#### Preparing a course for female medical physicists in or aspiring to leadership roles

#### Carmel J Caruana Ph.D.

Prof. and Head, Medical Physics Department, Fac. of Health Sciences, University of Malta **EFOMP Past-Chair, Education and Training** EFOMP rep European Guidelines on the MPE, MEDRAPET and EUTEMPE-RX projects carmel.j.caruana@um.edu.mt















## Background

- Why leadership? because without good leadership nothing gets done, the profession does not develop further
- Why preparation for leadership? because the younger generation (and even the not so young!) needs to be prepared to take over when it's time for this generation to retire
- No well-prepared future leaders means a weak profession in the future













## STRATEGIC Leadership should be an *integral* part of the E&T of Medical Physicists



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Point/Counterpoint

Subjects such as strategic planning, extra-disciplinary communication, and management have become crucial to medical physics clinical practice and should become an integral part of the medical physics curriculum

Carmel J. Caruana Ph.D., J. Adam M. Cunha Ph.D., Colin G. Orton Ph.D.,

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In today's world being a good scientist is simply not enough to develop or even survive!

#### Developing a Course in Leadership for female MPs

- Leadership needs to be learned like everything else (forget about the born leader thing – our society has become too complex)
- Don't reinvent the wheel! take an existing leadership module and adapt it to your needs. Example: EUTEMPE-NET Module MPE01 - Leadership in Medical Physics, development of the profession and the challenges for the Medical Physics Expert (D&IR)
- Include successful women medical physics leaders who would share their personal experience of leadership (role modelling), but don't exaggerate this is not an amazon society, they would need to lead teams which include both genders!













#### **EUTEMPE Module MPE01**

Leadership in Medical Physics, development of the profession and the challenges for the MPE (D&IR)

http://eutempe-net.eu/mpe01/

#### MEDICAL PHYSICS EXPERTS

Driving Technology to Advance Healthcare Proactively Protecting Patients

















## A comprehensive yet concise mini-MBA for future Medical Physics leaders in Diagnostic and Interventional Radiology















#### **Abstract**

This module aims to help the future MPE in Diagnostic and Interventional Radiology (including imaging outside the D&IR department proper) acquire the knowledge, skills, competences and attitudes necessary to exercise a strategic leadership role within the profession in own country and in Europe both in terms of professional issues faced by the profession and own personal development as a leader. The content of the module will provide a framework for discussions for all the other modules. In the onsite phase participants will have the opportunity to interact with and discuss issues facing the profession and personal development directly with European leaders. The participants would also be updated with the latest EU directives, guidelines and policy statements impacting the role to ensure they are at the forefront of these developments. The module will achieve its learning objectives using a combination of online and onsite readings, fora, presentations and case studies. The online component will consist of sets of compulsory readings. Each set of readings will be accompanied by an online forum for difficulties and real world case studies to promote reflection on their own attitudes towards leadership and discussion in preparation for the assessment. The online phase will be asynchronous so that participants would not need to take time off their clinical duties and there will not be a problem with time zones. Module participants can put forward the issues they are facing in their own country and receive feedback and advice. As preparation for the assessment, further case studies will be discussed with the panel. Onsite presentations will be sent to the participants 2 weeks before the start of the onsite phase.













## This is what you get...

- Knowledge, skills, competences and attitudes which are essential for all medical physicists aspiring for professional leadership or managerial roles
- A module which provides the scientific, professional, managerial, legal and ethical framework for discussions in all other modules
- Extensive opportunities for discussions of actual real-world case studies with other future leaders like yourself from all over Europe
- Mostly asynchronously online delivery so that you can study anytime, anywhere.
- Three day programme of face-to-face interactive sessions with the leaders of the profession in Europe
- 115 EBAMP CPD Points (less if you don't take the assessment)















Learning Outcomes	
MPE01.01	Take responsibility for researching, evaluating, leading, and offering vision for the development of the role of the MPE (D&IR,) in the ambit of European and national legislation and a holistic vision of healthcare.
MPE01.02	Implement and evaluate strategic solutions to the challenges facing the MPE (D&IR) in own country and Europe.
MPE01.03	Evaluate the various models of management in terms of suitability for a Medical Physics Service and the use of project management tools.
MPE01.04	Learn the meaning of strategic leadership/negotiation and the importance of emotional intelligence for driving leadership performance.
MPE01.05	Take responsibility for the development of the role of the MPE (D&IR) in health care governance and management in D&IR.
MPE01.06	Discuss the role of the MPE (D&IR) in service development, health technology assessment (HTA), innovation and expert consultancy.
MPE01.07	Research, develop and lead the development of the role of the MPE (D&IR) in the education and training of medical physics trainees and other healthcare professionals.
MPE01.08	Manage the relationship of the MP/MPE with other healthcare professions in D&IR, with patients and with the general public and acquire better communication skills
MPE01.09	Manage priorities regarding radiation protection research and medical physics input to clinical research projects needing the support of MPEs.
MPE01.10	Take responsibility for ethical issues in medical physics particularly in the areas of research and radiation protection in D&IR and apply them in practice.
MPE01.11	Learn how to participate in networks for research and development at the European and international level.
MPE01.12	Take responsibility for management of a Medical Physics Service in D&IR (including providing leadership, quality accreditation, staffing levels, clinical audit)
MPE01.13	Interpret the significance of liaising with the Radiation Protection Expert















## **Chapters: Online Part**

- 1. Introduction to the module
- 2. The role of D&IR within healthcare provision, today and tomorrow and its impact on our role (including role outside the D&IR department proper)
- 3. Milestones in the development of the role of the MPE(D&IR) in European legislation and documentation
- 4. Dimensions of quality health care and the role of the MPE (D&IR)
- 5. Health care governance and management and the MPE(D&IR)
- 6. Health care ethics and the MPE (D&IR)
- 7. Components of quality professional practice
- 8. European and international recommendations, guidelines, technical documentation and codes-of-practice impacting the activities of the MPE (D&IR)
- 9. Qualification and curriculum frameworks for the MPE (D&IR) in Europe
- 10. Project management for the MPE (D&IR)
- 11. Pedagogical principles and communication skills for the MPE
- 12. Management of a Medical Physics Service in D&IR (including providing leadership, quality accreditation, staffing levels, clinical audit)
- 13. Medical Sociology for the MPE (including role development, inter-professional issues)
- 14. Occupational Organizational Psychology and Politics for the MPE(D&IR)
- 15. Qualitative research methodologies for the MPE
- 16. The role of the MPE in service development, health technology assessment (HTA), innovation and expert consultancy
- 17. Strategic planning skills for the MPE (D&IR)













#### Real World Case Studies

Case study 1: There are 5 chest radiography rooms in your hospital each run by a different team of radiographers. You have noticed that one of the rooms is repeatedly exceeding the local DRLs which you have established. How would you tackle it? You know that the team of radiographers don't like people investigating their techniques.

Case Study 2: Consider a particular Medical Physics department. With respect to D&IR: (a) Describe the *present* situation of the department (b) Describe a *future* vision: how should the department to be in 10 years time? (c) List 3 gaps between the present situation and future vision (d) List the Strengths and Weaknesses of the *department* with respect to the vision (e) List the external Opportunities available and Threats it faces with respect to the vision (f) Give ideas on how to reduce each gap using the SWOT methodology.

Case study 3: There has been a radiological accident at your hospital. A child had a head CT scan and the next day a severe erythema appeared on the face. It ended up as headlines in the newspapers. You are involved in the investigation and need to deal and communicate with other healthcare professions and the media. Discuss the various ethical issues involved (include reference to the basic ethical principles such as beneficence-nonmaleficence etc).













#### First group of participants (Feb 2015)

















## 2nd Group (Feb 2017)















#### Comments from previous participants...

- "Content and course material were excellent"
- "Very competent teachers, wide range of topic, wonderful atmosphere"
- "Online part was very good. The content and the references worked very well in hand with the faceto-face"
- "The use of case studies throughout the online session were very useful to focus on specific learning objectives"
- "Guidance and support from the experts during the face-to-face"
- "Possibility to learn from best speakers and best professional teachers in this area"
- "Presentations with practical case studies"
- "Broad scope with European leaders of the profession presenting and interacting with the participants"
- "Online discussions with other participants"
- "Guidance about my professional future and choices"
- "Gave a great insight into what is required / expected of one in order to be a successful Medical Physics Expert"















# When asking established leaders to give their experiences

Insist on them describing their real-life personal journey and experiences including the trials and tribulations. It's important to show that leadership has it's rewards but one has to work at it and it does requires personal sacrifice.















#### Why personal perspective & journey?

- Because what will be achieved during their leadership will depend on:
  - Their own personal and professional history
  - Their own personality type, gender, level of intelligence, level of commitment, attitudes, integrity
  - The personality type, level of intelligence, level of commitment, attitudes, integrity ... of those they would be leading
  - The circumstances they will find themselves in: history showers many leadership opportunities at them, but sometimes also the unexpected
- However do tell them that, notwithstanding the challenges if they are willing to work hard, grasp opportunities, dive into it, they can actually achieve a lot!













# How I do it. Not necessarily the best way so go ahead and cherry-pick!















Have a 'My Leadership Achievements' session – but don't simply list and brag! Give background, explain how you got the ideas, the problems you faced, how you tackled them, what you managed to achieve, what you could have done better....















# Achievements of a guy from a miniscule island in the Mediterranean

- On the National front:
  - Set up the E&T in Malta (obtained European Social Fund money for this)
  - Established legal recognition of the profession
- On the European front:
  - Development of a mission statement for the profession at the European level
  - European Guidelines on the MPE (main author of role and E&T chapters)
  - EFOMP Policy Statement 12.1 on E&T (another one on role of the MPE, PS16)
  - EUTEMPE-RX: EU E&T project for developing Medical Physicists to Expert status
  - EUTEMPE-RX Module MPE01 'Leadership in Medical Physics, development of the profession and challenges for the MPE (D&IR)'
  - Initiator of the European School for MPE in Prague
  - Policy statement 16 an update on the role of the medical physicist in ionizing radiation after 2013/59/EURATOM
- On the International front:
  - Member of the Accreditation Committee of the International Medical Physics Certification Board (IMPCB)















#### End with a to-do list!















#### Whatever you're leading here's the to do list:

- Clarify your vision: what state would you like the project / trainees / department / profession to be in by the end of your leadership tenure? Let that vision be your guide!
- Decide on the **style of leadership to adopt**: if you are lucky with personalities/attitudes/motivation levels of team members happily democratic, if not benevolent dictator (what can you do?), often shifting blend of both.
- Have a **deep personal commitment**: otherwise do the right thing make way for someone else Medical Physics is serious business, there's the patients' well-being at stake.
- Conduct an honest **personal SWOT audit**, ask yourself: "do I need to change anything about myself to be successful in this leadership role (knowledge, attitudes, psychological resilience)?" Don't expect too much of yourself too quickly, nobody can become a leader overnight, changing oneself is a gradual process, be nice to yourself (but not too nice!).
- Conduct an honest **SWOT** audit of your team/departmental/profession (recognize their strengths abut also the weaknesses, we cannot solve issues if we pretend they don't exist).
- Develop a practical strategic plan for achieving the vision
- Work at it till the vision is achieved: we never achieve 100% of what we would like to do, but aim high, celebrate the ups, accept quickly the downs and move on.
- **Prepare your successors:** it's important that someone else continues the task when you leave, none of us is eternal, important to accept handing over to others gracefully.















#### **IMPORTANT DATES**

**Application deadline is 20 October 2018** 

First come first served basis

**Online phase starts 1 November 2018** 

Face-to-Face phase Prague 4 – 6 February 2019

**Optional Open-Book Assessment Prague 8 Feb 2019** 

carmel.j.caruana@um.edu.mt

Please come and take a flier after the session and feel free to write to me if you are interested. We are getting many applications from people outside Europe now. We welcome these and would be ready to help them set up their own module.















## Thank you for your attention!













