

23 July
2026

Thursday

LECTURE

MEET AND GREAT *

10:30 - 12:00

12:30 - 14:00



Gut bacteria as multi-level regulators of obesity and metabolic disease



BIOGRAPHY

Gut microbiome variations are linked to dietary habits and obesity risk in humans. Translational studies from humans to models show that the microbiota associated with obesity contributes to the hallmarks of metabolic disease. These studies demonstrate that the gut microbiome influences obesity through body-brain interactions originating in the gut that regulate immune and neuroendocrine pathways controlling energy balance. In my presentation, I will discuss how different intestinal bacterial strains associated with a metabolically healthy phenotype in humans and their metabolic products may help combat obesity by restoring endocrine or immune signaling from the gut to the brain and peripheral tissues. While some beneficial bacterial strains improve GLP-1 production and signaling via endocrine or paracrine routes, thereby exerting anti-diabetic effects, others enhance glucose metabolism and reduce body weight by decreasing inflammation through actions on innate or adaptive immunity. Although evidence from human intervention trials is still much needed, this translational research is deepening our understanding of the pathophysiology of metabolic disease and offers hope for developing microbiome-informed interventions to combat the complications of obesity more efficiently.

SPEAKER

Yolanda Sanz

Full Professor of the Spanish Research Council (CSIC)
Head of the Research Unit «Microbiome Innovation
in Nutrition & Health » at IATA-CSIC, Valencia, Spain

HOST:

Lecture series coordinated by the Luxembourg Institute of Health, the University of Luxembourg, and the Luxembourg Institute of Science and Technology, and organized within the framework of the MICRO-PATH Doctoral Training Unit coordinated by the University of Luxembourg and the Luxembourg Institute of Health

RESPONSIBLE SCIENTIST:

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* Please note that registration is mandatory for meeting after presentation by sending an email to michelle.roderes@lih.lu

Location:

Lecture:

House of BioHealth
Big conference room at the ground floor
29, rue Henri Koch,
L-4354 Esch-sur-Alzette

Meet and great:

House of BioHealth
FBS room 2nd floor
29, rue Henri Koch,
L-4354 Esch-sur-Alzette