

AFOMP OUTSTANDING MEDICAL PHYSICISTS 20TH ANNIVERSARY OF AFOMP



On the occasion of the 20th anniversary of the Asia-Oceania Federation of Organizations for Medical Physics (AFOMP), AFOMP decided to recognize the contributions of medical physicists from the AFOMP region.

AFOMP has introduced the Outstanding Medical Physicist Award for medical physicists who worked in the AFOMP region for the last 20 years and put tremendous effort into the development of medical physics as a profession and as a subject, and into medical physics education & research. They also organized scientific activities in the AFOMP region to disseminate scientific knowledge for the welfare of the profession and society. AFOMP congratulates and is proud of all the 21 outstanding medical physicist awardees. They have served in national medical physicist organizations and AFOMP, have served their country, the AFOMP region and the community.



AFOMP OUTSTANDING MEDICAL PHYSICISTS 20TH ANNIVERSARY OF AFOMP



AFOMP

21 Outstanding Medical Physicist Awardees



Dr. K.Y. Cheung
Hong Kong



Dr. M. Endo
Japan



Dr. H. Round
New Zealand



Dr. A. Chougule
India



Dr. N. Kanematsu
Japan



Dr. J. Lee
Singapore



Dr. T. Kanai
Japan



Dr. C. S. Chui
Taipei



Dr. H. J. Kim
South Korea



Dr. N. B. Jamal
Malaysia



Dr. S. K. Kim
South Korea



Dr. H. A. Azhari
Bangladesh



Dr. K. Ogawa
Japan



Dr. K. B. Kim
South Korea



Dr. H. Mozdarani
Iran



Dr. H. T. Chung
South Korea



Dr. W.A.K. Abdullah
Malaysia



Dr. B. P. Ravindran
India



A. P. Peralta
Philippines



Dr. J. Dai
China



Dr. N. Chawapun
Thailand



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. KIN YIN
CHEUNG**

HONG KONG

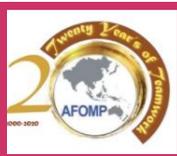
Professor Kin Yin Cheung PhD, FIOMP, FIPEM, FHKIE, CertMedPhy, CRadP, CEng is Senior Medical Physicist at Medical Physics & Research Department, Hong Kong Sanatorium & Hospital. He is also Adjunct Professor at Tung Wah College, Adjunct Associate Professor at University of Hong Kong, and Adjunct Associate Professor at Chinese University of Hong Kong. He is an Honorary Member of Hong Kong College of Radiologists.

Professor Cheung was the Founding President of AFOMP (2000-03), President of IOMP (2012-15) and President of IUPESM (2015-18). He has played a leading role in creating a platform for promoting and facilitating the collaboration on development of medical physics amongst the countries in the AFOMP region and beyond. While serving as IOMP President, he played a key role in establishing an international consensus on the definition and roles and responsibilities of medical physicists in healthcare and on the basic requirements for their education and training through the preparation, consultation and endorsement of two IOMP Policy Statements on the subjects.

He also played an important role in promoting the formal recognition of medical physicists as healthcare professionals by national authorities through collaboration with IAEA in getting the definition and roles and responsibilities of medical physicists in healthcare specified for the first time in the current version of International Basic Safety Standards. During 2005 to 2016, he has served as a consultant/expert in a number of IAEA projects on improving medical physics in radiation medicine.

Professor Cheung has been actively engaged in research and development work initially in the field of radiation oncology physics and more recently in MR-guided radiation therapy, including MR-Linac based online adaptive radiotherapy, and proton therapy. He has published/presented more than 240 scientific peer-reviewed papers, abstracts, book chapters, and oral and poster presentations in major international conferences.

Professor Cheung has made outstanding contributions on training of radiation oncologists, radiologists, medical physicists and radiation therapists in Hong Kong. He has played a leading role in establishing the systems for formal clinical training and professional certification of medical physicists in Hong Kong



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. MASAHIRO
ENDO**

JAPAN

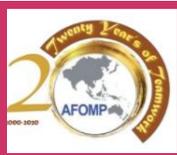
Masahiro Endo entered the University of Tokyo in 1967, earning a bachelor's degree in 1971 and a master's degree in 1973 in the field of physical science. Then he joined National Institute of Radiological Sciences (NIRS), and was affiliated with Division of Clinical Research. During his first decade at NIRS, he was primarily involved in the development and application of medical imaging devices such as CT and PET. Meanwhile, in 1982, he received his PhD in the field of medical science from Chiba University.

In 1983, NIRS started a research project to treat cancer using heavy ion beams. After returning to Japan, he joined the HIMAC (Heavy Ion Medical Accelerator in Chiba) Construction Group, and prepared for heavy ion radiotherapy. NIRS started carbon ion therapy in 1994, and in time he developed the three-dimensional treatment planning system HIPLAN, that continued to be used until 2012.

While developing a heavy ion treatment planning system, he started developing cone-beam CT around 1989 in order to improve the spatial resolution in the longitudinal direction of images, and completed a prototype in 1995. After various basic and clinical evaluations, 4D CT was commercialized in 2007 as Aquilion One, which has been used not only in Japan but in other countries around the world. For this achievement, he was awarded three awards from Japanese Government: The Minister of Education, Culture, Sports, Science and Technology Award for basic research in 2006; the Minister of Economy, Trade and Industry Award for commercialization in 2009; and the Minister of Health, Labor and Welfare Award for medical applications in 2017.

He was promoted to Director of Medical Physics, NIRS in 2001, and retired from it in 2009. Then he immediately joined the SAGA HIMAT project as the Chief Technical Officer and constructed the fourth heavy ion radiotherapy facility in Japan. He retired from SAGA HIMAT in 2017, when he joined the Association for Nuclear Technology in Medicine (ANTM), the unique secondary standard dosimetry laboratory (SSDL) of radiotherapy field in Japan, and has been still supporting radiation therapy infrastructure.

He led the founding of the Japan Society of Medical Physics (JSMP) in 2000 by integrating the Japanese Association of Medical Physicist (JAMP), which was a member of IOMP, and a group of medical physicists who were members of the Japan Radiological Society (JRS). Then, for the next 13 years, he served as the president (for 10 years) or an auditor (for 3 years) of JSMP. He served as the organizing chair of the 5th Asia-Oceania Congress on Medical Physics (AOCMP), which was held simultaneously at the 4th Japan-Korea Meeting in 2005.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. HOWELL
ROUND**

NEW ZEALAND

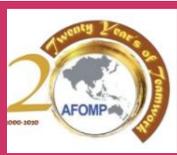
Dr Howell Round first encountered medical physics while on a work placement at Waikato Hospital, New Zealand, while doing a Bachelor of Science and Technology degree in physics at the University of Waikato. He went on to do an MSc in medical physics at the University of Surrey, UK. On returning to New Zealand he took up a position as a medical physicist at Waikato Hospital before going on to complete a PhD in Electrical and Electronic Engineering at the University of Canterbury, New Zealand. This was followed by two years as a diagnostic imaging physicist at the Royal Brisbane Hospital, Australia, before starting an academic career as a lecturer at the University of Waikato in 1985. While there he chaired the University's Physics and Electronic Engineering Department for seven years before becoming an associate professor until he retired in 2017.

Howell Round has conducted research in medical ultrasound, radiotherapy treatment planning, dose optimization, nuclear medicine, and applications of electronics and electronics education. He also published papers on medical physics education and training, continuing professional development, workforce issues and medical physics policy.

In conjunction with John Drew (Australia) he developed TEAP, the clinical physicist training and education program of the Australasian College of Physical and Engineering Sciences in Medicine (ACPSEM). This was later adopted by the IAEA as the basis for its clinical training programs.

Howell has been President of the ACPSEM, Secretary General of AFOMP and Secretary General the International Union of Physical and Engineering Sciences in Medicine (IUPESM). He also served on and chaired numerous committees of ACPSEM, AFOMP, IOMP and IUPESM and continues to serve on committees of ACPSEM and IOMP.

Howell has been elected a Fellow of the New Zealand Institute of Physics (1986), Fellow of the ACPSEM (2002), Fellow of the Institute of Professional Engineers of New Zealand (2013) and Fellow of the International Organization for Medical Physics (2019). He is a recipient of the ACPSEM Distinguished Service Award (2010) and the IOMP International Day of Medical Physics Award (2017). He is an Honorary Professor of Nguyen Tat Thanh University, Vietnam.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. ARUN
CHOUGULE**

INDIA

Dr. Arun Chougule is Senior Professor and Head at the Department of Radiological Physics, SMS Medical College and Hospitals, Jaipur, India. He started his Medical Physics career in 1984 as an Assistant Professor at the Rabin-dranath Tagore Medical College Udaipur, India. It was the beginning of an exemplary academic and research career with great contributions to the domains of Radiobiology, LQ model and its application to radiother-apy, biochemical tumor markers and TL dosimetry. Over the last 36 years, Prof. Chougule has contributed immensely to the medical physics education and training, research, professional development and recognition of the profession in the local, regional, national and international rostrums.

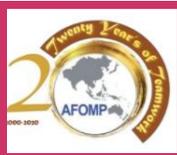
He is currently the President of AFOMP, Chair of ETC IOMP, Chairman of IOMP accreditation Board and member Board of Directors IMPCB. He held positions like Dean, Student Welfare, Rajasthan University of Health Sciences (RUHS), Member, Board of Management, RUHS, Member, Academic Council, RUHS, Chairman, Unfair Means Redressal Committee, RUHS, Ex-President, AMPI, Ex-Dean, Faculty of Paramedical Sciences, Ex-Pro-Vice Chancellor, RUHS and active involvement in the institutional administration as a member of the board of management, the clinical trial screening committee, the ethics committee, the research board and so on.

Dr. Chougule is the founding and fellow member of over 35 scientific, professional societies and accreditation boards. As chair of ETC, IOMP, he has put tremendous efforts to advance medical physics practice worldwide by disseminating scientific and technical information, fostering the educational and professional development of medical physics and promoting the highest quality medical services for patients. As AFOMP President, he works towards the expansion of the activities of AFOMP, strengthening financial resources and activating NMO's.

During the time of COVID-19 pandemic, he facilitated the release of AFOMP documents for medical physicists.

He is a teacher par excellence with more than 100 publications in reputed peer reviewed national and international journals, more than 300 research presentations around the world. He is the recipient of prestigious awards and honors for his outstanding contribution to the profession, research, and academic contribution such as "outstanding Faculty award", "best researcher award", "IDMP award", "meritorious RSO award". He is research guide and co-guide to many Ph. D, MD and M. Sc students. He is the recipient of various fellowships such as ICRETT, UICC, ESTRO, VLIR, ICTP, TWAS-UNESCO, TAWS-CAS, DAAD and regular Associateship of ICTP.

Dr. Chougule organizes national and international scientific meetings and teaching programmes, 17 international scientific conferences in Jaipur are to his credit as a veteran organizer and the "International Conference on Radiological Emergency Management (ICONRADEM 2019)" and "AOCMP2017" under his chairmanship are the most recent and glittering examples. He organizes IDMP every year and IMPW celebrations at Jaipur to impart awareness about the medical physics profession among healthcare professionals and general public.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. NOBUYUKI
KANEMATSU**

JAPAN

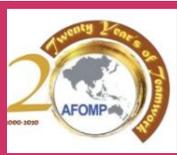
Nobuyuki Kanematsu is a Deputy Director of the Department of Accelerator and Medical Physics, National Institute of Radiological Sciences for research, and a member of the Quality Control Section, QST Hospital for clinical practice, both in the Quantum Medical Science Directorate of the National Institutes for Quantum and Radiological Science and Technology (QST). He is one of the Directors of the Japan Society of Medical Physics (JSMP) and the chairperson of the Meeting Support Committee.

He received PhD from Osaka University for a research of experimental elementary particle physics in March 1990. After postdoctoral positions of 2 years at the High Energy Accelerator Research Organization in Tsukuba, Japan, and 4 years at the University of California at Irvine in the USA, he entered the field of medical physics at Mitsubishi Electric Corporation to develop a particle therapy treatment planning system. He further changed the career in 2001 to pursue medical physics research and practice of carbon-ion radiotherapy, which continues to the present.

As of Sep 2020, he has authored 130 articles listed in Web of Science with an h-index of 24. He received Doi Award for the best radiation therapy physics paper published in Radiological Physics and Technology (RPT) in 2018. He has been on editorial boards of Medical Physics (2008-present), RPT (2008-present), and Physics in Medicine and Biology (2018-present). He received awards or appreciations for peer reviewing from Japanese Journal of Radiology (2020), Publons (2018), Physics in Medicine and Biology (2017 and 2018), International Journal of Radiation Oncology Biology Physics (2017), Physica Medica (2017), and Medical Physics (2012).

He regularly lectured medical physics subjects in domestic and international medical physics training courses at QST. He was a visiting lecturer of Tohoku University for 2007-2020 and mentored two graduate students who successfully received PhD. He was also a visiting lecturer of Tokyo Institute of Technology for 2006-2017. He was appointed by IAEA to Expert Steering Committee of RCA project RAS/6/038 “Strengthening Medical Physics through Education and Training,” to define the competency-based training standard for radiation oncology medical physicists. He promoted IDMP events in Japan and organized seminars at QST on November 7, 2018 and 2019.

He is a medical physicist certified by the Japanese Board of Medical Physicist Qualification and has been working for carbon-ion radiotherapy at QST, contributing to the development of new technologies, to the implementation of the new technologies in clinical practice, and to the management of the clinical medical physics team for up to about 1,000 patients per year.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



DR. JAMES LEE

SINGAPORE

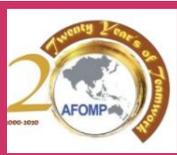
James graduated from National University of Singapore (NUS) in 1996 with a PhD in Physics and joined the Division of Radiation Oncology, National Cancer Centre Singapore in 1998 to be trained as a Radiation Oncology Medical Physicist (ROMP). He received advanced ROMP trainings at Stanford University (2000) for Intensity Modulated Radiotherapy and Mayo Clinic (2017) for Proton Beam Therapy (PBT). Since 2007, he has held the appointment as Chief Radiation Physicist and Chairman of the Radiation Safety Committee.

He manages the Medical Physics department and was part of the key team that grew the Division of Radiation Oncology to include new technologies and PBT. He is Head of the Secondary Standard Dosimetry Laboratory (IAEA SSDL network, Radiotherapy) for Singapore. He holds academic appointments as Associate Professor (adjunct) for Medical Radiation Physics at Nanyang Technological University (NTU) and National University of Singapore (NUS), being first in Singapore to introduce Medical Physics as a subject in NTU.

He remains closely involved in educating Medical Physics to undergraduates and supervising postgraduate research students in Medical Physics, raising interests and building capacity for the Medical Physics community. He currently serves as the President of the Society of Medical Physicists (Singapore).

He is actively involved in the South-East Asian region, organising the 2013 AOCMP-SEACOMP congress and served as the President of SEAFOMP from 2016-2019. He sits in the steering committee of the recently formed Particle Therapy Co-operative Group–Asia Oceania (PTCOG-AO) and is the Medical Physics Scientific Committee Chairman for the World Congress for Medical Physics and Biomedical Engineering 2021, Singapore.

With the IAEA, he introduced the first ROMP residency program in NCCS and Singapore, was involved in various Medical Physics related projects and was course director for three IAEA regional training workshops. He publishes occasionally in international journals and speaks regularly at various local and international conferences.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. TATSUAKI
KANAI**

JAPAN

Most of research activities of Tatsuaki Kanai have been involved in the development of particle beam therapy for more than 40 years. He graduated in physics in 1974 at Tokyo University of Education and earned master's degree of nuclear physics. He obtained his PhD at Tsukuba University in 1983. He started as a researcher in the physics department of the National Institute of Radiological Sciences and worked on medical physics research.

He was a head of Division of Medical Physics and Accelerator Physics at NIRS from 2006 to 2009. From 2001 to 2009, he was also appointed as a collaborative professor at Tokyo Institute of Technology, where he supervised many doctoral students in medical physics field. In 2009, he became a professor at Gunma University and was involved in the launch of Gunma University carbon therapy. Between 2007 to 2010, he served as the president of Japanese Society of Medical Physicist. In 2017, he moved to the Osaka Heavy Ion Therapy Center and set up a private carbon beam treatment hospital as a deputy director.

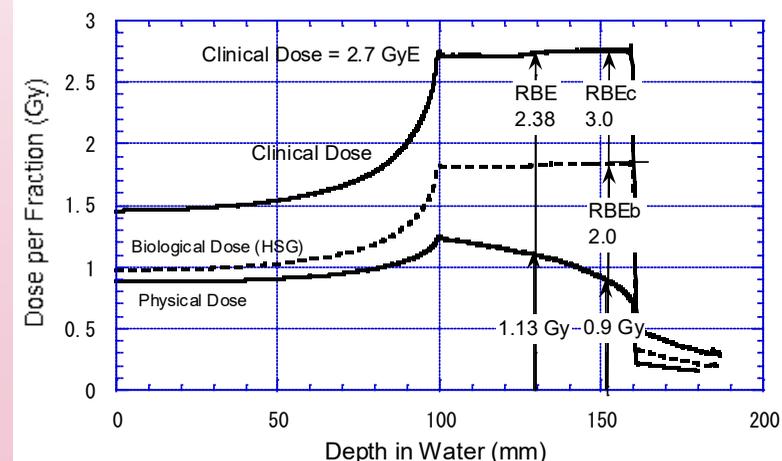
He started his carrier in developing a proton scanning system in 1983. In this scanning, the proton beam was collimated to one cm square and was scanned for any kind of irradiation fields.

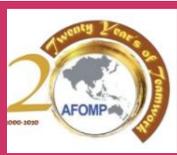
This system was used for superficial cancer using 70 MeV proton beam. From 1980's, he participated in the HIMAC

project and started basic research on various factors to use carbon beams for treatment. Especially, he has developed how to incorporate biological effects of carbon beams into treatment.

Moreover, he has established quantitative analysis methods of clinical results in carbon beam radiotherapy. His achievements have contributed significantly to the success of carbon beam radiotherapy in the present-day world

Fractionated dose for clinical situation





AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. CHEN-SHOU
CHUI
TAIPEI**

Prof. Chen-Shou Chui received his PhD degree in Applied Physics and Nuclear Engineering from Columbia University in New York City. He started his career in medical physics in 1979 when he joined Memorial Sloan-Kettering Cancer Center (MSKCC) in New York initially as a computer programmer and gradually rose to the rank of attending physicist and member of Memorial Sloan-Kettering Cancer Center.

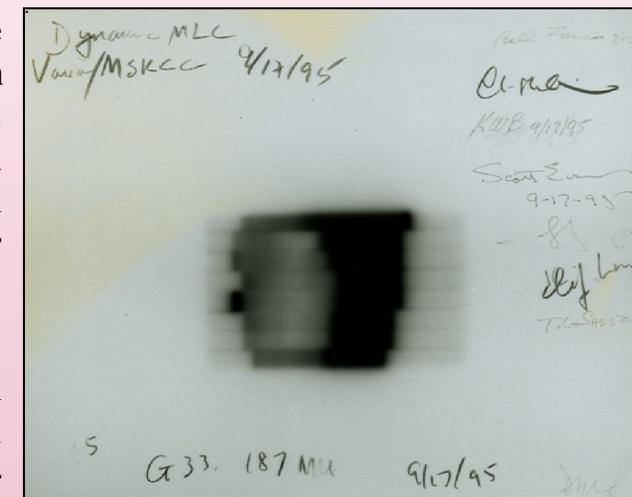
His work focused on the applications of computers in radiation therapy and radiation dosimetry, including the development of computer treatment planning system, advanced dose calculation methods, and applications of Monte Carlo methods. He was also appointed the head of the Secondary Standard Dosimetry Laboratory at MSKCC from 1989 to 1994.

In the 1990s, collaborating with his PhD student Spiridon Spirou, he developed “intensity-modulated radiation therapy” based on a conjugate gradient method which took into account dose-volume constraints. This work culminated in the world’s first delivery of IMRT using a multi leaf collimator at MSKCC on September 17, 1995. Prof. Chui was elected a Fellow of AAPM in 2000.

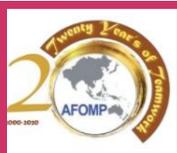
In 2006, Prof. Chui returned to his native country in Taiwan, where he served as the head of Medical Physics department at Sun Yat-Sen Cancer Center in Taipei until 2015. During his tenure in Taiwan, Prof. Chui has been actively involved in medical physics education and research. He was elected President of the Chinese Society of Medical

Physics, Taipei (CSMPT) in 2008 and served on the board until now. He was also adjunct Professor at National Yang Ming University from 2007-2014.

He organized the AOCMP 2010 meeting in Taipei, and attended many AFOMP conferences in China, Japan, Korea, and Thailand. Prof. Chui received the Lifetime Achievement Award from CSMPT in 2020. He had published 109 articles in peer review journals and written 15 book chapters. Prof. Chui is currently adjunct professor at National Tsing Hua University in Hsinchu, and physics consultant to KaoHsiung Chang Gung Memorial Hospital, National Taiwan University Hospital, and the Veteran General Hospital in Taipei.



World's first delivery of IMRT with a MLC



AFOMP OUTSTANDING MEDICAL PHYSICISTS



Hee-Joung Kim has been dedicated for promoting medical physics both nationally and internationally for the last 30 years. In 1991, as a medical physicist, he started his career in nuclear medicine at the Hospital of University of Pennsylvania after obtaining his Masters and Doctoral degree at George Washington University. In 1995, he joined faculty member of nuclear medicine, Asan Medical Center, and developed his career in medical physics for quantitative neuroimaging and ECT instrumentation.



**DR. HEE-JOUNG
KIM
SOUTH KOREA**

His early studies of neuroimaging resulted in publishing the paper at EJNM and received award of "the image of the year" at the 1996 annual meeting of the Society of Nuclear Medicine, Denver, Colorado. He also received "the young investigators award" at the 1996 6th Asia & Oceania congress of nuclear medicine and biology, Kyoto, Japan. In 1997, he moved to the Dept. of radiology and radiological science, Yonsei University. Since then, he has been served as a chair, dean, director for department of radiological science, college of health science, and leaders in industry-university cooperation, respectively.

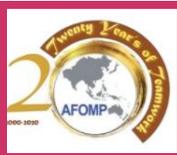
He played many roles for promoting medical physics including education, research, networking, and international collaboration. In 2006, he served as a scientific program chair for world congress of medical physics and biomedical engineering. He also played leading

roles for scientific societies, such as president of Korean society of imaging informatics, President of Korean Council of nuclear medicine imaging and Instrumentation, and President of IEEE NPSSS Seoul chapter. During that time, he also actively participated AFOMP and IOMP as a committee member of ETC, PDC, etc.

In 2013, he served for 2013 IEEE NSS/MIC as a general chair. It was a great success with excellent scientific programs, social networking with 2300 participants. He has been a member of professional societies including AAPM, AFOMP, IOMP, IEEE, SPIE, SNM, SIIM, KSMP, KSNM, KSIIM, KOSMI, etc. In 2018, he received an excellent medical physicist award from KSMP. During his career in medical physics, Dr. Kim has published 160 peer reviewed scientific papers, registered 30 patents, performed 50 research projects, and advised 30 graduate students in medical physics related area.



General Chair of 2013 IEEE NSS/MIC



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. NORIAH BINTI
JAMAL**

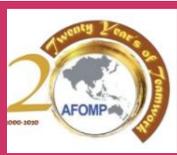
MALAYSIA

Dr Noriah Binti Jamal PhD, FIPM, JMW is currently an adjunct professor at the School of Medicine, Faculty of Health and Medical Sciences, Taylor's University of Malaysia. She is a visiting lecturer to the University of Malaya Master Medical Physics since June 2006. She obtained her B Sc Hons (Nuclear Science) in 1984 from the National University of Malaysia and Post Graduate Diploma (Radiation and Environmental Protection) from the University of Surrey, United Kingdom in 1998. She received her M Sc (Medical Physics) from the University of Aberdeen, Scotland in 1992. She also received her PhD (Medical Physics) from the University of Malaya, Malaysia in 2005, under supervision of Professor Dr Kwan - Hoong Ng and Dr Donald McLean.

Her career has been dedicated to the promotion and application of physics in medicine, both at the national and international levels. Upon completion of her study, she was appointed as the quality assurance manager for the production of Tc-99m Generator and head of biodosimetry laboratory, Malaysian Institute of Nuclear Technology (MINT). She has authored or co-authored over 80 scientific articles and several chapters in medical physics textbooks. She has made a major contribution to the teaching organisation and professionalism of medical physics. She has also organized and directed several national and regional workshops on radiation protection, diagnostic radiology and nuclear medicine.

At national level, presently, she is the Vice Chair of the Medical Physics Division, Institute of Physics Malaysia (IFM) and Chair of Radiation Protection Committee, Malaysia Association of Medical Physics (MAMP). She was the National Project Counterpart of the International Atomic Energy Agency (IAEA) Regional Cooperative Agreement Project RAS 6083: Strengthening Medical Physics Through Education and Training (2006 -2012). She facilitated the clinical residency training programme in Radiation Oncology Medical Physics (ROMP). Six Qualified Clinical Medical Physicists in radiotherapy have graduated from the IAEA pilot project. Until end of last year, she was the Lead Country Coordinator for the IAEA project RAS 6088: Strengthening the effectiveness and extent of medical physics education and training.

She is actively involved in the regional and international professional organizations, including as a life member of the ASIAN Breast Disease Association (ABDA) and one of the founders and member of the ASIAN College of Medical Physics (ACOMP). She is also an immediate past Malaysian National Liaison Officer to the IAEA and Principle Point of Contact to the Comprehensive Test-Banned Treaty (CTBT). She has served as an expert for the IAEA since 2015.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



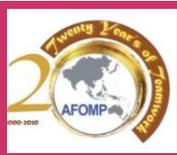
DR. SUNG-KYU KIM

SOUTH KOREA

Professor Sung-Kyu Kim has been dedicated to promoting medical physics both nationally and internationally for the last 35 years. He accomplished President of the Korean Society of Medical Physics (KSMP) from January 2004 to December 2007. Thanks to his hard-working, World Congress on Medical Physics and Biomedical Engineering (WC2006) was successfully held as a broad scale congress at COEX in Seoul from August 27 to September 1, 2006, with the exceptional congratulatory speech on the opening ceremony of Myeong-Sook Han, prime minister of South Korea. This congress paved the way to strengthen the necessity of legally certified medical specialists and the collaboration system with related societies, insisting on the importance of the medical physics field. With this opportunity, he broadly promoted the status of KSMP towards global from Asia.

He established the Prize of the Korean Medical Physicist in 2004. This prize was awarded to KSMP members who significantly contributed to the development of KSMP or was excellent in academic achievements. Moreover, the various awards were established, including the excellent paper award, young medical physicists award, and hyperthermia award, promoting and stimulating academic achievements for KSMP members. KSMP became a member of the Korean Academy of Medical Science as a non-medical doctor for the first time in 2006, which brought an excellent opportunity for the positive development of KSMP. This Korean Academy of Medical Science not only gave enthusiastic support to WC2006, but also continued to support the legal authorization of medical physicists in Korea. KSMP carried out the United Nations Development Programme (UNDP) project with research funding from IAEA. Bangladesh, Mongolia, Malaysia, Vietnam, and Sri Lanka participated in this project in 2007.

He also accomplished President of the Korean Medical Physics Certification Board (KMPCB) from January 2018 to December 2020. The KMPCB committee for the certification of clinical medical physics specialists was independently organized from KSMP to have objectivity and reliability, while IOMP carried out the certification system of international medical physicists. KOSRO (The Korean Society for Radiation Oncology), KSNM (The Korean Society of Nuclear Medicine), and KSMP joined this committee of KMPCB, and government officials also participated in this committee to prepare the certification system of clinical medical physicists. KMPCB contracted MOU with HKAMP (The Hong Kong Association of Medical Physics) in 2020 and agreed to mutually recognize each certification of medical physicists.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. HASIN
ANUPAMA AZHARI**

BANGLADESH

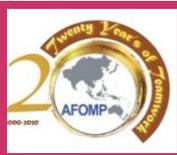
Dr. Hasin Anupama Azhari is the Chairman and Professor of the Dept of Medical Physics and Biomedical Engineering, Gono Bishwabidyalay (GB, University) and Dean, Physical and Mathematical Sciences, GB. She has academic experience more than 15 years in academic field and got many clinical training in radiation oncology and diagnostic radiology from India, Germany, Italy.

She is the first women MP in Bangladesh having MSc in medical physics who become Chairman in one and only Medical physics (BSc) course in Bangladesh in Gono University. Under her leadership, this department is well equipped with the necessary apparatus in collaboration with Germany and has done MoUs with different national and international universities/ institutes/ hospitals.

She got fellowship for PhD in Medical Physics from Organization for Women in Science for the developing world (OWSD), ICTP, Trieste, Italy and received German DAAD scholarship for MSc in Medical physics. For the first time, International Medical Physics Certification Board (IMPCB) examination was held in Bangladesh, 2018 by her efforts and afterwards in forming the Bangladesh Medical Physics Certification Board. She has able to create position and unified recruitment rules working with Directorate of Health Services and Ministry of Health.

About more than 60 research works were published in different national and international Journals and books. She acts as a reviewer for different national and international Journals and supervised many BSc projects, MSc thesis and PhD thesis. Prof. Dr. Azhari received the “International Day of Medical Physics award 2018” from IOMP. She was a project coordinator for Bengal translation at EMITEL e-Encyclopaedia of Medical Physics and Multilingual Dictionary and terms, a project of International Organization of Medical Physics (IOMP).

She received best Paper publication award in Journal of Bangladesh Physical Society. Recently for continuous professional development for the MP in south Asia region she started South Asia centre for Medical Physics and Cancer Research (SCMPCR) under Alo Bhubon Trust, where accredited hands on training, e learning , in service training is provided for SA Medical Physicists Currently she is the executive member for Asia and Pacific Region, OWSDW, Italy; Secretary- General AFOMP; CEO, SCMPCR, Founder President, Bangladesh Medical Physics Society (BMPS), Vice President, Bangladesh Association of Women Scientists (BAWS), Regular Associate member , ICTP.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



DR. KOICHI OGAWA

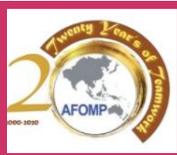
JAPAN

Professor Koichi Ogawa received his B.Sc., M.Sc., and Ph.D. in Electrical Engineering in 1980, 1982, and 1989 from Keio University, Tokyo, Japan. He joined the Department of Radiology, Keio University School of Medicine in 1982. His major research theme is the quantification of SPECT images, he has written many papers on gamma-ray absorption correction, and proposed a transmission CT using gamma-rays for absorption correction. For the problem of scattered photons, he proposed a triple energy window (TEW) method. On the other hand, in the field of radiotherapy, he has developed a treatment planning system for brachytherapy using a personal computer. His dose planning system was about 1/10 the price of a dedicated treatment planning system, and introduced it to more than 50 hospitals in Japan.

After moving to Faculty of Engineering, Hosei University in 1991, Koichi Ogawa expanded his research into image processing for medical images in general. Regarding the research on nuclear medicine detectors, he made a prototype system with high spatial resolution and high energy resolution using a CdZnTe semiconductor detector. In this system, an 11-pinhole collimator is attached to each gamma camera and three gamma cameras surround a patient in a triangular shape, and data are acquired without rotational movement of the detectors. In addition, as a next-generation X-ray CT system, Koichi Ogawa has developed a photon counting X-ray CT detector, and is proposing a medium separation method.

Regarding the education of medical physicists, Koichi Ogawa cooperated with the medical physicist education course at Gunma University. He was in charge of chairing the Glossary Committee of the Japan Society of Medical Physics (JSMP), and has also realized the publication of glossaries in Japanese and English. In addition, Koichi Ogawa has also contributed as a chairman to the publication of the medical imaging handbook organized by the Japanese Society of Medical Imaging Technology (JAMIT). Now, he is the president of the JAMIT. As an international contribution, he collaborated with the EMITEL Project (Developer and Coordinator: Prof. Slavik Tabakov) as the JSMP side Glossary Committee, and worked to complete the international glossary related to medical physics.

Koichi Ogawa was awarded the first best paper award from the JAMIT in 1989, and also awarded the 29th Japanese Society of Nuclear Medicine Award in 1991. He has also written numerous peer-reviewed papers (169) and proceedings of international conferences (171) since 1980. Regarding the presentation of papers at academic conferences, he made 251 presentations at international conferences and 520 presentations at domestic conferences, and have contributed greatly to the development of academic fields in the field of medical physics.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



DR. KUM BAE KIM

SOUTH KOREA

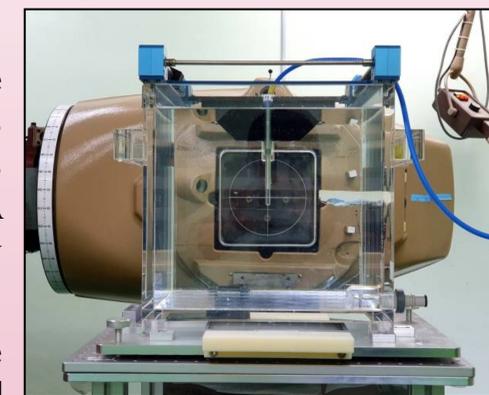
Dr. Kum Bae Kim received a PhD in medical physics from Kyonggi University in Korea on the topic of "Research and Development of Standard Measurement Systems for Radiation Therapy". Currently, he is the chief medical physicist of the department of radiation oncology and the head of the Radiological Physics and Engineering Research Team at the Korea Institute of Radiological & Medical Sciences (KIRAMS). He has been working as a clinical physicist and researcher for 23 years since 1997 in Korea.

He is contributing to the improvement of domestic and international medical radiation measurement technology by operating the SSDL-based KIRAMS Dosimetry Lab. KIRAMS completed the Secondary Standard Dosimetry Laboratory (SSDL) facility in 2017 to perform more than 230 calibration services for ionization chamber every year, including calibration services for Asian countries such as Mongolia.

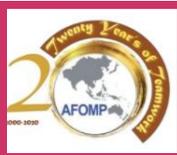
In recognition of the spread of radiation measurement technology, it contributed to receive the Korean Prime Minister's award in October 2017. By the end of 2020, it is expected to complete the development of SSDL for calibration of a well-type chamber used to measure the output dose of remote afterloading brachytherapy sources. He also developed an independent quality audit program for Linear Accelerator, Tomotherapy, and CyberKnife machines for three years from 2017 to 2019. From 2020, he will be in charge of running the quality audit services with a national level.

Since 2010, he is also participating in the remote dosimetry audit program of the IROC Houston QA Center in the United States to verify the output stability of all radiotherapy devices operated in our institution. Since 2008, he has participated in various IAEA/RCA projects and FNCA meetings as a National Project Coordinator, National Project Member, and Course Director. From 2018, as an IAEA Expert of medical physics, he has delivered technologies related to SSDL, independent quality and dosimetry audit, and advanced radiotherapy QA/QC for Asian countries in 2019.

KIRAMS Dosimetry Lab was designated as a member of the IAEA Dosimetry Audit Networks in 2019 and the IAEA/WHO SSDL Network Full Member in 2020 by the IAEA. He has authored or co-authored, and corresponding authored over 80 scientific articles and has translated several medical physics textbooks. Currently, he has been serving as the Executive Board of Quality Assurance Director of KSMP, Korean Society of Medical Physics, since 2018 and as General Secretary of MPBRG, Medical Particle Beam Research Group in Korea, since 2016.



SSDL facility to provide calibrations for dosimetry equipment in KIRAMS Dosimetry Lab



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. HOSSEIN
MOZDARANI**

IRAN

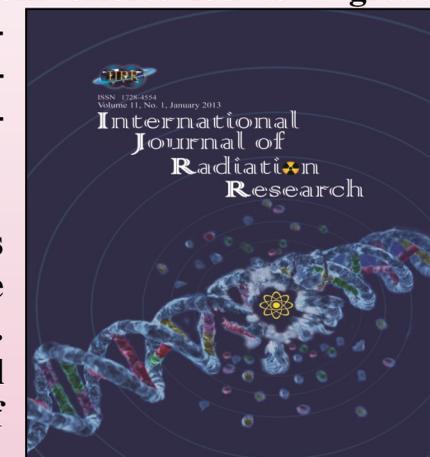
Professor Hossein Mozdarani obtained his B.Sc. in Radiology in 1983 from Iran University of Medical Sciences, and then admitted to the St Andrews University, UK, where he first obtained M.Sc. in Radiation Biophysics-Biology and then a PhD in Radiation Cytogenetics/Radiobiology in 1989. He has been engaged in post-graduate research and teaching for 30 years at the faculty of Medical Sciences of the Tarbiat Modares University (TMU). He was one of the pioneer scientists involved in teaching and research at the department of radiology and medical physics at TMU at MSc and PhD level. He has supervised over 30 Ph.D and over 130 M.Sc students for their thesis mainly with the discipline of Medical physics or radiobiology.

He has published over 310 papers and he has been the Editor or translator of 21 academic books, mainly in the field of radiation sciences. He published monograph books with the titles of biological dosimetry, and encyclopedia of radiobiology. Prof. Mozdarani is a leading pioneer in radiobiology in Iran whom efforts led to a great enthusiasm to combine this knowledge with other disciplines in medical physics. He introduced concepts of biological dosimetry, radio-adaptation, chemical radio-protection, and other biological paradigms influencing tumor response to radio-therapy for the first time in Iranian academic teaching and research community.

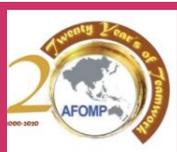
Dr. Mozdarani proposed a radiobiology MSc course in Iran for the first time and was engaged as a leading scientist for preparation and certification of M.Sc course curriculum for Radiobiology and radiation protection course in the Ministry of health.

It is about 20 years (since 2001) that he has been a leading board member of the Iranian Association of Medical Physics (IAMP). During these years he has been the president, vice president and now is serving as the treasurer of IAMP.

At international level, he was appointed as science committee member of IOMP in 2009-2012. This membership and cooperation with IOMP science committee has been continued since then till now (2018-2021) for forth terms. He was engaged in training courses provided by IAEA for medical response to radiation accidents. Prof. Mozdarani is the founder editor and editor-in-chief of the International Journal of Radiation Research since 2003. His scientific efforts and research work has been appreciated by various awards such as: Khwarizmi International award, Razi medical award, Royan International Festival, academic year books, outstanding professor and outstanding researcher of the TMU and finally outstanding professor amongst Iranian universities.



Editor-in-Chief, IJRR since 2003



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. HYUN-TAI
CHUNG**

SOUTH KOREA

Hyun-Tai Chung is a Professor at the Department of Neurosurgery. His major work was on quality assurance and standardization of Gamma Knife radiosurgery. Since he started his career at Seoul National University Hospital in Korea in 1997, he has emphasized that it was essential for a medical physicist to be admitted as an expert in medical societies. He was one of the founding members of the Asian Leksell Gamma Knife Society, the Korean Gamma Knife Society, and the Korean Stereotactic Radiosurgery Society.

From 2005 to 2018, he served as the board member, vice-president, and president of the Korean Stereotactic Society, which consisted of medical physicists, radiation oncologists, and neurosurgeons. He was the only non-medical doctor editorial member of the Journal of Korean Neurosurgical Society ever and contributed to promoting the status of medical physicists among neurosurgeons. To evoke interest in the physics of radio-surgery and educate young medical physicists regarding radiosurgery, he founded the Korean Society of Medical Physics for Radiosurgery together with professor Tae Suk Suh and Dong Jun Lee in 2004.

He served for the society for four years as the Vice President and another four years as the President. He also worked for the Korean Society of Medical Physics for six years as a board member and four years as an audit.

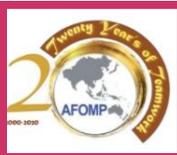
For international clinical societies, he took the lead of the 13th Meeting of the International Leksell Gamma Knife Society, which was held in Seoul in 2006 and the 9th Congress of the International Stereotactic Radiosurgery Society, also in Seoul in 2009, as the secretary-general of

the local organizing committee and member of the scientific committee. As the program organizer of both meetings, he emphasized the role of medical physics in radiosurgery, increased the number of presentation sessions on medical physics, and invited many medical physicists.

From 2006 to 2018, to the last meeting of the International Leksell Gamma Knife Society, he was a scientific committee member. Since 2019, he is working as a board member of the International Stereotactic Radiosurgery Society. During his career, he has published scientific papers on dosimetry of small fields, quality assurance of Gamma Knife radiosurgery, and the development of radiation detectors.



Prof. Chung is explaining about Gamma Knife surgery to UAE government officers.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. WAN AHMAD
KAMIL ABDULLAH**

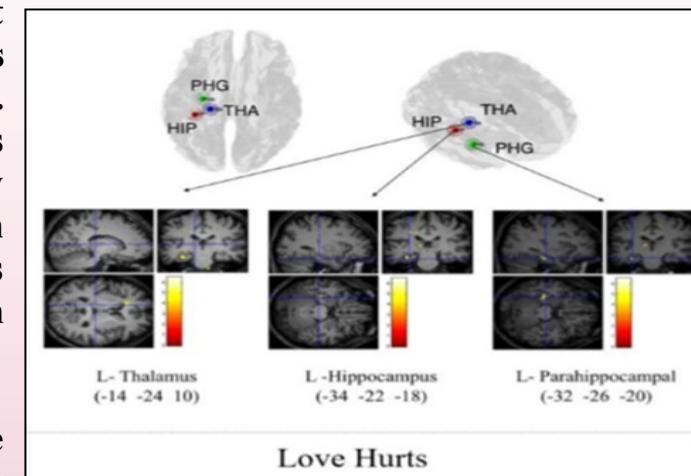
MALAYSIA

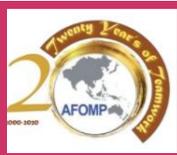
Wan Ahmad Kamil has been a lecturer in Universiti Sains Malaysia for 32 years. His early academic life was in the area of solid state physics in the School of Physics and later moved to the School of Medical Sciences as a medical physicist. In 1994 he was the European Community *Marie Curie* Postdoctoral fellow and working in the University of Essex, England. Wan Ahmad Kamil obtained his BSc and PhD from the University of London. He was working in the Tolansky Laboratory, Royal Holloway College, for the doctoral research.

He became a professor in the Department of Radiology in 2015. Apart from working in ionizing and non-ionizing radiation, his specific areas of interests are diffusion tensor imaging and functional MRI (fMRI). An interesting fMRI studies was about 'Love Hurts' where it was confirmed that when somebody that a female subject loves was nearby (standing near the MRI gantry), her pain threshold was lower than when the loved one is not present. Another MRI studies, which is beyond the usual anatomical imaging, was about gas void formation in statically cooled waxy crude oil.

He was once the National representative in Diagnostic Radiology in the Regional Cooperative Agreement project under IAEA in Enhancing Medical Physics in Malaysia. Wan Ahmad Kamil was also the president of the Malaysian Association of Medical Physics (MAMP), an affiliate of IOMP, for 12 years (2006-2018). He was also a member of Ionizing Radiation Group and Non-ionizing Radiation Group of the Malaysian Standards (MS) to develop the national guidelines standards (Requirements for the safety of MR Equipment for Medical Diagnostic MS IEC 60601-2-33:2009, Particular Requirements for the safety of Ultrasonic Medical Diagnostic and Monitoring Equipment MS IEC 60601-2-37:2009, Magnetic Resonance Equipment for Medical Imaging - part 1: Determination of Essential Image Quality Parameters MS IEC 62464-1:2009, Code of practice for Medical Lasers, MS 2699:2018 ICS: 11.020, Radiation Protection for Medical Diagnostic X-rays – Code of Practice (2nd. Revision), MS838:2018, ICS:13.280).

During his career as a university lecturer, Wan Ahmad Kamil has published about 100 scientific papers in peer reviewed journals and proceedings, performed 12 research projects, and supervised 25 graduate students in areas of physics, medical physics and radiology.





AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. B. PAUL
RAVINDRAN**

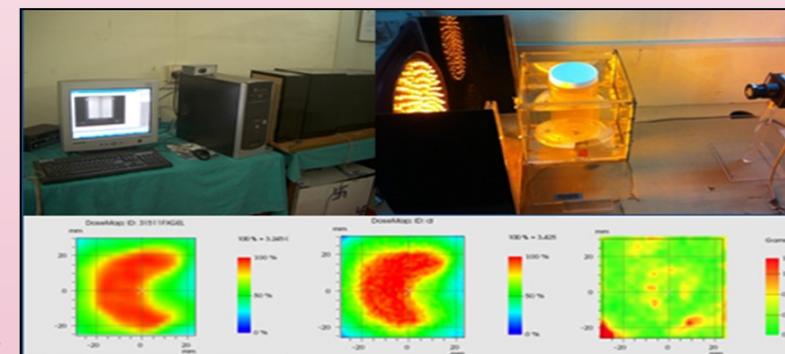
INDIA

Dr. Paul Ravindran began his journey with Christian Medical College (CMC), Vellore, India way back in 1986. He did postgraduate diploma in Radiological Physics in 1987 from BARC and Ph. D from Madras university in 1994. Dr Ravindran was an active member of the Christian Medical College, Vellore and contributed to various developments in the department of Radiation Oncology and in the institution. He was the Vice-Principal for Allied Health Sciences of CMC during 2010-2014. His great passion for teaching and his interactive style of delivering lectures in Radiological Physics, to the PG students of Radiation Oncology, Medical Physics and to the UG students of Radiotherapy Technology made him a Professor much loved by his students.

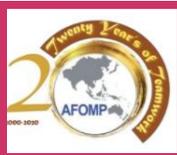
In the year 2001, Dr. Paul Ravindran joined the London Regional Cancer Program; London, Ontario and during his stay in Canada he completed the Membership exam of the Canadian College of Physicists in Medicine (MCCPM). He is Fellow of Canadian College of Physicists in Medicine. In 2003, he started a two-year residency program in Medical Physics at CMC Vellore

In 2011, Dr Paul Ravindran was responsible for starting the three-year Master's Program in Medical Physics in CMC, Vellore and established a laboratory for Medical Physics students, an imaging lab, with a bench top x-ray Cone Beam CT for imaging experiments and a small computer lab for scientific computing. The other lab he developed was for Gel dosimetry with facility for preparing FX and LCV gels and Optical Cone Beam CT for reading the radiation dose embedded in the Gel matrix.

Dr Ravindran has about 50 publications in peer reviewed journals, has successfully guided five students for the Ph.D. Dr Ravindran has received several research grants from various funding agencies. He has been a member of review committees of the Department of Science and Technology, (Govt. of India) projects and was a member of high-level expert committee of the Department of Biotechnology on Carbon Ion Radiotherapy. Dr Ravindran played a significant role in establishing the College of Medical Physics of India (CMPI) and as the Chief Examiner of CMPI and currently secretary of CMPI. He has served as expert for several missions of International Atomic Energy Agency (IAEA) and served as a consultant to the IAEA for a year during 2019-2020.



Optical Cone beam CT developed by Dr Ravindran for reading dose embedded in gel matrix



AFOMP OUTSTANDING MEDICAL PHYSICISTS



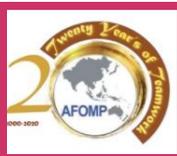
**AGNETTE DE PERIO
PERALTA**

PHILIPPINES

Agnette de Perio Peralta is one of the four pillars of medical physics in the Republic of the Philippines. She obtained her BS Physics from the University of the Philippines (UP) and her MS in Medical Physics from the University of Wisconsin-Madison, USA. She taught physics in the UP Physics Department, then was recruited to work as a health physicist in the Radiation Health Office of the Department of Health (DOH). She rose from the ranks to become the Director of her office (which became the Center for Device Regulation, Radiation Health, and Research of the Philippine Food and Drug Administration). She was then promoted to Assistant Secretary of Health. She retired from government service in 2017.

She served as national project coordinator/counterpart in several International Atomic Energy Agency and World Health Organization projects in medical physics. She is the Founding President of the Philippine Organization of Medical Physicists [new name: Society of Medical Physicists of the Republic of the Philippines (SMPRP)]. She worked for government recognition of medical physicists and for creation of more positions for medical physicists. She served as President of the South East Asian Federation of Organizations for Medical Physics (SEAFOMP) for two years and as a member of committees in SEAFOMP, the Asia-Oceania Federation of Organizations for Medical Physics (AFOMP) and the International Organization for Medical Physics (IOMP). She co-chaired the Organizing Committee of two of the three SEAFOMP congresses held in the Philippines.

Since 1983, Prof. Peralta has been a Lecturer [current rank: Professor II] in the University of Santo Tomas Graduate School (USTGS) which offers to date the only Master of Science degree program in medical physics in the Philippines. She has taught all Filipino medical physicists, except those who graduated from foreign universities. She is the only Filipino medical physicist to have worked in the World Health Organization in Geneva as a consultant and she also served in the WHO Advisory Committee on Electromagnetic Fields. She is the only medical physicist from Asia to have been elected a member of the Main Commission of the International Commission on Non-Ionizing Radiation Protection which she served for three terms. She is the first medical physicist to have been appointed DOH Bureau Director and the only medical physicist to have been appointed DOH Assistant Secretary. She is the only medical physicist to have received the Distinguished Faculty Award from USTGS and the only Filipino to have been elected a Fellow of the IOMP. Besides her USTGS appointment, Prof. Peralta is currently chairperson of the Subcommittee on Clinical Equipment and Devices of the Health Technology Assessment Council of the Philippines.



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. JIANRONG
DAI**

CHINA

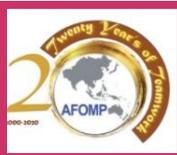
Dr. Jianrong Dai was a student of nuclear physics in Peking University during 1984 to 1988, worked as a junior medical physicist in Hunan Provincial Tumor Hospital during 1988 to 1992, was a graduate student of medical physics in Peking Union Medical College during 1992 to 1996.

Since graduated with a PhD degree in 1996, he has been working in the department of radiation oncology, National Cancer Center/Cancer Hospital, Chinese Academy of Medical Sciences (CH_CAMS). He ever temporarily left NCC/CH_CAMS to France, USA and Canada to accept Postdoc training or to work as a visiting scholar. He has served as vice chairman in the department of radiation oncology since 2002.

Dr. Dai's research is primarily related to developing, improving and implementing new methods, algorithms or techniques for radiotherapy, including jaw-only intensity-modulated radiotherapy, stereotactic body radiotherapy with implanted fiducial markers, treatment planning optimization and leaf sequencing for intensity-modulated radiation therapy, dual-energy cone-beam computer tomography, auto-segmentation of target volumes and organs at risk with deep learning methods. He has over 200 peer-reviewed publications and applied over 30 patents.

He serves in several important academy bodies including president of Chinese Society of Medical Physics, Editorial Board of Medical Physics journal, standing member of Chinese Society of Therapeutic Radiology. He ever served as National Project Coordinator, IAEA/RCA Project RAS 06/038.

He has been actively promoting cooperation and communication between China medical physicists and colleagues in Asian-Pacific region as well as worldwide. He led organization or participated in organization quite a few international meetings and training course, which included 7th Asia-Oceania Congress of Medical Physics (Huangshan, 2007), Great Wall Medical Physics meetings (Beijing, 2008 and Nanjing, 2010), IAEA/RCA regional training course (Beijing, 2012), World Congress on Medical Physics and Biomedical Engineering (Beijing, 2012), 15th Asia-Oceania Congress of Medical Physics (Xi'an, 2015).



AFOMP OUTSTANDING MEDICAL PHYSICISTS



**DR. NISA
CHAWAPUN**

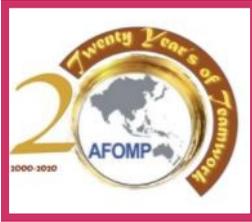
THAILAND

Dr. Nisa Chawapun received her M.Sc. (Medical Physics) from Ramathibody Hospital, Mahidol University in 1984 then joined the Faculty of Medicine, ChiangMai University as medical physicist and lecturer. She continued her study as the Royal Thai Government scholar and received Ph.D. in Radiological Health Sciences (under the supervision of Prof. Mortimer M. Elkind) at Colorado State University, U.S.A.

In 2000, the M.Sc. course on Medical Physics was proposed to ChiangMai University and started in 2001 academic year. Dr. Chawapun was in the executive curriculum committee since then and served as chair of the program in 2007 until her retirement. She taught a broad spectrum of medical physics subjects including radiation therapy physics, radiation protection and radiation biology to under and post-graduate students, medical doctors and other healthcare professions. Over 20 medical physics graduate students were under her supervision, some of them received the “Distinguished Thesis Award” while some became the leaders in their respective clinics countrywide, and they have gone on to their own successful career path.

Dr. Chawapun setup Radiation Biological Laboratory Research in Section of Therapeutic Radiology and Oncology, Department of Radiology, Faculty of Medicine, ChiangMai University in 2001. The long – term goals of her research are to improve diagnosis, prognosis, quality of life and patient care. She applied the National Research University Project to fund her research work which range from molecular cancer biology, factor affecting treatment outcome, biological basis of molecular and functional imaging to explore for personalized medicine, development of 3D biological effective dose distribution software program. Dr. Chawapun and her colleagues have also actively involved in innovation research i.e. development of micro-and nano-scale analysis by flow-based techniques, whole body hyperthermia machine, daily radiation beam checker for linear accelerator machine, prototype of optical tomography for animal model.

For contribution in AFOMP region, Dr. Chawapun was the congress organizing committee for both 9th Asia- Oceania Congress of Medical Physics and 7th South East Asian Congress of Medical Physics and 12th Asia- Oceania Congress of Medical Physics and 10th South East Asian Congress of Medical Physics. She was in the lecturer team for IAEA (RAS6062/ 2nd Regional Training Course) Basic Concepts of 3-D Image-Guided Brachytherapy for Cervical Cancer in 2013, and later Clinical Workshop, Transition from 2D to 3D Brachytherapy for Gynecology in 2016. Dr. Chawapun is the member of Thai Medical Physicist Society and Thai Association of Radiation Oncology.



AFOMP OUTSTANDING MEDICAL PHYSICISTS 20TH ANNIVERSARY OF AFOMP



On the occasion of its 20th anniversary, AFOMP acknowledges all the IOMP outstanding medical physicist awardees, awarded on the occasion of the 50th anniversary of IOMP in 2013 from the AFOMP region who have made their outstanding contributions to medical physics education, the profession and research in the AFOMP region and globally.



Dr. B. J. Allen
Australia



Dr. Y. Hu
China



Dr. K. Kawachi
Japan



Dr. A. Krisanachinda
Thailand



Dr. T. Kron
Australia



Dr. K.H. Ng
Malaysia



Dr. A. S. Pradhan
India



Dr. M. M. Rehani
Austria & India



Dr. T. S. Suh
South Korea



Dr. E. Tanaka
Japan



Dr. D. Thwaites
Australia