Subcommittee AC1

Carmel J. Caruana, PhD, Professor

Email: carmel.j.caruana@um.edu.mt

Qualifications:

2003 – 2006 PhD Faculty of Mathematics and Physics, Charles University, Prague

1989 – 1990 MSc Applied Radiation Physics, University of Birmingham (UK).

1973 – 1976 BSc Physics and Mathematics, University of Malta.

Position:

Head of the Medical Physics department, Faculty of Health Sciences, University of Malta

Area of specialization: Diagnostic and Interventional Radiology, patient dosimetry, radiation protection, optimization processes.

Immediate past-Chair, Education and Training Committee, EFOMP

Experience in EC Projects:

Guidelines on the Medical Physics Expert (MPE) Project:

Core member of the team writing the final document. Principal author of chapter 2 ('The role of the MPE') and Chapter 3 ('Qualification and curriculum frameworks for the MPE in Europe') Member of the following workgroups.

WP2 Syllabus Diagnostic and Interventional Radiology,

WP3 Syllabus for Nuclear Medicine,

WP4 Syllabus for Radiation Oncology,

WP7 European Workshop on MPE – member of scientific committee.

MEDRAPET Project (Medical Education in Radiation Protection and Training):

Member of WP3 Development of European Guidance on radiation protection training of medical professionals containing appropriate recommendations on harmonisation in this field.

Principal author of the chapter dedicated to the education of medical physicists and medical physics experts.

ENETRAP (European Network for Education and Training in Radiation Protection)

Member of the Advisory Board.

EUTEMPE-Rx (2013 -2016) (EUropean Training and education for the Medical Physics Expert -

<u>Diagnostic and Interventional radiology</u>)

Originator of the idea behind the project.

Lead for WP 4.1 Developments of the profession and the challenges of the MPE

Quality Manager for the education and training modules

Vision:

Harmonisation of the structure and level of MSc Medical Physics programmes worldwide to facilitate the mobility of Medical Physicists.

María-Ester Brandan, PhD

Email: brandan@fisica.unam.mx.

María-Ester Brandan is, since 1991, University Professor in the Physics Institute of the National Autonomous University of Mexico, UNAM. Her education includes a 1974 B.Sc.(Physics) from Universidad de Chile-Santiago, and a 1979 Ph.D.(Physics) from University of Wisconsin-Madison. Brandan's present and past research include a broad spectrum of subjects in experimental nuclear physics, radiation dosimetry and medical physics (http://www.fisica.unam.mx/~brandan/).







She was the creator in 1997, and has been since then the coordinator, of the UNAM M.Sc.(Medical Physics) program aimed at specializing physicists into medical applications. Almost 100 medical physicists have graduated from the program (www.fisica.unam.mx/fismed): most of them hold clinical positions in Mexican and other regional health services, and an important fraction of the graduates is pursuing —or has finished—a doctorate degree.

ME Brandan has been awarded the Mexican Physics Society Medal for the Development of Physics in Mexico, recognizing research achievements as well as the solid results in the education of nuclear and medical physics professionals. At the moment, her main research interests are novel techniques in digital mammography, and the response of TL dosemeters to densely ionizing radiation, particularly X-rays relevant for mammography.

Brandan has participated in more than 120 scientific publications and her h-index is 25. She is a member of the Mexican Academy of Sciences, Fellow of the American Physical Society and a Fellow (member) of TWAS, the Academy of Sciences for the Developing World. She has been President of the Nuclear Physics and the Medical Physics Divisions of the Mexican Physics Society. In 2010-2013 she was Chair of the International Solid State Dosimetry Organization, ISSDO. ME Brandan received the UNAM 2013 Premio Universidad Nacional in the area of Research in Exact Sciences.

Yimin Hu, Professor

Dept. Radiation Oncology, Cancer Institute (Hospital), CAMS, Chaoyangqu Panjiayuan Nanli17, Beijing 100021, China, Tel & Fax:+86-10-67737011, E-mail: yiminhu888@163.com Education: Dept. of Physics, Anhui University

Professional Experience:

2002.05 ~ present Chair-Professor of Radiation Oncology Physics

1991.01 ~ 2002.05 Professor and Chief Physicist

1991.02 ~ present CAMS & PUMC Ph.D. Supervisor

1985.04 ~ 1990.12 Associate Professor and Chief Physicist

1984.05 ~ 2002.05 Deputy Director, Dept. Radiation Oncology

1964.08 ~ 1978.09 Medical Radiation Physicist

Overseas Professional Experience:

 $1982.09 \sim 1983.10$ Visiting Physicist, Radiation Oncology and Medical Physics Department, Royal Free Hospital, London

1988.05 ~ 1988.07 Visiting Physicist, University Hospital, Uppsala University, Sweden

Major Academic & Scientific Activities:

Chairman & SG, 2012 World Congress in Beijing; Co-Chairmen, Great Wall 2009 & 2010 Congress on Medical Physics and 15th Annual Meeting of CSMP, China; Co-Chairmen & Secretary-General, The 7th Asia-Oceania Congress on Medical Physics and the 13th national Annual Meeting of Medical Physics, 2007; Chairman of Organizing Committees for the 1990 and the 2000 Beijing International Congress on Medical Radiation Physics, the (ICRO'97) 1997 International Congress on Radiation Oncology, Beijing, and the 1998 National Workshop on Conformal Radiation Therapy. Has served as an expert of IAEA for Uganda & Ethiopia 1993, Ghana & Ethiopia 1995, Sudan & Ghana 1996, Amman, Jordan, Hefei, China, & Cairo, Egypt 1998, Karaj & Esfaham, Iran, 1999, and Amman, Jordan, 2000

Major Activities in teaching/training Medical Radiation Physics

Coordinator for Sino-French Medical Radiation Physicists Exchange Training Program 1985.08, for Sino-Swedish Medical Radiation Physicists Exchange Training Program 1985.05 ~ 1998.04, and **Lecturer** giving lectures for post-graduates, M.S., and Ph.D. students of Medical Radiation Physicists, Radiation Oncologists, Radiation Technologists, and **Coordinator and Lecturer** for the short intensive



training courses on Radiation Physics, Radiation Oncology, etc. organized by academic Societies of CSRO, CSMP, CSMBE, etc.

More than 50 articles, papers as first author have been published in Journals such as Medical Physics, Radiation Oncology, etc.

Patents

- X(γ)- rays Three-source Cross-fired Intensity-Modulation Radiotherapy (TSCFIMRT)Unit China Patent No. 00132508.6
- New type Multi-leaf Collimator (IMMLC) for Intensity-Modulation Radiation Therapy China Patent No. 00259662.8
- QA(QC) Solid Phantom for Stereotactic Radiosurgery & Radiotherapy China Patent No. 99201409.3

Mustafa Majali, PhD

Email: mustafa.majali@fanr.gov.ae,

I have Ph.D. in Nuclear Engineering (Radiation Protection & Clinical Dosimetry) from Czech Technical University in Prague. I joined Federal Authority for Nuclear Regulation (FANR) early 2010 as Health Physicist in Radiation Safety Department (RSD). Slightly, I had responsibility as Chief Inspector of RSD, and I was assigned as Radiation Protection Specialist, and Senior Radiation Protection Specialist active from 2014. I am active member in building capacity committee. The committee is



detected to establish competency strategy, identify the training needs and qualification for workers who are engaged in radiation activities including qualified experts in medical physics and radiation safety. In addition to my involvement in medical exposure control, safety assessment, reviewing the radiation protection programs, and verify the licensees compliances with regulatory radiation safety requirements and standards, conduct necessary radiation measurements, assess the radiation doses and estimate the optional doses. This certainly including medical exposure, quality assurance, qualification and competency of medical workers. Moreover, my effective participant in preparing and drafting procedures, policies, standards, and safety requirements.

In my 20 years previous experience as director of radiation protection control, head of licensing and inspection, head of medical exposure control in Jordan Atomic Energy Commission, also, as external expert did work for IAEA in field of organization implementing regulatory infrastructure, Medical exposure control, Regulatory inspection in medical applications in different countries. I worked also as IAEA reviewer for the integrated regulatory authority infrastructure (IRRS) in general and medical exposure in particular. I did design and been detected as regional counterpart for the IAEA Project "Upgrading Medical Physics Services in the ARASIA Member States through Education and Training (2007-2008)". Also, a National Counterpart of the IAEA project "Strengthening Radiological Protection of Patients and Medical Exposure (2006-20080.

I am a HPS Full Membership, Emirate Medical Association, AAPM Full Membership (2005-2007), ASTRO International Membership, President, Jordan Association for Physicist in Medicine (JAPM), Representative of JAPM at International Organization of Medical Physicist (IOMP) 2009-2011, also, Program Co-Director of Conference on Topic in Therapeutic & Diagnostic Medical Physics, Organized by AAPM in Amman, Jordan, 28 April-2 May, 2010. Also, I dedicated a lot of time for training and teaching in medical radiation applications.

I have been attended many meeting, workshops and conferences in radiation protection, medical exposures, education and training in radiation applications, health physics and medical physics. Also, I published many scientific paper and books in field of radiation protection, radiotherapy (stereotactic), patient's dosimetry, Peripheral Dose, QA & QC in diagnostic radiology. In addition, I did design software for shielding calculation for diagnostic medical installations and for QC in diagnostic radiology.

Finally, I am preparing for CHP exam part II for this year (2014), I passed Part I. I was born in in 1966, married with four children.

Nabaa Naji, PhD

Email: nabaanaji2012@gmail.com

I have been worked in the field of medical physics since 1996 till present.

Qualifications:

- Ph.D in Medical Physics Science/ Dept. of Physiology/ College of Medicine/ Al-Mustansiriya University-2007. Work was done in the Cardiology Dept./ Charles Nicolle Hospital/ University of Rouen-France/ 2004-2005.
- M.Sc. in Medical Physics Science/ Dept. of Physiology/ College of Medicine/ Al-Mustansiriya University-2002.
- B.Sc. in general Physics Science/ Dept. of Physics/ College of Science/ Al-Mustansiriya University-1995.

Occupations:

- Lab. Demonstrator, Assistant Lecturer, Lecturer in Medical Physics unit-Dept. of Physiology/ College of Medicine/ Al-Mustansiriya University 1996-2007.
- Member, Jordnian Association of Physics in Medicine (JAPM). October 2010.
- Member of medical physics planning for training committee. Ministry of Health (MOH). Baghdad-Iraqi. May, 2011.
- Member of the scientific committee of the first conference of Middle East Federation of Medical Physics (MEFOMP). 2011.
- Member, American Association of Physics in Medicine (AAPM). Sept. 2011
- Medical physics representative in the Iraqi MOH, Iraqi Cancer Board, 2012.
- President of Iraqi Medical Physics Society (IMPS), 2013.

Publication and Researches

- The importance of leads selection in the assessment of QT dispersion by the electrocardiogram (Research)- published in the journal of Basic Medical Science/ 2006.
- Effect of duration and glycemic control on autonomic nerve function parameters in diabetic subjects: published in the journal of Basic Medical Science/ 2006.
- Assessments of Predominance of Cardiac Autonomic Neuropathy in Iraqi Diabetic Subjects: published in the journal of Basic Medical Science/ 2006.
- Heamorheological and pulmonary function changes in Diabetes Mellitus (Research)/2001.
- A study of some haemorheological parameters in correlation to lung diffusion capacity in diabetic patients- published in the journal of Basic Medical Science/ 2002.
- Effect of plasma, RBCs viscosity and aggregation on haemorheology in diabetes mellituspublished in the journal of Basic Medical Science/ 2002.
- Effect of duration and glycemic control on peripheral nerve function parameters in diabetic subjects. Published in the journal of Basic Medical Science/ 2009.

Courses and Trainings:

- Workshops for the Iraqi medical physicists and radiation oncologist. Baghdad radiotherapy and nuclear medicine hospital, conducted by the International Medical Corp (IMC). December 16-18, 2009.
- The 27th annual meeting of the American College of Medical Physics (ACMP), organized by the ACMP in coordination with the American Association of Physics in Medicine (AAPM). The United States of America. Texas, San Antonio. May 22-25, 2010.
- First National conference on therapeutic and diagnostic medical physics, organized by king Hussein cancer center in collaboration with the international scientific exchange program of the



- American Association of Physicists in Medicine (AAPM) and the Jordan Association of Physicists in Medicine (JAPM). Amman- Jordan. October 7-10, 2010.
- Workshop and conference for IMSS supported programs. Organized by the International Medical Corps (IMC). Erbil. June 18-19, 2011.
- Medical Physics Society training course. Organized by the IMC. Erbil. June 20, 2011.
- Training course in "Strengthening Radiological Protection of Patients and Medical Exposure Control". which is organized by the IAEA. Italy, Udine on Nov 7-13, 2012.

Current responsibilities and activities:

- The chair of local preparing committee of the ISEP, which is proposed to be held in Iraq/ Erbil,
 March 2015 in coordination with the AAPM.
- Member of postgraduate study committee in the field of medical physics/ Mustansiriya medical college
- Member of the committee that is responsible for receiving, and operating the medical physics devices in Mustansiriya medical college.
- Supervisor of two postgraduate MSc medical physics students.
- I am now working in coordination with the Iraqi ministry of Higher Education and Scientific
 Research on the amendments of the postgraduate medical physics curriculum to match the
 international standardization according to the AAPM report no. 197 (revision of AAPM report no.
 79), "Academic Program Recommendation for Graduate Degree in Medical Physics"

ARUN ANNAPPA CHOUGULE, PhD

Address: II / 38, GANDHINAGAR GOVT. QUARTERS, GANDHINAGAR, JAIPUR-302015. INDIA.

Email: arunchougle@rediffmail.com, arunchougule11@gmail.com, Phone: +91-141-2700357

I have twenty seven years of experience as Radiation safety officer and Medical Physicist. Presently I am working as Senior Professor & Head Radiological Physics & Radiation Safety Officer in the Department of Radiotherapy, S.M.S. Medical College & Hospital, Jaipur, India, and Dean, Faculty of Paramedical Sciences, Rajasthan University of Health Sciences [RUHS].



EDUCATION:

B. Sc. SHIVAJI University, Kolhapur 1980, Physics, Biochem, Maths, M.Sc. SHIVAJI University, 1982, Physics, PhD BOMBAY University(BARC) , MUMBAI, 1994, Biophysics (Radiation Biology)

PROFESSIONAL QUALIFICATION

Dip. R.P., BOMBAY University, 1984, Nucl Physics, Rad Protection, Rad Dosimetry, Radiobiology. FUICC, Fellow of UICC (Geneva), Awarded ICRETT, UICC fellowship twice, ESTRO fellowship once and VLIR fellowship once, Regular Associate ship of ICTP, Italy for 2004-2011, APCASOT, Hans Wider Felowship of ESO 2006, IOMP Travel grants 2009, and AFOMP Travel grants 2013. I am awarded "Meritorious Life Time achievement award 2010" for contribution towards application of radiation and radiation research.

PRESENT DUTIES:

- Teaching of undergraduate & post graduate Radiotherapy and Radiodiagnosis medical students, teaching of B. Sc Radiation Technology, Dip. Radiographer trainees, M. Tech-Cognitive Neurology
- ii. Overall radiation safety and radiation monitoring and calibration & maintenance of radiation equipments of the institute in the capacity of Radiological safety officer. I am member secretary of Radiation Safety review committee.
- iii. Treatment planning of cancer patients by teletherapy and brachytherapy, proper execution of the treatment.

- iv. As administrative coordinator, Member of Board of Management, Member Academic council RUHS to coordinate and streamline the functioning of the University.
- v. As Dean, Faculty of Paramedical Sciences, RUHS, curriculum, academics and examinations of various paramedical courses.

RESEARCH WORK

I have published over 82 research papers in national and international journals and an article for a book. I have presented over 113 research papers in national and international conferences.

MEMBERSHIP of scientific organizations

Elected President of Association of Medical Physicist of India [AMPI- NC] for 2012- 2014. I am member of 11 National and 2 international organizations, including the IOMP Professional Relations Committee.

Stelios Christofides, PhD

Email: c4stelios@gmail.com

Qualifications:

1974 – 1978 BSc Physics (UK)

1978 – 1982 PhD (Electron Optical and Related Design Considerations for Micro-X-Ray Sources) (UK)

Fellow of the Institution of Physics and Engineering in Medicine (FIPEM), Member of the Institute of Physics (MInsP), Chartered Physicist (CPhys), Registered Clinical Scientist (CSci).



Positions:

1985 - Today Head of the Medical Physics Department of the Nicosia General Hospital, Cyprus

2005 – 2008 Chairperson of the Scientific Committee of the European Federation of Organisations of Medical Physics (EFOMP)

2008 – 2009	Vice President of EFOMP
2009 – 2011	President of EFOMP
2011 – 2013	Past President of EFOMP
2009 - 2012	President of the Medical Physicist Registration Council of Cyprus
2012 – 2015	Member of the Medical Physicist Registration Council of Cyprus
2009 – 2013	Vice-President of the Cyprus Society for Quality in Healthcare
2013 – 2016	President of the Cyprus Society for Quality in Healthcare
2011 – 2013	President of the Biomedical Research Foundation.
2003 – 2011	Director General of the Biomedical Research Foundation

Experience:

29 years of experience in Medical Physics. Involved in the "Public Health" Committee of the Ministry of Health of Cyprus on harmonisation with the EU, the preparation of equipment specifications, calibration and testing of equipment, Delegate of the Cyprus Standards Organisation for the CEN TC 251 "Health Informatics", CENELEC TC62 "Medical Electrical Equipment" and CENELC TC 106X "Electromagnetic Fields in the Human Environment".

Extensive experience in monitoring safety aspects in both the private and public sectors and was faculty member and organiser of many training courses organised in collaboration with IAEA & WHO. Participated as a Work Package leader in the SENTINEL European Project. Participated actively in Work Packages 2 and 8 of the EUnetHTA European project and represented the Ministry of health of Cyprus in the PHGEN European project.

Member of the consortium that revised the European Report RP91 "Criteria for of Radiological (including Radiotherapy) and Nuclear Medicine installations", published as EC Radiation Protection Report 162 (leader of the Nuclear Medicine section).

Was member of the Steering Committees of the European MPE Guidelines, the EMAN and the MEDRAPET projects (and leader of Work Package 3 of the last project), published as EC Radiation Protection Reports 174 and 175 respectively.

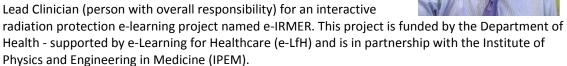
One of the editors of the IAEA document "Diagnostic Radiology Physics: A Handbook for Teachers and Students".

Currently the leader of Work Package 5 of the European Training and Education for Medical Physics Experts in Radiology (EUTEMPE-RX) project, a member of the EFOMP Working Group for the review and modernisation of the European School of Medical Physics, the convenor of the EFOMP Working Group for the development of a CEN standard on Medical Physics Services and the convenor of the EFOMP working Group on developing an EFOMP policy Statement on the Hospital Governance Board and the Role of the Medical Physicist.

Stephen H. Evans, CSci, CRadP

Email: Stephen.Evans@NGH.NHS.UK

Head of Medical Physics and Radiation Protection Adviser (Expert) at Northampton General Hospital (UK). Responsible for 40 staff who work in the Medical Physics Department. Service provisions include; radiotherapy physics, imaging (diagnostic x-ray) physics, radiation protection and nuclear medicine.



Co-founder, co-organiser and lecturer on The Royal Marsden/King's College Hospital "Radiation Protection Training Course" (mid 1990's - 2008). This course is now part of the Masters degree requirement of the UK Modernising Scientific Careers for Clinical Scientists training. Former lecturer on the Marsden's Medical Imaging MSc course and organiser and lecturer on a number of radiation protection courses.

1976 - 1979 BSc. Astronomy & Physics, University College London (UK)

1979 - 1981 MSc. Radiation Physics, University College London (UK)

2004 ~ Awarded status of Chartered Scientist (CSci) by the Science Council

2008 ~ Awarded status of Chartered Radiation Professional (CRadP) by SRP

Member of the Institute of Physics and Engineering in Medicine (MIPEM).

Member of the Society of Radiological Protec-tion (MSRP).

Registered with the Health and Care Professions Council (HCPC)

Awarded Radiation Protection Adviser (RPA) Certificate of competence by RPA 2000

Awarded Radioactive Waste Advisor (RWA) Certificate of recognition by UK RWA Approval Board 2006 - 2010 SRP committee member on Qualifications and Professional Standards Committee (QPSC). QPSC committee primarily deals with the development of professional accreditation schemes such as the certificate of competence to be a Radiation Protection Adviser (Expert).

2006 - 2010 IPEM member of Accreditation Working Party (AWP). AWP remit included consideration of the professional competences required for the medical physicist expert.

2010 - 2012 Council and Trustee member of IPEM.

2010 – 2012 IPEM Director of Science Board - important matters of concern to IPEM Special Interest Groups. Key role was to ensure Scientific Meetings ran successfully.

2014 - European Federation of Organisation in Medical Physics (EFOMP) Projects Officer European Commission projects current (2014) involvements:

- Guidelines on Medical Physics Expert,
- EUTEMPE-Rx (2013 -2016) (EUropean Training and education for the Medical Physics Expert),
- European Diagnostic Reference Levels for Paediatric Imaging (2014 2016)

