“Recently, the view of neutrophils as anti-microbial cells that die shortly after phagocytosis has been challenged. Several neutrophil subsets have been described which can have either pro- or anti-inflammatory functionalities, offering exciting new opportunities for immune regulation. The ability to steer neutrophil function, activation or localization would be beneficial for many diseases. However, the basic knowledge on the timing, localization or even origin of neutrophil subsets is lacking. Using mouse and human endotoxemia models we investigate these existential questions of the different neutrophil subsets. In collaboration with the group of Jeroen Jansen at the Radboud University we developed unsupervised methods to analyze our flow cytometry data in a multi-dimensional disease specific space. In addition, we make use of in vivo human cell labeling as well as in vitro functional assays in order to further characterize these cellular subtypes”