

# Leadership in Medical Physics

**Carmel J Caruana PhD FIPEM**

Professor and Head, Medical Physics Department, Faculty of Health Sciences, University of Malta  
EFOMP Past-Chair, Education and Training

EFOMP representative on the European Guidelines on the MPE, MEDRAPET and EUTEMPE-RX projects  
carmel.j.caruana@um.edu.mt



# Structure of the Presentation

- Setting the Scene: some initial reflections on leadership in Medical Physics
- Mission Critical: Preparing future Medical Physics leaders
  - Prepare future leaders by having established leaders present their own personal journeys, perspectives and experiences of leadership (role modelling).

**Essential pointers for preparing a leadership presentation**

- Preparing future Medical Physics leaders by organizing a formal accredited leadership course.

Example syllabus and learning outcomes: **EUTEMPE-EFOMP Module MPE01 - Leadership in Medical Physics, development of the profession and challenges for the Medical Physics Expert (D&IR)**

# Some Initial reflections on Leadership in Medical Physics

# Background

- Why leadership? - because without good leadership nothing gets done, departments are ineffective, projects do not move forward, the profession will not develop locally/nationally/regionally/internationally
- Why the emphasis on preparation for leadership in Medical Physics?
  - no leadership training in most Medical Physics E&T programmes
  - because society has become too complex for leading simply by intuition and off-the-cuff decision making
  - in a world dominated by austerity economics, fake info, bluff and inter-professional competition being a good scientist is not enough for an individual professional or the profession to succeed (in fact being an objective scientist can sometimes be a handicap!) - **strong strategic planning, management and communication skills have become crucial**
  - although many medical physics related documents refer to the importance of leadership skills there are very few resources specifically targeted to Medical Physicists
  - the younger generation needs to be prepared to take over when it's time for this generation to retire, if we do not prepare future leaders it will mean problems for the profession in the future

In today's complex world **Strategic Leadership** should become an *integral* part of the E&T of Medical Physicists

# Medical Physics

The International Journal of Medical Physics Research and Practice

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Article freely  
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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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# What type of group shall I be leading? - Different Medical Physics groups require different styles of leadership

- A new group of Medical Physics trainees
- A Special Interest Group dedicated to the ongoing development of a specific area of professional practice
- A time-limited Medical Physics task group set up for a specific well-defined objective
- A team of Medical Physicists within an independent Medical Physics department (clinical/academic/combined)
- A small team of Medical Physicists within a large D&IR/Oncology/NM department managed by Physicians or Radiographers
- The members of a Medical Physics organization (either directly if it's a relatively small group or indirectly via their representatives in the case of large groups)
- A team of Medical Physics academics in a university department
- A multidisciplinary task group
- Increasingly, virtual teams with members geographically distributed in different countries and time zones

# Leadership is a *personal* journey

- Because what will be achieved during your leadership will depend on:
  - Your *own personal and professional history*
  - Your *own* personality, level of commitment, attitudes, robustness
  - The personality, level of commitment, attitudes *of those you would be leading*
  - The circumstances you find yourself in: history showers many leadership opportunities at you, but sometimes also the unexpected
- However, notwithstanding the challenges if you are willing to work hard, grasp opportunities, dive into it, you can actually achieve a lot!
- The attitude for success is: “I have one life, I want to do something worthwhile with it, something to be able to look back to with pride”

# We need strategic leadership: **SWOT**

1. Set short/medium/long term **future vision** for the group you are leading in collaboration with the members of the group. Your vision is the guide that will help keep you focussed on your objectives in the complexities of everyday life in our healthcare organizations.
2. Carry out an *honest* **Gap Analysis** i.e., differences between the future desired vision and the actual present real situation
3. Carry out an *honest* **SWOT Analysis** with respect to that vision (your **S**trengths, and **W**eaknesses and those of the group, external **O**pportunities and **T**hreats)
4. Set **specific objectives** leading to the desired vision and a **strategy to achieve them**
5. **Assess** your achievement or otherwise of those objectives, **re-evaluate your strategic plan** iteratively



Preparing Medical Physics leaders by having established leaders present their own personal journeys, perspectives and experiences of leadership (role modelling)

Essential pointers for preparing a leadership presentation



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# Preparing a role modelling presentation

- Make a list of own main achievements at the personal, departmental, national, regional, international level.
- Choose achievements which can help participants acquire the leadership knowledge and skills you are aiming to teach them.
- Very importantly, whilst talking about these achievements do not just brag about what you have achieved but *very importantly discuss how you got the ideas, what problems you faced, reasons for successes (and failures - a good leader learns from failures and it's important to teach this essential leadership skill), what you could have done better...*

# Achievements of a guy from a miniscule island

- On the **National** front:
  - Set up the E&T in Malta (a department of MP, obtained European Social Fund money for this)
  - Established legal recognition of the profession
- On the **Regional (European in this case)** front:
  - Developed a mission statement for the profession at the European level
  - Authored the role and E&T chapters in the European Guidelines on the MPE, EFOMP Policy Statement 12.1 on E&T and EFOMP Policy Statement 16 on the role of the MP
  - Originator of EUTEMPE-RX: EU E&T project for developing Medical Physicists to Expert status in D&IR
  - Leader and main contributor to 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 (mostly in Prague)
  - Special Interest Group: teaching to non-physics healthcare professions
- On the **International** front:
  - Member of the Accreditation Committee of the International Medical Physics Certification Board (IMPCB)
  - Member of the Editorial Board of the IOPP-IPEM ebook series on Physics in Medicine and Biology

# At the end give them an essential to-do list: here's an example

- **Clarify your vision:** what state would you like the team/profession to be in *by the end of your leadership tenure*? **Without having a good vision as your constant guide you will not be successful in improving the situation for your team - instead the complexity of the healthcare system will wear down your enthusiasm.**
- 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 authoritarian (what can you do?), in practice often a 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 **self-analysis of personal strengths and weaknesses**, 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 becomes a leader overnight, changing oneself is a gradual process, be nice to yourself (but not too nice!).
- Conduct an honest **audit of the strengths and weaknesses of your team** (recognize their strengths but also their weaknesses, we cannot solve issues if we pretend they don't exist.
- **Scan the environment for opportunities to be able to improve on your strengths and eliminate weaknesses and threats - pay very careful attention to threats!**
- Set specific strategic objectives **which are doable** and develop a **realistic strategic plan** for achieving those objectives
- **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 the next generation:** 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.

# Prepare a formal, accredited leadership course

# EFOMP-EUTEMPE Leadership Module



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# Module abstract

This module aims to help the future MPE in Diagnostic and Interventional Radiology acquire the **knowledge, skills, competences and attitudes necessary to exercise a strategic leadership role within the profession in own country and regionally both in terms of professional issues faced by the profession and own personal development as a leader**. In the onsite phase participants will have the opportunity **to interact with and discuss issues facing the profession and personal development directly with established European leaders**. The participants would also be updated with the latest legislation, 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 can study anytime anywhere!** 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.



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# Online syllabus

1. **Introduction to leadership in Medical Physics and SWOT methodology**
2. The role of D&IR within healthcare provision, today and tomorrow and its impact on our role
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 and 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:** Imagine that you are leading your particular Medical Physics department: (a) Describe the *present* situation of the department (b) Describe a *future* vision: how should in your opinion the department be in 5 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 (f) Suggest strategies for reducing each gap (in particular further developing the strengths and elimination weaknesses and threats)

**Case study 2:** 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. You know that this particular team of radiographers don't like people investigating their techniques. You would like to bring about the necessary changes for the patients' benefit as per your legal duty whilst still doing all possible to maintain good inter-professional relations with the radiographers concerned. How best to tackle it?

**Case study 3:** You are the head of the Medical Physics department at a large hospital which is expanding its Diagnostic and Interventional facilities owing to a large population increase in the region. You want to employ additional medical physics staff but the human resources manager tells you that you have enough staff. How would you tackle it?



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# Past Participants (Feb 2015)



# Past Participants (Feb 2017)



# Past Participants (Feb 2019)



# MPE01 The Leadership Module

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

**Application deadline: 15 May 2020**

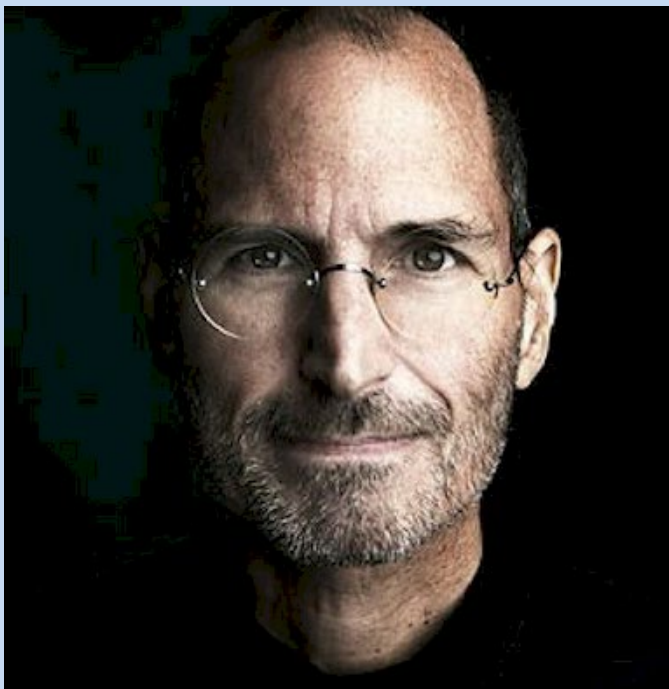
Online phase starts: 1 June 2020

Onsite phase Prague: 7 – 9 September 2020

Optional Open-Book Assessment Prague: 11  
September 2020

[carmel.j.caruana@um.edu.mt](mailto:carmel.j.caruana@um.edu.mt)

**Feel free to write to me if you are interested**



"If you want to make everyone happy, don't be a leader – sell ice cream."

Steve Jobs



# Thank you for your attention!

[carmel.j.caruana@um.edu.mt](mailto:carmel.j.caruana@um.edu.mt)