Sur invitation du Dr Jacques Pouyssegur :

Nous aurons le plaisir d'accueillir le **Dr Shamir CASSIM** (PhD de l'Université de Montréal, Canada) qui nous présentera le **Vendredi 15 Mars à 14h** en salle de réunion du CSM (2ème étage) un séminaire intitulé :

Role of Glucose metabolism in hepatocellular carcinoma phenotype

This intense metabolic activity displayed by the liver complicates the detection of primary tumor foci through PET-scan by reducing the detection contrast between healthy and tumor hepatocytes. In addition, hepatocellular carcinoma (HCC) cells exhibit greater metabolic plasticity than normal hepatocytes, and thus characterizing the metabolism of HCC cells become great of interest. The goal of my graduate work was to understand the capacity of HCC cells to metabolically adapt to a harsh microenvironment, and to define metabolic characteristics of HCC cells that enable the identification of new carbohydrate tracers. In the course of this work, we made the surprising finding that major metabolic alterations occur immediately after primary hepatocytes are removed from the liver, and that these changes persist or increase with time in culture. My work probing the metabolism of HCC cells demonstrated that their greater tumorigenicity likely stems from an increased ability to sustain diverse metabolic programs, for example by using their stored fatty acids under glucose-restricted conditions. Finally, through metabolomics and HCC patients datasets, we could define a metabolic signature that supports glycolysis and hypoxia as being important in the tumorigenicity of HCC.