



**Arielle
Nzoussi Loubota**
Post-Doctorante

Equipe
« Biologie Cutanée et
Microenvironnement »

IMPACT OF NUTRITIONAL STATUS ON ZONATION OF GLUCOSE METABOLISM IN THE LIVER: CONTRIBUTION OF THE FXR RECEPTOR

During this seminar, I will first present my thesis work carried out before my arrival at CBM, focusing on the zonation of glucose metabolic pathways according to nutritional status, with a focus on the role of the nuclear receptor FXR (Farnesoid X Receptor). The liver is a central organ that regulates glucose production and utilization. Structurally, this organ is organized into lobules with hepatocytes along the porto-central axis. Hepatic metabolic zoning refers to the fact that hepatocytes perform different functions depending on their location: periportal hepatocytes (close to the portal triad) participate in gluconeogenesis, while perivenous hepatocytes (close to the central vein) are involved in glycolysis and lipogenesis. This zonation is controlled by the Wnt/ β -catenin pathway, which interacts with the nuclear receptor FXR. This receptor, activated by bile acids, modulates glucose metabolic pathways depending on diet. The results obtained during this research highlight the role of nutritional status and FXR in this regulation, opening up avenues for targeted therapies against zoned liver diseases.

Secondly, I will present my current research project at CBM, which aims to characterize the effect of oxygen on the endocannabinoid system in skin cells. This project seeks to identify skin endocannabinoid receptors, assess the impact of oxygen on their expression, as well as that of phytocannabinoids. In the long term, this study could pave the way for new therapeutic approaches to skin diseases and associated pain.

Vendredi 19 septembre 2025 à 11h00
CBM - Salle Luciole
Rue Charles Sadron - 45000 Orléans