



Equipe MoBAT (Molécules BioActives et Traceurs)

Laboratoire Structure et Réactivité des Systèmes Moléculaires Complexes (UMR **SRS MC**)

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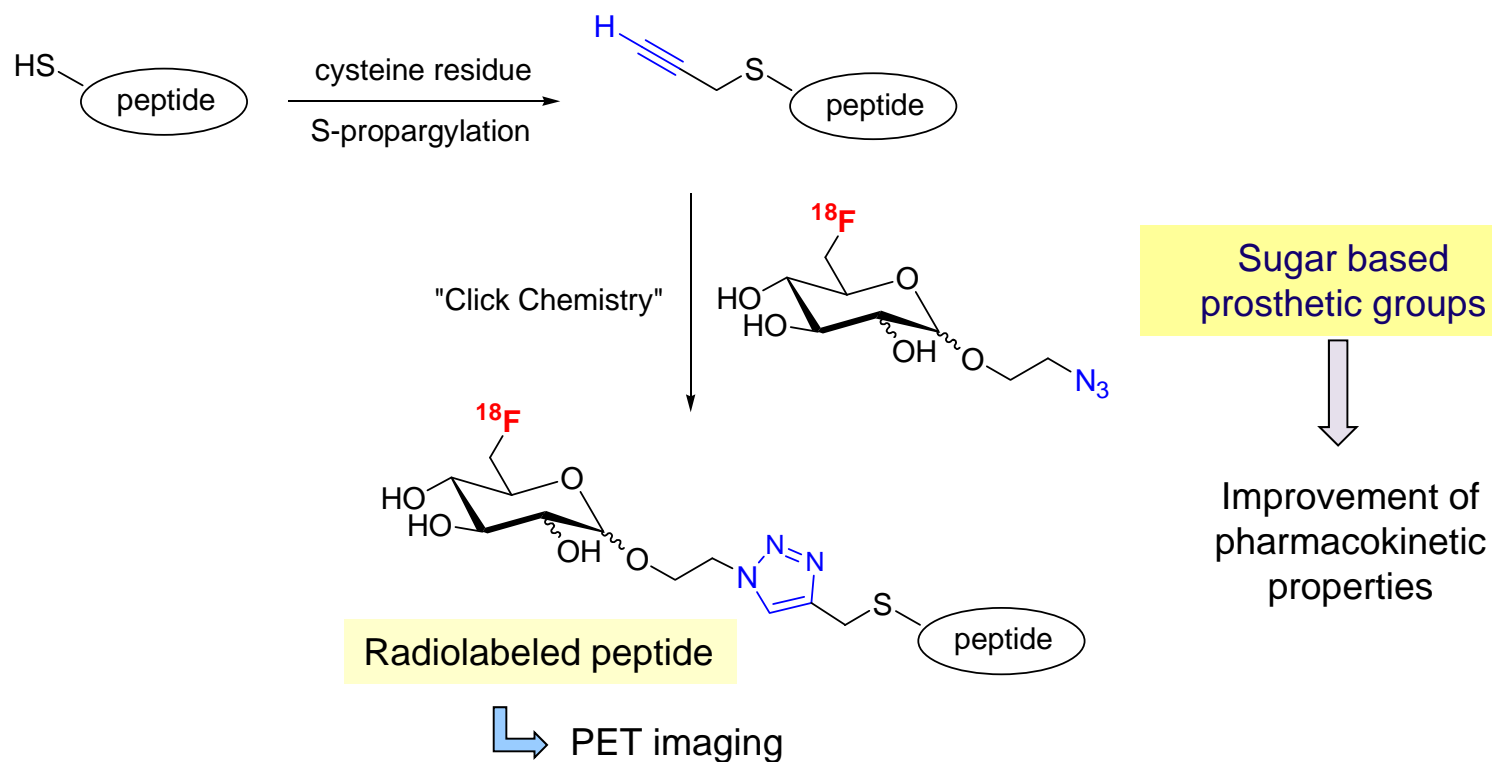
- Keywords:**
- **Bioactives molecules**
 - **Fluorine-18**
 - **Radiochemistry**
 - **PET imaging**

Principal Investigators : Sandrine Lamandé-Langle

Synthesis and radiosynthesis of fluoro sugar based prosthetic groups

Method: use of fluoro sugar to radiolabel peptides

Collaborations: NancycloTep



Chapleur, Y.; Vala, C.; Chrétien, F.; Lamandé-Langle, S.; *Toward imaging glycotools by click coupling*; Witczak, Z. J.; Bielski, R. Eds; *Click Chemistry in Glycoscience: New Developments and strategies*; Wiley; **2013**; 183-210.

Chapleur Y., Lamandé S., Collet C., Chrétien F., Process for the preparation of ^{18}F -radiolabeled triazolyl-linked glycopeptides as radiotracers via "click" chemistry, *PCT Int. Appl.* (**2014**), WO 2014006022 A1 20140109.

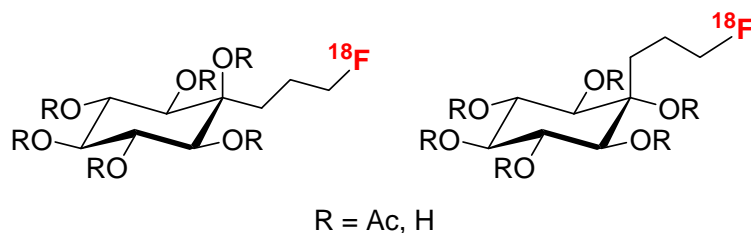
Vala, C. ; Chrétien, F. ; Balentova, E. ; Lamandé-Langle, S. ; Chapleur, Y. *Tetrahedron Lett.* **2011**, *52*, 17.

Synthesis and radiosynthesis of inositols based radiotracers

Method: use of inositols to image breast cancer

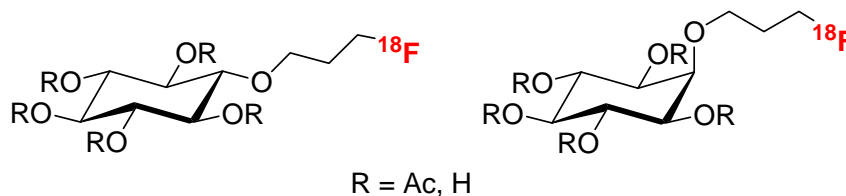
Collaborations: NancycloTep

1st series: Addition of an arm to the structure via a **C-C linker**



Synthesis
Radiosynthesis
Biological evaluation

2nd series: Addition of an arm to the structure via an **ether linker**



promising radiotracers in particular for breast cancer imaging