LEARNING OBJECTIVES

Radiation Protection in Diagnostic and Interventional Radiology: The basics and beyond
(J. Damilakis)
1. To understand the basic concepts of radiological protection
2. To understand the limitations of CTDIvol and DLP with respect to CT dose estimates
3. To learn how to optimise patient radiation dose in fluoroscopically-guided interventional procedures
4. To learn how to minimise occupational radiation dose from fluoroscopically-guided interventional procedures

Patient dose management in CT
(J. Damilakis)
1. To understand the effect of the CT protocol parameters on patient radiation dose
2. To become familiar with the dose levels currently encountered in CT
3. To get practical advice on how to optimise protocols
4. To become familiar with new developments towards dose reduction in CT

Additional practical approaches to optimising adult and paediatric CT
(P. Vock)
1. To discuss aspects related to radiation-induced cancer risk
2. To understand the importance of patient centring on patient dose and image quality
3. To learn to adapt the localiser scan to the patient and the prerequisites of the specific scanner
4. To learn about organ protection, e.g. by local shielding, from CT exposure
5. To understand the influence of arm positioning on patient dose from CT

Radiation and pregnancy
(P. Vock and J. Damilakis)
1. To understand the factors that influence radiation dose to the conceptus
2. To learn the approach to imaging frequent clinical situations during pregnancy and how to optimise exposure
3. To learn the biological effects that radiation may have on the conceptus
4. To learn how to manage and counsel a pregnant patient in case of (a) intentional and (b) accidental exposure
5. To learn dose limits, regulations and recommendations concerning occupational exposure of pregnant women employed in diagnostic radiology