

Kolloquium

Biomedizinische Technik und verwandte Gebiete

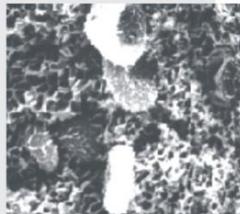
Sommersemester 2015

Donnerstag, 09.07.2015, 16:15 - 17:00 Uhr

Tobias A. Fuchs, PhD, Assistant Professor

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(Moderation: Prof. Dr. Wilhelm Jähnen-Dechent, Institut für Zell- und Molekularbiologie an Grenzflächen (Biointerface) im Helmholtz-Institut für Biomedizinische Technik der RWTH Aachen)



„Neutrophil Extracellular Traps – A link between infection and thrombosis“

Abstract:

Neutrophil Extracellular Traps (NETs) are lattices of extracellular DNA fibers decorated with histones and enzymes from neutrophil granules. Neutrophils release NETs via NETosis - an enzymatically-controlled program, which involves the break down of the nuclear envelope and the decondensation of chromatin. NETs are formed during infection to bind microbes and prevent bacterial dissemination. Neutrophils also release NETs during thrombus formation, where NETs immobilize blood cells and provide scaffolding for clotting, respectively. The antimicrobial and pro-thrombotic properties of NETs may explain the epidemiological association of infection with thrombosis.