

## **UZ BRUSSEL - NUCLEAR MEDICINE**

UZ Brussel is well recognized amidst the university hospital landscape of Flanders and Brussels region and is closely associated with the Medicine and Pharmacy Faculty of the Vrije Universiteit Brussel. The clinical Nuclear Medicine Department maintains the necessary specialist knowledge, the facilities and the legal certifications to be able to provide qualified diagnostic care, treatment and training.

### **Research axes & Expertise**

The nuclear medicine department is part of the Medical Imaging Centre at UZ Brussel and equipped with 4 SPECT cameras (1 SPECT/CT), and 2 PET cameras (1 PET/CT). The clinical activities include PET imaging in oncology with  $^{18}\text{F}$ -FDG,  $^{18}\text{F}$ -FET,  $^{68}\text{Ga}$ -octreotide and the full spectrum of conventional nuclear medicine applications. One patient room is dedicated to radionuclide therapy. Research activities involve phase I/II clinical trials with newly developed radiopharmaceuticals and hypoxia imaging.

### **Application fields**

- PET/CT imaging is applied for the diagnosis, staging, follow-up of cancer and radiotherapy planning.
- Brain imaging is applied for the differential diagnosis of dementia.
- Applications of SPECT imaging include imaging studies to detect bone diseases, cardiac ischemia, renal disorders, pulmonary embolism and parathyroid disorders.
- One SPECT camera is dedicated to paediatric applications
- Iodine-131 radionuclide therapy for treatment of thyroid disorders.

### **Major projects/partnerships/collaborations**

Ongoing clinical trials include

- a phase I trial in breast cancer patients with an in-house developed nanobody-based anti-HER2 imaging PET tracer
- non-invasive mapping of tumor hypoxia for Biologically Modulated Radiotherapy in patients with locally advanced head-and-neck cancer and patients stage III non-small cell lung cancer.

The department collaborates in several industry sponsored clinical trials in Neurology, Gastroenterology and Oncology.

### **Key figures**

- ?? nuclear medicine physicians, 1 in training
- 1 radiopharmacist
- 1 medical physicist

### **Contact**

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