UCL Université catholique de Louvain

WRPR2330

2015-2016

Utilisation des radioisotopes et des molécules marquées en biologie

3.0 credits	15.0 h + 15.0 h

Teacher(s) :	Gallez Bernard (coordinator) ; Vander Borght Thierry ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	Introduction to the use of radioisotopes : tracer, applications in vitro (pharmacology, RIA) and in vivo (with comparison to other imaging modalities) Preparation of radiolabelled molecules : nuclear reactions (neutron activation, charged particles, fission, generators), radiochemistry Two examples illustrated from the nuclear reaction, radiochemistry, pharmaceutical conditioning, quality controls, and use in nuclear medicine (+ comparison/integration of other modalities for the diagnosis assessment) : - 99mTc generator, diphosphonate kits for the use in bone scintigraphy - 18F-fluorodeoxyglucose and applications in PET oncology
Aims :	Answer to three fundamental questions : why and how to use a radioactive isotope, and how to prepare it ? *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Faculty or entity in charge:	CRPR

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Physics	PHYS2M	3	-	
Master [120] in Biomedical Engineering	GBIO2M	3	-	
	RPHY9CE	3	-	
	RFAR9CE	3	-	