Molecular Imaging Center Antwerp Center for Radiopharmaceuticals Antwerp



GROUP LEADERS

Prof. Dr. Steven Staelens (Molecular Imaging) Prof. Dr. Jeroen Verhaeghe (Engineering) Prof. Dr. Sigrid Stroobants (Nuclear Medicine) Prof. Dr. Filipe Elvas (Radiopharmacy)

RESEARCH AREAS

Radiotracer development Molecular Imaging using PET-CT and **SPECT-CT** Quantitative pharmacokinetic modelling

LOCATIONS

Campus Drie Eiken, Building UC 0.60 Antwerp University Hospital - Nuclear Medicine Department, route 11

CONTACT

Neuroimaging: steven.staelens@uantwerpen.be; Engineering: jeroen.verhaeghe@uantwerpen.be Radiopharmacy: filipe.elvas@uantwerpen.be

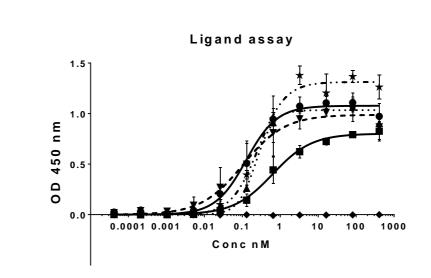
RESEARCH FOCUS

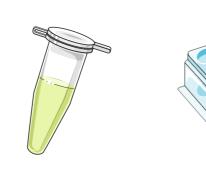
The Molecular Imaging Center Antwerp (MICA) is a multidisciplinary team focusing on translational molecular imaging of neurological and oncological processes using PET and SPECT in animal models of disease. Center for Radiopharmaceuticals Antwerp (CREANT) focuses on the development and (pre)clinical evaluation of radiotracers and cancer treatments.

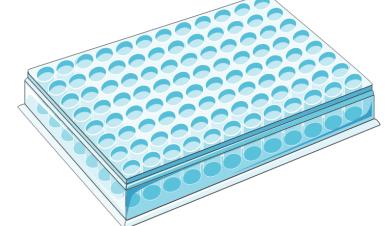
FROM BENCH TO BEDSIDE

1. Target selection 2. Design and synthesis of new ligands

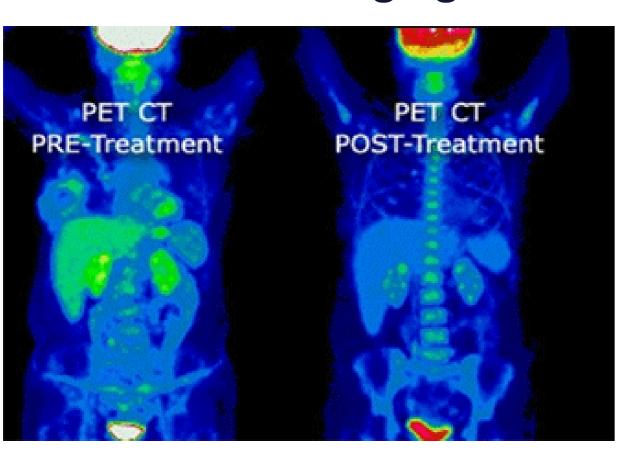
3. Compound screening in vitro



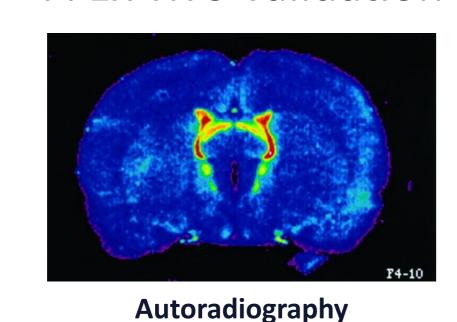




8. Clinical PET imaging studies

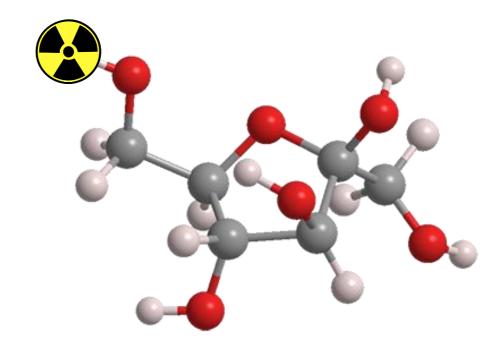


7. Ex vivo validation



Radiopharmacy **Molecular Imaging**

4. Radiosynthesis of the most promising ligands





5. *In vitro* evaluation of the radiotracer

6. In vivo preclinical imaging including mouse models of disease



PET, SPECT, CT imaging

Siemens Inveon

microPET/CT

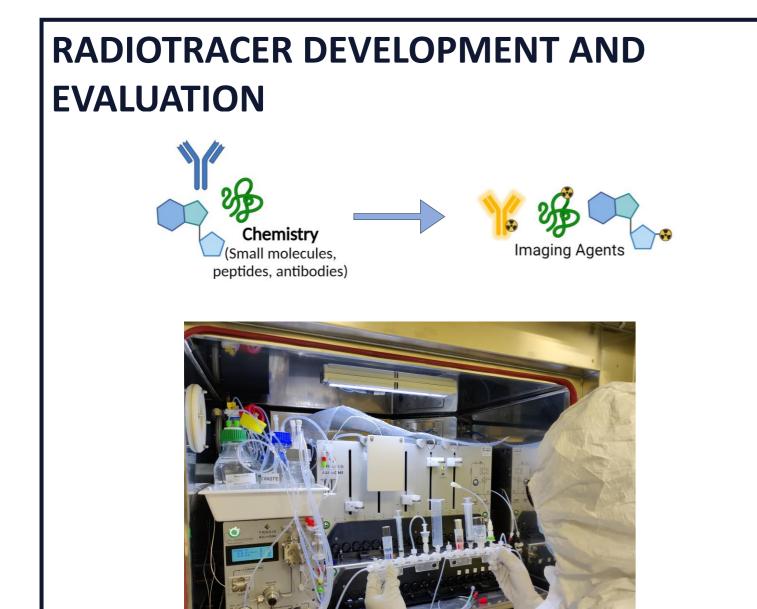
Milabs VECTor PET/SPECT/CT

Non-Blocked Blocked

MRI **PET Blocked**

RESEARCH PROJECTS

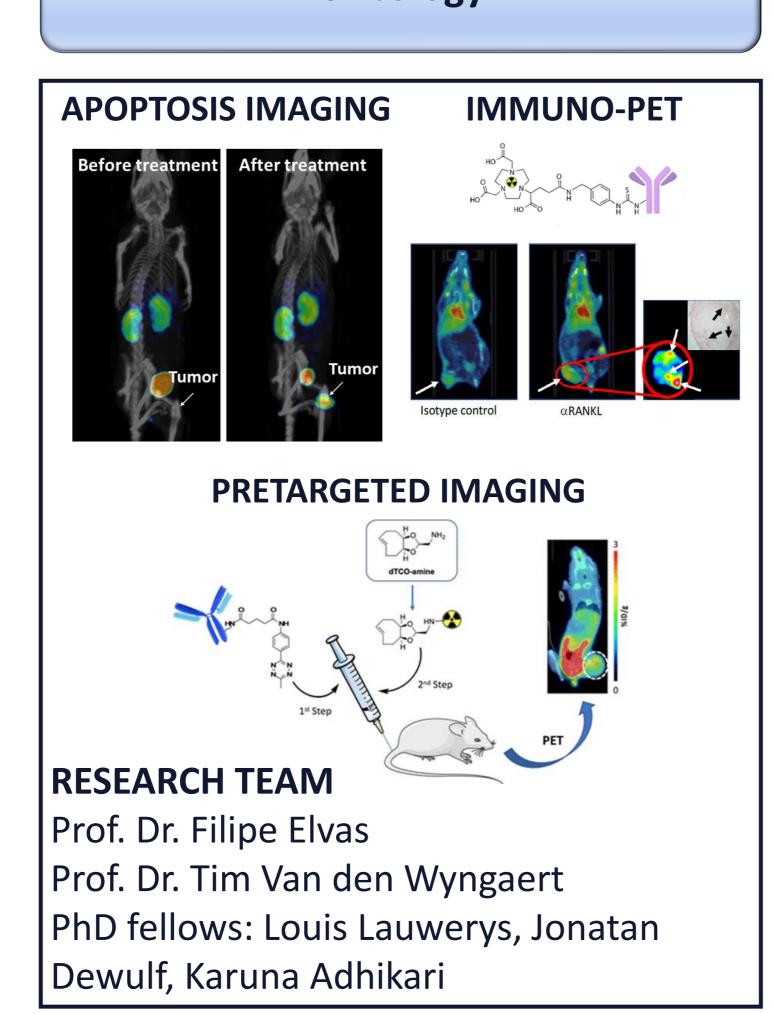
Tracer development



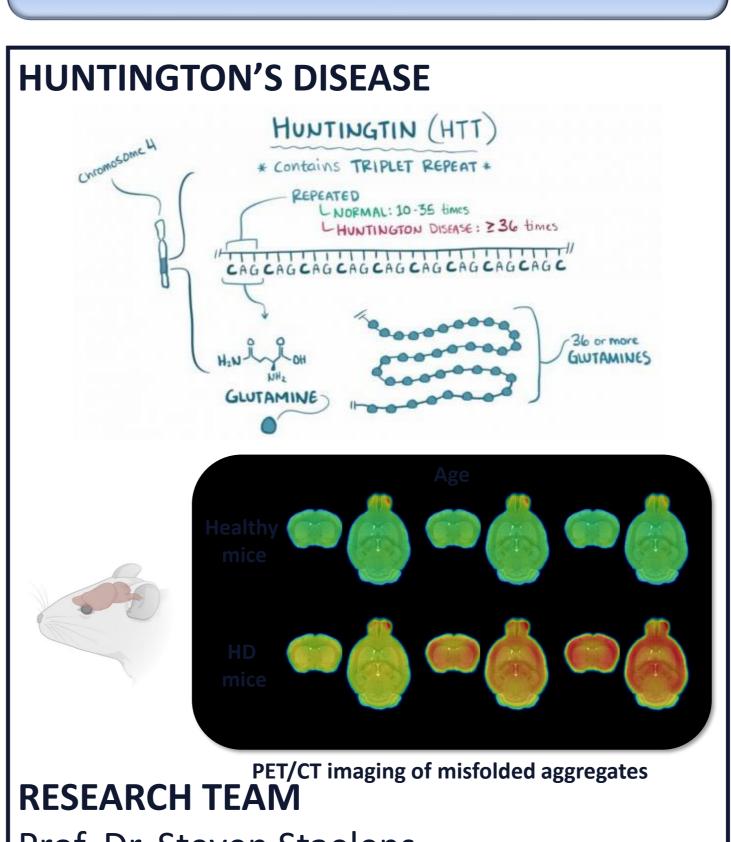
RESEARCH TEAM

Prof. Dr. Filipe Elvas Dr. Gustavo da Silva PhD fellows: Louis Lauwerys, Jonatan Dewulf, Karuna Adhikari

Oncology



Neuroimaging



Prof. Dr. Steven Staelens

PhD fellows: Franziska Zajicek, Liesbeth Everix, Jordy Akkermans

Engineering

