



Galactofuranose-related enzymes: challenges and hopes



Richard Daniellou
ICOA UMR CNRS 7311
Université d'Orléans

Mardi

11

Février

2020

10h30

UFR Sciences et Techniques
Mont-Saint-Aignan
Amphi CURIB

Specific targeting of viral and bacterial infections is of major importance for early diagnosis of many diseases. Galactofuranose (Gal_f) is absent in humans but is found as glycoconjugate moiety in a large number of human pathogens (*Aspergillus*, *Leishmania*, *Trypanosoma*, *Mycobacterium*) thus offering possibilities to target this carbohydrate in biotechnological applications using enzymes involved in its metabolism (UDP-galactopyranose mutase (UGM), Galactofuranosyl transferase (Gal_fT), Galactofuranosidase (Gal_f-ase).

Recently, the first and only Gal_f-specific enzyme from *Streptomyces spp.* and gene encoding it has been reported. Our recent findings related to these 3 classes of CAZymes will be presented as well as innovative applications in chemistry and therapeutic fields.

