UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Pet Techniques and Tracers

2324-3-I0303D036-I0303D063M

Aims

The student should know the principal equipment and diagnostic techniques used in Positron Emission Tomography (PET), and of the methods to prepare radioactive tracers and relative doses

Contents

The course aims to provide knowledge of the principal equipment and diagnostic techniques used in Positron Emission Tomography (PET), and of the methods to prepare radioactive tracers and relative doses

Detailed program

PET techniques: acquisition and reconstruction modalities in oncological, cardiac and neurological studies. Acquisition and reconstruction modalities in quality control procedures (blank), calibrations, corrections (axial and transaxial normalization). Coincidence time acquisition and reconstruction. 2D-3D acquisition and reconstruction modalities. Attenuation correction methods: transmission imaging using Ge68-Cs137 sources, CT. Logistic organization of a PET centre, Detection systems. Applications: pathologies of the thorax, abdomen, pelvis, brain, muscle-skeletal, cardiovascular and endocrine apparatus, with particular reference to the neoplastic pathology.

Prerequisites

Teaching form

Exercises

Textbook and teaching resource

The Teacher will provide educational materials

Semester

First semester

Assessment method

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING