

Aberrant microbiota-host crosstalk in type I interferon deficient mice and its impact on metabolic dysfunction

Initiative: zukunft.niedersachsen (nur ausgewählte Ausschreibungen)

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The trillions of microbes that inhabit our gut, collectively known as the microbiome, affect many aspects of human health. It is now appreciated that alteration in composition and activity of the microbiome can contribute to diseases that plague modern civilization, such as obesity and diabetes, by inducing metabolic inflammation. Specifically, aberrations in microbiota composition and microbiota-derived metabolites have been linked to educating the immune system and to regulating weight gain and blood sugar levels. The foundation of this collaborative research project is the observation that by controlling a single gene that regulates the immune system, called interferon beta, the scientists can change the microbiome and affect weight gaining and obesity. To this end, they designed a unique international team of scientists that are experts in their respective fields to study this phenomenon and provide novel therapeutic treatments for obesity and diabetes.

Projektbeteiligte

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