Announcement

Leukocyte trafficking across the vessel wall
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Cardiovascular Research publishes Focus review issues devoted to a specific research topic. A Focus issue on ‘Leukocyte Trafficking’ will bring together a series of papers that highlight recent advances in basic and translational research.

Inflammatory responses require efficient recruitment of leukocytes into the tissue. This process proceeds in a cascade-like fashion. Selectins and their counter receptors mediate the first contact of leukocytes with the endothelium, followed by rolling and integrin-mediated arrest. During rolling, leukocytes collect different inflammatory signals which can activate several signaling pathways leading to leukocyte adhesion to the endothelium and transmigration through the blood vessel wall into the inflamed tissue where they release potent oxidants, proteases, and cationic peptides, which may induce collateral tissue damage. Whereas inflammatory reactions are beneficial and necessary for host defense, they need to be balanced and controlled to prevent harmful consequences and tissue destruction. In this issue, we focus on leukocyte recruitment and functions during inflammation and development.

Topics that will be covered in invited review articles as related to this theme include:

- Selectins: more than rolling ligands
- Sheet anchor of neutrophils
- Leukocyte recruitment regulated by chemokines
- Intracellular signaling during leukocyte recruitment
- Squeezing through the endothelial barrier
- Regulation of leukocyte homeostasis in the circulation
- Platelets in leukocyte recruitment
- Leukocyte function during fetal ontogeny

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