**EUTEMPE-RX** (http://www.eutempe-rx.eu/) is a project for helping MEDICAL PHYSICISTS in **DIAGNOSTIC AND INTERVENTIONAL RADIOLOGY** achieve **MEDICAL PHYSICS EXPERT STATUS**
**All modules are FREE!**

**FIRST EUTEMPE-RX MODULE!**

EFOMP EUTEMPE-RX European Commission An FP7 Project

**IMPORTANT DATES**
**Application deadline** is 9 December 2014
**Late applications considered if places available**
**Online phase starts** Wednesday 17 December 2014
**Face-to-Face phase Prague 9 – 13 February 2015**
Optional Open-Book Assessment 13 February 2015

# Module MPE01: Development of the profession and the challenges for the MPE (D&IR) in Europe

**Aim:**

This module aims to help the future MPE in Diagnostic and Interventional Radiology (including fluoroscopically guided procedures performed outside the imaging department) acquire the knowledge, skills and competences necessary *to exercise a leadership role within the profession in his own country and in Europe*. The content of the module provide a framework for discussions for all the other modules. *In the face-to-face phase participants will have the opportunity to discuss the major issues facing the profession directly with the present European leaders of the profession. The participants would also be updated with the latest EU directives, guidelines and activities 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 face-to-face readings, fora, presentations and discussions. The online component will consist of a series of sets of compulsory readings. Each set will be accompanied by an online forum for difficulties and to promote reflection 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. Each presentation during the face-to-face will be presented by a leader in the area and will be followed by a discussion involving a panel made up of the present European leaders of the profession. Module participants would put forward the issues they are facing in their own country so that we may create a harmonised approach. As preparation for the assessment, case studies will be discussed with the panel. *All presentations will be sent to the participants 2 weeks before the start of the face-to-face phase.* The learning outcomes are:

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 issue of staffing levels.
MPE01.04 Take responsibility for the development of the role of the MPE (D&IR) in clinical governance in D&IR.
MPE01.05 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.
MPE01.06 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 the general public.
MPE01.09 Manage priorities regarding radiation protection research and medical physics input to clinical research projects needing the support of MPEs.
MPE01.10 Implement safety culture in their practice.
MPE01.11 Participate in networks for research and development at the European and international level.
MPE01.12 Take responsibility for the role of the MPE (D&IR) in accidental and unintended medical exposures in D&IR and radiation accidents.
MPE01.13 Interpret the significance of liaising with the Radiation Protection Expert

**Teaching Faculty**

**Prof Carmel J. Caruana** PhD: Module leader, lead Role Definition and Education and Training chapters of the 'European Guidelines on the MPE' project, EFOMP lead for the chapter for medical physicists in MEDRAPET
**Prof Eliseo Vano** PhD: Module leader, Chairman of the Medical Working Party on Medical Exposures of the Article 31 Group of Experts of the EURATOM Treaty. Chairman of the Committee on Protection in Medicine of the ICRP. IAEA consultant for radiation safety in diagnostic and interventional radiology.
**Prof Eduardo Guibelalde** PhD: Coordinator 'European Guidelines on the MPE' project
**Dr Stelios Christofides** PhD: Past President, EFOMP
**Prof Peter Sharp** PhD: President, EFOMP
**Prof John Damilakis** PhD: Vice-President and President-Elect, EFOMP
**Stephen Evans** MSc: Lead for staffing levels in the 'European Guidelines on the MPE' project and present Chairperson EFOMP Projects Committee
**Prof Hilde Bosmans**: Coordinator EUTEMPE-RX project
**Prof Jim Malone**: Chairman IEC SC62B Medical Imaging Equipment

## ONLINE PHASE: 17th DECEMBER 2014 – 8th February 2015 (PRELIMINARY PROGRAMME)

The online component will consist of a series of sets of compulsory readings on the topics below. Each set will be accompanied by an asynchronous online forum with prompting questions and responses to difficulties to promote reflection and discussion in preparation for the assessment.

**Topics**

1. The functions of D&IR departments (including imaging outside Radiology departments) within healthcare provision, today and tomorrow.
2. Milestones in the development of the role of MPE in European legislation and documentation.
3. Attributes of quality health care and the role of the MPE (D&IR).
4. The various models of healthcare management and clinical governance and the role of the MPE (D&IR).
5. Health care ethics and the MPE (D&IR) (e.g., research ethics, data protection, privacy, dignity, ethical governance). Ethical aspects of the medical use of ionising radiation in routine practice and research.
6. Components of quality professional practice.
7. European and international recommendations, guidelines, technical documentation and codes-of-practice impacting the role of the MPE (D&IR) e.g., ICRP, ICRU, IEC, IAEA, CENELEC, EFOMP, AAPM etc.
8. Qualification and curriculum frameworks for the MPE (D&IR).
9. Project management for MPEs.
10. Principles of curriculum development, pedagogical and communication skills for MPEs. Curriculum development for the medical physics profession. Teaching other healthcare professionals.
11. Management of a Medical Physics Service in D&IR: Models of management and leadership, Equipment management, Staffing levels
12. Medical Sociology for the MPE: role development, inter-professionalism etc
13. Occupational and Organizational Psychology for the MPE (D&IR)
14. Qualitative research methodologies (research for role development, professional issues, service development, management and education).
15. The role of the MPE in service development, health technology assessment (HTA), innovation and expert consultancy.
16. Strategic planning skills for MPEs.

## FACE-TO-FACE PHASE: DAY-TO-DAY PRAGUE 9 – 13 FEBRUARY 2015 (PRELIMINARY PROGRAMME)

**Monday 9th February: Role of the MPE: where is D&IR heading and what should be our role?**

**Introduction:** CJ Caruana, E Vano

**Presentations**

1. The role of the MPE before 2013/59/Euratom and before the 'European Guidelines on the MPE' (E Guibelalde, E Vano)
2. The role of the MPE in 2013/59/Euratom: rationale behind the provisions relating to the MPE, update on developments, explaining to local health and radiation authorities, liaising with the radiation protection expert, non-medical exposures (E Vano)
3. Elaboration of the role of the MPE (D&IR) in the 'European Guidelines on the MPE document' (CJ Caruana)
4. The role of the MPE in fluoroscopy guided procedures performed outside the imaging department (E Vano)
5. Non-ionising radiations: EFOMP Policy Statement 14: The role of the Medical Physicist in the management of safety within the MRI environment (CJ Caruana)
6. The educational role of the MPE:
   - Education and training of Medical Physicists: The qualification and curriculum development frameworks for the MPE in the 'European Guidelines on the MPE document' and EFOMP Policy Statement 12.1.
   - The education of physicians and the healthcare professions (CJ Caruana)

**Case studies for discussion between participants and panel of experts**

Case Study 1: A member of the radiology management team comes up to you stating: "MPEs are not important in D&IR, we don't have the high doses that one finds in radiation oncology". How would you tackle it?
Case study 2: The head of radiology clinic comes up to you and says "We don't need an MPE here as our doses are according to national DRLs". How would you tackle it?
Case study 3: A radiologist has opened a new clinic in which he has 1 digital x-ray machine, a mammography unit and a CT scanner. He says he does not need the service of an MPE as the facility is too small. How would you tackle it?

**Tuesday 10th February: Management issues for MPEs**

**Presentations**

1. Setting up, organizing and managing a Medical Physics Service for D&IR (E Vano)
2. Staffing levels for Medical Physics Services as in the 'European Guidelines on the MPE document': examples of use in D&IR (S Evans)
3. EFOMP Policy Statement 15: Recommended Guidelines on the Role of the Medical Physicist within the Hospital Governance Board (P Sharp)
4. Standards for Medical Physics Services and the creation of a safety culture (S Christofides)

5. Managing the relationship of the MP/MPE with other healthcare professions in D&IR, with patients and the general public. (J Damilakis)
6. Professional ethics (including issues associated with outside consultancy and research) and the ethics of radiation protection (J Malone)
7. Managing accidental and unintended medical exposures in D&IR and radiation accidents (E Vano)
8. Strategic planning: A SWOT analysis for the MPE (CJ Caruana)

**Case studies for discussion between participants and panel of experts**

Case study 1: You have noticed that one of the interventional cardiologists in your hospital tends to produce high cumulative KAPs and long fluoroscopy times. He is aversive to other professions 'telling him what to do'. How would you tackle it?

Case study 2: You want to employ another medical physicist. The manager of the department of radiology tells you that you have enough staff. How would you tackle it?

Case study 3: It has come to your attention that an equipment procurement committee has been set up in your department. You have not been asked to sit on the committee. How would you tackle it?

**Wednesday 11th February: Developing, publicising and internationalising the role of the MPE**

**Presentations**

1. The involvement of the MPE at the national, European and international level in the development of medical radiation protection (E Vano)
2. Involvement yourself in IEC SC62B Medical Imaging Equipment (J Malone)
3. Involving yourself in European projects. What are the opportunities? How can you work with EFOMP (S Evans)
4. Combining clinical work, research and innovation - a case study from Belgium (H Bosmans)
5. Combining clinical work, research and innovation - a case study from Spain (E Vano)
6. Going public – raising the profile of the profession within and outside healthcare. How can we raise the public profile of the profession? How can we link this with patient radiation protection issues - the MPE as patient and population advocate in the area of Medical Radiation Protection (CJ Caruana)

**Case studies for discussion between participants and panel of experts**

Case study 1: You have a good idea for a project, you have discussed it with your colleagues but have found little support and the head of the department says there's no money. How would you tackle it?

Case study 2: There has been a radiological incident 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. How would you tackle it?

Case study 3: You are heavily involved in clinical work, doing research and taking part in two European projects with EFOMP. You cant manage and need to find a way. How would you tackle it?

**Thursday 12th February: Free day for personal study**

Carmel J Caruana will be available to answer and help the participants with difficulties 09:00 – 12:00.

**Friday 13th February: Assessment Day (optional)**

09:00 – 13:00 The **optional** assessment mode will consist of a 4 hour *open-book* examination consisting of case scenarios (4 to choose 3) of situations faced by the MPE (D&IR) in which candidates are expected to demonstrate that they have achieved sufficient vision to act as future leaders of the MPE (D&IR) profession. Participants are expected to back their arguments with quotes from EU directives and other documentation utilised during the module.

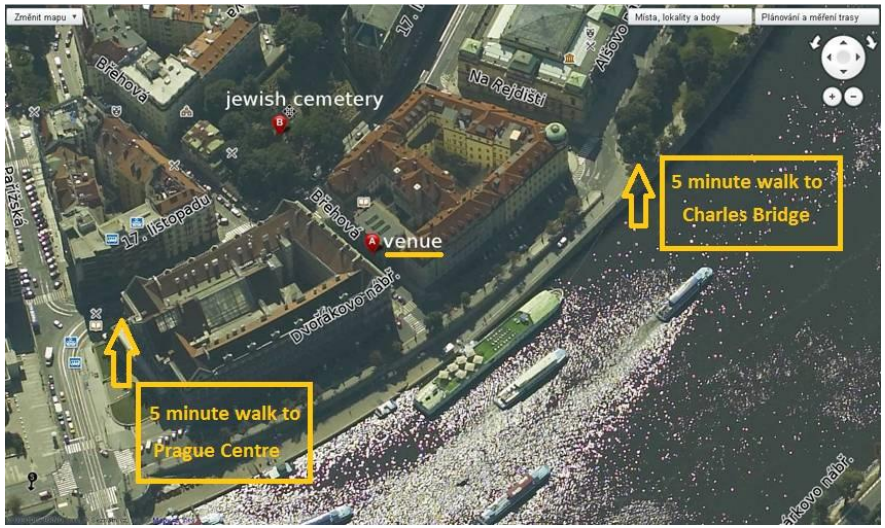
For any queries regarding this module please write to one of the module leaders
Carmel Caruana carmel.j.caruana@um.edu.mt or Eliseo Vano eliseov@med.ucm.es
The enrolment form can be found at http://www.eutempe-rx.eu/index.php/more-news/109-enrolment-form
Please fill in the form and send to info@eutempe-rx.org
**Application deadline is 9 December 2014 Late applications considered if places available**

## Course Venue and Accommodation in PRAGUE

Prague is of course one of the foremost cultural and tourist destinations in the world. It is situated in the middle of Europe and you can get there by air, rail or bus from most cities in Europe. Here are some websites for you:

http://www.prague.eu/en http://www.360cities.net/area/prague-czech-republic http://www.pragueexperience.com/index.asp

The **course venue** in Prague is the **Faculty of Nuclear Sciences and Physical Engineering of the Czech Technical University**, Brehova 7, 115 19 Praha 1. It is **located directly in the city centre 5 minutes walk from Prague's world famous historic Prague Centre (Old Town Square) and Charles Bridge.** Food will be available at the Faculty of Nuclear Sciences and Physical Engineering. Coffee breaks and light lunches Monday to Wednesday (total 6 coffee breaks and 3 lunches) cost 55 Euro. The fee should be paid to the Faculty of Nuclear Sciences and Physical Engineering on arrival. Please inform Carmel Caruana on carmel.j.caruana@um.edu.mt by 10th January 2015 if you would like this service.




Prague is a major tourist city and central Prague is full of all types of hotels, hostels and all forms of restaurants, cafes and snack bars. For low cost accommodation we suggest Czech Technical University's MASARYKOVA HOTEL AND HOSTEL located at metro stop Dejvicka. You can find more information about it here: http://www.masarykovakolej.cz/en/ From the airport there is a direct **bus number 119** - stop at Dejvicka metro stop. To the course venue take Metro A (the Green Line) from Dejvicka and stop at Staromestska. The course venue is a few minutes walk form Staromestska metro station. To book accommodation go to: http://www.masarykovakolej.cz/en/hotel/rezervation. 1 Euro is approx 27 Czech Crowns (written as CZK or Kc). All hotel booking sites feature Prague. For other low cost accommodation try http://www.czechhostel.cz/