



# GUT MICROBIOTA

Open Your Mind Seminar

Friday, Dec 3 2021  
1.30 pm – 3 pm

Arts et Métiers  
155 Boulevard de l'Hôpital  
75013 Paris  
Bézier Amphitheater

## Fecal microbiota transplantation : objectives and challenges

The intestinal microbiota is a large and diverse microbial community that inhabits our intestine. Over the past decade, our knowledge on gut microbiota (composition and function) has been recorded an exponential boom. Gut microbiota plays a key role in host nutrition, metabolism, immune cells homeostasis and protection against pathogens and is under the permanent influence of the environment. Dysbiosis (qualitative, quantitative and functional alteration of the gut flora) has been described in many diseases and particularly in inflammatory bowel diseases (IBD, including Crohn's disease and ulcerative colitis). The role of the microbiota is also mentioned in psychiatric, neurodegenerative or pulmonary diseases, suggesting communication between the intestine and the other organs. The link between gut microbiota and human health is mainly based on correlatives studies, and functional studies are now needed to decipher the mechanisms and offer new microbiota-based therapeutic approaches. Several approaches can be considered to restore microbiota composition and function, such as dietary intervention, pre- or probiotics or fecal microbiota transplantation (FMT). FMT consists in administering a preparation of fecal matter from a healthy donor to restore the gut microbiota of a patient suffering from a microbiota related-disease. During this presentation, the story of the FMT, its spectacular success in the treatment of recurrent *Clostridiodes difficile* infection, its preliminary promising data for other diseases (especially IBD), its potential as a mechanistic tool, the issues surrounding this practice and its future will be discussed.

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