

Methods to study arterial leukocyte recruitment

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Course description:

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 participants will see/learn the following techniques:

1. **Flow cytometric analysis of mouse aortas** (with Quinte Braster)
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)
References: Schmitt et al., Circulation, 2014
3. **Intravital microscopy of the carotid artery**
(with Oliver Söhnlein, Patricia Lemnitzer)
References: Megens and Soehnlein, Methods Mol Biol, 2015