

26 MAR
Thursday

LECTURE

MEET & EAT*

10:30 - 11:30 + 30 min. Q&A

12:30 - 14:00



Mechanisms of host-microbiota interactions in extraintestinal autoimmunity

BIOGRAPHY

Despite multiple associations between the microbiota and immune diseases, its role in autoimmunity remains poorly understood. Several mechanisms have recently been uncovered in extraintestinal autoimmunity (Nat Rev Micro 2020; Curr Op Immunol 2022). I will focus on the concepts of cross-reactivity on a molecular level and gut microbiota translocation on an organismal level. Cross-reactive antigens within the human gut and skin microbiota can instigate systemic autoimmune responses (Sci Transl Med 2018; Cell Host Microbe 2018). How mucosal immune responses to bacteria disseminate systemically in predisposed hosts is not well understood. Gut pathobiont translocation evolves within the gastrointestinal and leads to systemic Th17 responses and autoantibodies in mice and humans (Science 2018; Nature 2022; Sci Transl Med 2025). As a proof of principle, autoimmune pathology can be ameliorated by vaccination against, or dietary suppression of translocating model organisms (Science 2018; Cell Host Microbe 2019). In summary, I will cover cellular and molecular mechanisms of immune-microbiota interactions in autoimmunity and outline interventions to suppress autoimmune pathobionts, thereby restoring immune homeostasis.



SPEAKER

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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:

House of BioHealth
Big conference room at the ground floor
29, rue Henri Koch,
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