statutes was approved as was a proviso that the IOMP should apply for affiliation to IOPAB as a step toward being associated with ICSU. News of the imminent inauguration of the IOMP, along with a copy of the Statutes, was to be sent to all the known representatives of as many countries as possible asking them to join. The four founding members were Canada, Sweden, the UK and the USA [1].

The Statutes set forth the three objectives and four powers of the IOMP:

*Objectives:*

- To organize international co-operation in medical physics and promote communication between various branches of medical physics and allied subjects.
- To contribute to the advancement of medical physics in all its aspects.
- To advise on the formation of National Committees for Medical Physics in those countries which lack such organization.

*Powers:*

- To set up bodies for special purposes
- To organize international meetings and conferences
- To collaborate or affiliate with other scientific organizations
- To develop any activity deemed helpful to the forwarding of its declared objects.

### III. MEMBER COUNTRIES (1963-2013)

Countries are represented by National Organizations. Where more than one national organization wishes to join, the recognised national body is a national committee representing all members of such national medical physics organizations. Originally National Organizations were referred to as ‘adhering national bodies’ but in 2009 the Statutes were amended so that National Organizations were included as one the membership categories.

The Organization was established in 1963 with 4 founding countries. By 1998, within 25 years, this had grown to 37 Member Countries. Now, after 50 years, there are 84 Member Countries. In chronological order: (1-4) Canada, Sweden, UK, USA, (5-9) Germany (West-East were united in 1991), Hungary, Israel, Poland, South Africa, (10-16) Brazil, Finland, France, Greece, Mexico, Netherlands, New Zealand, (17-18) Ireland, Norway, (19-21) Italy, Japan, Spain, (22-27) Austria, Belgium, Denmark, India, Switzerland, Thailand, (28-31) China, Columbia, Nigeria, Turkey (32-35) Australia, Hong Kong, Philippine, Sri Lanka, (36) Malaysia, (37) Cyprus, (38-43) Argentina, Bulgaria, Ghana, Korea, Romania, Tanzania (44-49) Moldova, Pakistan, Russia, Slovenia, Sudan, Trinidad & Tobago, (50-55) Algeria, Indonesia, Iran, Panama, Venezuela, Zimbabwe, (56-62) Cuba, Estonia, Georgia, Lithuania, Morocco, Ukraine, Zambia, (63-64) Ecuador,

Portugal, (65-71) Bangladesh, Chile, Egypt, Nepal, Taiwan, Singapore, Uganda, (72) Mongolia, (73-74) Jordan, Croatia, (75-77) Cameroon, Czech Republic, United Arab Emirates, (78-79) Macedonia, Lebanon, (80-82) Peru, Saudi Arabia, Vietnam, (83-84) Iraq, Qatar.

#### IV. PRESIDENTS (1962-2015)

From 1962-1965 Sven Benner (Sweden) served as Acting President. Since then 17 Presidents from 9 countries have been elected to serve the Organization every 3 years. In chronological order:

(1) Val Mayneord (UK), (2) John S Laughlin (USA), (3) R I Magnusson (Sweden), (4) R Mathieu (Canada), (5) John R Mallard (UK), (6) Alexander Kaul, (Germany), (7) Lawrence H Lanzl (USA), (8) John R Cunningham (Canada), (9) Udipi Madhvanath (India), (10) Keith Boddy (UK), (11) Colin Orton (USA), (12) Oskar Chomiski (Poland), (13) Azam Niroomand-Rad (USA), (14) Barry Allen (Australia), (15) Fridtjof Nusslin (Germany), (16) K. Y. Cheung (Hong Kong), (17) Slavik Tabakov (UK)

#### V. SECRETARIES-GENERAL (1962-2015)

From 1962-1965 John R Mallard (UK) served as Acting Secretary-General. Since then 9 Secreties-General from 4 countries have been elected to serve the Organization for 3 or 6 years. In chronological order:

(1) B Waldskog (Sweden), (2) John R Cameron (USA), (3) Rune Walstam (Sweden), (4) Brian Stedeford, (UK), (5) Colin Orton (USA), (6) Hans Svensson, (Sweden), (7) Gary Fullerton (USA), (8) Peter Smith (UK), (8) Madan Rehani (Austria)

#### VI. TREASURERS (1994-2015)

Up to 1994 the Secretary-General looked after the finances of the Organization. From 1994-1997 Ann Dixon-Brown (UK) served as an Honorary Treasurer. Since then 5 Treasurers from 4 countries have been elected to serve the Organization for 3 or 6 years. In chronological order: (1) Gary Fullerton (USA), (2) Nisakorn Manatrakul (Thailand), (3) George Mawko (Canada), (4) Slavik Tabakov (UK), (5) Anchali Krisanachinda (Thailand)

#### VII. MAJOR ACCOMPLISHMENTS OF THE IOMP

During the past 50 years the IOMP has achieved all its objectives, and more. Following is a brief summary of these accomplishments:

- Has helped many countries develop national societies and regional organizations and now has 84 National Members and six Regional Organizations
- Established Medical Physics World to communicate with Members
- Organized 20 International Conferences on Medical Physics
- Affiliated with the International Federation of Medical and Biological Engineering to form the International Union for Physical and Engineering Sciences in Medicine (IUPESM)
- Through the IUPESM has gained Full Membership in ICSU
- Joined the International Union of Pure and Applied Physics as Affiliated Commission for Medical Physics
- Worked with the International Labor Organization to gain inclusion of medical physicists in the International Standard Classification of Occupations
- Organized 34 educational and training programs in developing countries and regions
- Established Medical Physics Libraries in developing countries: there are currently 87 libraries in 48 countries
- Established a Used Equipment Donation Program for developing countries
- Established *Medical Physics International* as the Official Journal of the IOMP

#### REFERENCES

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