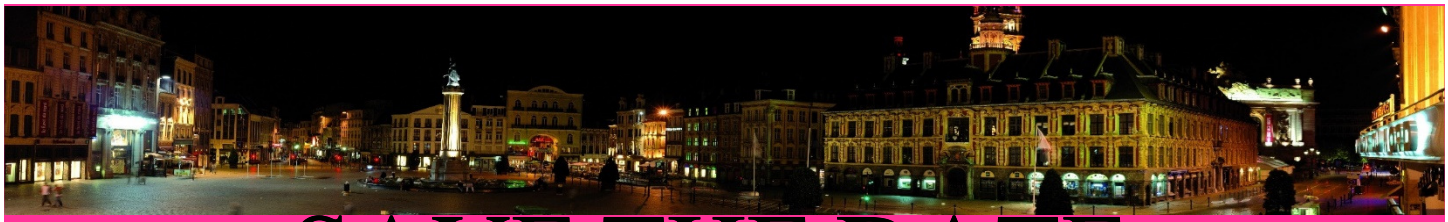

SAVE THE DATE

Pr. Philippe FROGUEL invites you to the EGID Conference on

Tuesday December 19th, 2018 at 11.00

Amphi D - Faculté de Médecine - Pôle Recherche - Université de Lille

Conference Entitled:

Gut Microbiota and Obesity; Can we Rescue Dysbiosis?

The high prevalence of metabolic diseases is a global health problem resulting in considerable health care costs. Lifestyle changes are seen as cornerstone in the management of these tightly-linked but heterogeneous disorders that progress over an individual's lifetime. In particular, the development and progression of obesity is linked to changes in many environmental factors interacting with individuals' genetic background and epigenetic factors. The gut microbiota is now seen a key actor at the interface between these environmental changes and host metabolism and inflammation. Obesity is associated with reduced gut microbiota diversity and modified composition, with an aggravation of dysbiosis with disease progression. Recent results from our team revealed that in severe obesity more than 75% of the subjects display low bacterial richness associated with functional anomalies. This severe dysbiosis is only partially restored after bariatric surgery despite major metabolic and inflammatory improvements. Nevertheless, some bacterial groups and gut microbiota-derived metabolites strongly associates with these improvements. Whether live microorganisms (i.e. probiotics) eventually combined to prebiotics can impact significantly gut microbiota composition and may induce a beneficial and significant effect in human metabolism and inflammation is still an open question. Moreover, which population or patient might benefit the most of these interventions impacting on the gut microbiome has to be deciphered. This presentation will examine whether modification of the microbiome can help in improving metabolic health and in which individuals. Funding acknowledgements: European Union's Seventh Framework Programme under grant agreement HEALTH-F4-2012-305312 (Metacardis), http://www.metacardis.net

By Professor Karine CLEMENT

Pr Karine Clément is full professor of Nutrition, Nutrition department, Pitié-Salpêtrière hospital and at Sorbonne University in Paris. From 2011 to 2016, she was the director of the Center of Excellence ICAN Institute de CardiometAbolism and Nutrition, dedicated to innovative Care, Research and training in the field of Cardiology and metabolic diseases. Inside the Institute, KC's team (INSERM/Sorbonne University team NutriOmics) is working on the pathophysiology of obesity adressing the altered interorgan cross-talks in this complex disease using genetics and functional genomics approaches. She performed a post-doctoral fellowship at Stanford University, CA, USA where she acquired competencies in large scale (systemic) approaches applied to complex diseases (1999-2000) and in 2001 she obtained a young INSERM "Avenir" team focused on the characterization of patterns of gene expression induced by environmental perturbations. KC's INSERM/University research team (NutriOmics Nutrition and obesity Systemic approaches) has been involved in genetic and functional genomics aspects of human obesity. She contributed to the identification of monogenic forms of obesity (Leptin receptor and MC4R mutations) and today patients suffering from these diseases benefit from new targeted treatments. Using functional approaches in commoner forms of obesity, her team showed notably that inflammatory and remodeling genes in different metabolic tissues are modulated by weight variation in parallel to immune cell accumulation changes. Deeper insight into mechanisms was undertaken. Her team is currently exploring the link between environment changes, immune systemic changes and functional modifications in the adipose tissue. The gut microbiota is of evidence a key actor of this link and explorations of this organ is deeply undertaken. KC contributed to more than 300 international publications, reviews and many international conferences in the field. She is a member and expert of several national and international scientific committees or science advisory boards in obesity and metabolism and contributes to several European Networks in genetics and functional genomics (Nugenob, Diogenes, Hepadip, ADAPT, FLIP, ePOS and recently coordinates METACARDIS a European program dedicated to the study of gut microbiota in cardiometabolic disorders www.metacardis.eu)

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