

## Block view of the study programme

Or Th Pr Au Cr

### Block 1

#### Information

Bernard PIROTTE  
 Department of Pharmacy  
 B36 - CHU - 4000 Liège  
 Tel.: 04/366.43.65.  
 Email: B.Pirotte@ulg.ac.be

#### Presentation

This training primarily responds to a need for future "radiopharmacists". It shall in particular facilitate access to the Ministry of public health of their approval as officials responsible for monitoring compliance and quality of radioisotopes used therapeutically (title of radiopharmacist awarded by the federal agency for nuclear control - FANC, article 47 of the royal decree of 20 July 2001).

This training may also be interesting for hospital and industrial pharmacists during their professional activity, as they will face the quality control and/or deliver radiopharmaceutical medicine.

Finally, this certificate is open to all holders of a master's degree (pharmacists, doctors, physicists, chemists, graduates in biomedical sciences, etc.) who wish to perfect their knowledge of radiopharmaceuticals.

As regards the approval of the title of radiopharmacist by the Ministry of Public Health, accessible only to qualified pharmacists, the certificate must be completed by a placement of at least one year in a hospital and industrial environment, during which the applicant will deal with the preparation and quality control of pharmaceutical products.

#### Special conditions of access / students concerned

This training programme is aimed at holders of a master's degree in pharmacy, medicine, physics, chemistry or biomedicine. Recognition of the title of radiopharmacist is only accessible to qualified pharmacists.

Applicants who don't meet these conditions will be examined by the coordinator in charge of the training programme, on the basis of their file.

Prerequisites: a university degree providing a minimum knowledge of medication (chemical, analytical, pharmacotherapeutic, regulatory aspects, etc.).

#### Duration

One year (44 credits) or two years (104 credits) for candidates who wish recognition of the qualification of radiopharmacist from the Ministry of Public Health. The second year is dedicated to an additional placement of one year in both a hospital and industrial environment. This placement must take place under the supervision of a placement supervisor who is an approved radiopharmacist, active in the field.

#### Collegiality

Coordinators : Bernard PIROTTE  
 ANDRE LUXEN, LAURENT DREESEN, DAVID STRUVAY, VERA PIRLET, CHANTAL HUMBLET, PHILIPPE MARTINIVE, ALAIN SERET, JOËL AERTS

#### Assessment

Oral and written exams; training report

#### Registration

Where?: ULiège lifelong learning unit

Documents to be presented: Dean's authorisation for enrolment

Enrolment fees: 500 EUR for the 1-year training; 1500 EUR for the 2-year training

#### Compulsory courses

CHIM0620-1	<i>Radiopharmaceutical Chemistry</i> - Patrick RISS	Q2	20	10	-	3
CHIM0621-2	<i>Production and application of radioelements</i> - Patrick RISS - [3d FW]	Q2	15	-	[+]	3
PHYS2009-2	<i>Modern physics</i> - Part A - Laurent DREESEN	Q1	20	-	-	3

	- Part D - David STRIVAY		-	15	-	
RADP0141-1	<i>Radioprotection</i>	Q2				<b>6</b>
	- Part a) Radioprotection techniques and complements - Véra PIRLET		30	15	-	
	- Part b) Legislation on radioprotection and the organisation of a radiotherapy, radiodiagnostic and nuclear medicine department - Véra PIRLET		10	-	-	
RADL0440-1	<i>Radiobiology</i> - Chantal HUMBLET, Philippe MARTINIVE	Q2	20	10	-	<b>4</b>
PHYS0952-6	<i>Physics fundamental issues in relation with medical x-ray diagnosis, radiotherapy and nuclear medicine</i>	TA				<b>4</b>
	- Dosimetry part - Véronique BAART, Klaus BACHER, Luca PELLEGRINI		20	-	-	
	- Imagery part - Alain SERET		25	5	-	
MCER2050-1	<i>Quality assurance and pharmaceutical management</i>	TA				<b>5</b>
	- Principes de management pharmaceutique - Walid EL AZAB		10	-	-	
	- Assurance qualité, partim a : Concepts de base et organisation de l'assurance qualité - Roland MARINI DJANG'EING'A, Joëlle WIDART		20	-	-	
	- Assurance qualité, partim b : Technologie analytique des procédés et analyse des risques - Joëlle WIDART, Eric ZIEMONS		7,5	-	-	
MCER2048-1	<i>Radiopharmacy</i>	TA				<b>8</b>
	- Aspects technologiques particuliers pour les médicaments radiopharmaceutiques - Mallory SALVÉ		10	-	-	
	- Radiopharmacologie des médicaments radiopharmaceutiques - Mallory SALVÉ		15	-	-	
	- Aspects réglementaires particuliers des médicaments radiopharmaceutiques - Mallory SALVÉ		5	-	-	
	- Analyse et contrôle de qualité appliqués aux médicaments radiopharmaceutiques - Mallory SALVÉ		10	-	-	
MCER2049-1	<i>Nuclear medicine</i>	TA				<b>2</b>
	- Diagnostic aspects - Roland HUSTINX, Pierre LOVINFOSSE		11	-	-	
	- Therapeutic aspects - Roland HUSTINX, Pierre LOVINFOSSE		4	-	-	
MSTG9050-1	<i>Internship</i>					<b>6</b>
	- Centre TEP/Cyclotron - COLLÉGIALITÉ - [1w Internship]		-	-	[+]	
	- Service center of nuclear medicine - COLLÉGIALITÉ - [1w Internship]		-	-	[+]	

#### Block 2

#### Compulsory courses

MSTG9051-1	<i>Hospital and industrial environment internship</i> - COLLÉGIALITÉ - [12mois Internship]		-	-	[+]	<b>60</b>
------------	--	--	---	---	-----	-----------