

## **“Methods to study arterial leukocyte recruitment”**

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### **Coursedescription:**

Recruitment of leukocytes is a crucial event during onset and progression of atherosclerosis. The recruitment pattern in large arteries differs from the one in the microcirculation due to differences in shear force, flow speed, endothelial phenotypes, and resident cell composition. To understand the complex processes of arterial leukocyte recruitment, methods are needed that allow for assessment of the various processes underlying arterial leukocyte accumulation. In this course the students will see/learn the following techniques:

1. Flow cytometric analysis of mouse aortas (with Maik Drechsler)

References: Drechsler et al., Circulation, 2010; Gjurich BN et al., Methods Mol Biol, 2015

2. Ex vivo perfusion of the carotid artery

(with Almudena Ortega & Remco Megens)

References: Schmitt et al., Circulation, 2014

3. Intravital microscopy of the carotid artery (with Oliver Soehnlein)

References: Megens and Soehnlein, Methods Mol Biol, 2015