









Inserm is the only French public body entirely dedicated to biological, medical and population health research. medical and population health research. It has research laboratories throughout France, grouped into 12 Regional Delegations. Our institute brings together 15,000 researchers, engineers technicians and administrative staff, with a common goal: to improve the health of health through advances in our knowledge of living organisms and diseases, innovative treatments and public health research.

Joining Inserm means becoming part of an institute committed to parity and professional equality, diversity and support for its employees with disabilities, from recruitment and throughout their career. To well-being at work, Inserm is pursuing an active policy in terms of working conditions, based in particular on a fair balance between personal and professional life.

In 2016, Inserm was awarded the European HR Excellence in Research label and committed to developing its practices for recruiting and evaluating researchers

	Location
Department/ Unit/ Institute	Institut de recherche en Cancérologie de Montpellier – IRCM/U1194 Montpellier Cancer Research Institute
About the Structure	The IRCM develops cognitive, multidisciplinary and applied research in the field of cancer. This research involves researchers and clinicians and aims to understand the different stages of tumorigenesis, and ultimately to identify new diagnostic and therapeutic strategies against cancer.  The Institute's unifying theme is 'Molecular Targets and Cancer Therapy: Discovery, Biology and Clinical Applications'.  Under the joint supervision of Inserm, Montpellier Cancer Institute (ICM) and University of Montpellier, IRCM currently employs more than 240 people, including researchers, clinicians, technicians and students, organised into 17 research teams supported by high-performance technical facilities and competent support services.
Director	Nathalie Bonnefoy
Address	Campus ICM Val d'Aurelle - 208 rue des Apothicaires – 34298 Montpellier cedex 5
Administration	Inserm Délégation Occitanie Méditerranée
Job description	

Job Title Junior Scientist in Nuclear Medicine Dosimetry

### **Main activity**

We are looking for a junior scientist specialising in dosimetry, with expertise ranging from preclinical dosimetry (from cells to small animals) to clinical dosimetry (in patients). The successful candidate will work as part of a multidisciplinary team (radiobiologists, physicists, physicians) to assess the relationship between the absorbed dose in targeted internal radiotherapy (TRT) and the biological effects observed, particularly involving the radiation-induced immune response.

As part of a large-scale clinical project (https://immunoriv.fr/), you will be responsible for :

- Set up a centralised imaging database:
  - Centralising, checking and integrating gamma camera calibration data supplied by other sites.
  - Centralising, checking and integrating 'patient' imaging data supplied by other sites.
- Carry out clinical dosimetry (lesions and organs at risk) of NET patients treated with Lutathera, based on SPECT/CT imaging data (cohort 1).
- To quantify <sup>131</sup>I tumour uptake in thyroid cancer patients treated with TRT, using planar and SPECT/CT imaging data (cohort 2).
- To develop and write a dosimetric report for each patient.
- Develop and write methodological protocols: procedure for verifying/centralising images, dosimetry/quantification procedure, procedure to be provided to other participating sites, etc.).
- Collect clinical data from patients in collaboration with the RCA dedicated to the project (response to IVR treatment).
- Organise data from dosimetry/quantification and clinical data in a spreadsheet for analysis by biostatisticians.
- Regular presentations to the team on the progress of the work and the results obtained.

# Specificities(s) and job environment

The Radiobiology for Targeted and Personalised Radiotherapy team comprises 24 scientists and clinicians in the fields of radiobiology, external radiotherapy and nuclear medicine. As well as developing new radiopharmaceuticals for cancer imaging and therapy, Dr Pouget's team's research focuses on radiobiology and the role of targeted (radiative) and non-targeted effects in the anti-tumour efficacy induced by radiopharmaceuticals. The team has access to the entire radiation environment:

- The protected radiobiology laboratories, a dedicated animal facility (including μPET/CT and μSPECT/CT), and irradiation equipment.
- The Nuclear Medicine clinical department, where patients are treated with Targeted Internal Radiotherapy, and where imaging and dosimetry associated with the treatments are carried out.

A period of training by the medical physics team is planned, so that the junior scientist can quickly acquire full autonomy over the project. Regular progress reviews will be organised with the team.

### Knowledge

Imaging, dosimetry, medical physics.

### Skills / Aimer-faire

Competence / Aptitude for clinical dosimetry (internal targeted radiotherapy, selective internal radiotherapy, brachytherapy, external radiotherapy).

Competence in handling, processing and analysing imaging data.

Interest in medical physics, biology and the clinics.

#### **Aptitudes**

Rigour and method

Skills in data analysis and interpretation of scientific results

Ability to work as part of a team in a multidisciplinary environment, in collaboration with researchers, clinicians and medical physicists

Project organisation and follow-up

Autonomy

Excellent written and oral communication skills, in French or English.

### Experience(s)

Internship in clinical or preclinical dosimetry (internal vector radiotherapy, selective internal radiotherapy, brachytherapy, external radiotherapy) / imaging / image processing.

## Diploma and initial training

Master of sciences (MSc)

General Information		
Start of the contract	1 <sup>st</sup> February 2025	
Duration	12 months Renewable: YES (Renewable once)	
Temps de travail	<ul> <li>Full time</li> <li>Number of weekly hours: 38h30</li> <li>Annual leave: according to employer's practice Inserm</li> </ul>	
Tele-workable activities	□ OUI ⊠ NON	
Salary	Civil servants: in accordance with statutory conditions (salary scale corresponding to the post)	
How to apply		
Application deadline	January 15th 2025	
Contact	Julie Constanzo	
Contract workers	Send CV and motivation letter to <u>julie.constanzo@inserm.fr</u>	