

Lea Rosenberger

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Phd student at: LIMES Institute Bonn- Immunology and Environment;

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Main supervisor: PD Dr. Heike Weighardt / Prof. Dr. Irmgard Förster

Project title: Role of the chemokines CCL17 and CCL22 during infections with *Salmo*-

nella Typhimurium and metabolic stress

Research focus: This project aims on assessing the role of the chemokines CCL17 and

CCL22 and their receptor CCR4 in chronic infections in mice. Here we want to focus on host defense functions and T cell responses in a chronic infection model, which is induced by an attenuated *Salmonella*

Typhimurium strain (TAS2010).

Another part of this project focuses on deciphering the effect of the chemokines in chronic low-grade inflammation caused by obesity. We noticed that CCL17- and CCR4- deficient mice are heavier in the naïve state than wildtype mice. Since both chemokines are expressed in adipose tissue, we assume that the CCL17/CCL22/CCR4 axis might play a role in the homeostasis or differentiation of adipose tissue. Therefore, we want to unravel the role of this axis in obesity mediated by a high-fat

Further we want to combine the obesity model with the infection model, to analyze how the metabolic syndrome contributes to the susceptibility of bacterial infections.

Personal interests

& motto:

Cooking, Yoga / "The more you know, the more you know you don't

know." - Aristotle

and gain new experiences

Advantages of being a MOI V fellow:

Additional network for scientific exchange; support for lab rotation and international stay, as well as several workshops to improve our skill set

MOI V fellow since: 04/2024



