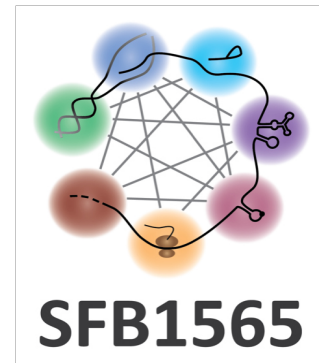




## SFB1565 Seminar



# Dr. Felix Randow

MRC Laboratory of Molecular Biology, Cambridge, UK

## How cells defend their cytosol against invasive bacteria

Felix Randow's research group is interested in cell-autonomous innate immunity, i.e., the ability of individual cells to defend themselves against infections. Intracellular pathogens colonize specific subcellular niches to access host resources but face compartment-specific immunity. Most intracellular bacteria reside in phagosome-derived bacteria-containing vacuoles, while only a few succeed in colonizing the cytosol, a counterintuitive situation given the abundance of nutrients in this compartment. Potent cytosolic defense mechanisms must therefore exist. In his talk, Felix Randow will discuss how cells defend their cytosol against bacterial invasion through anti-bacterial autophagy triggered upon damage of the phagosome membrane and through the ubiquitylation of lipopolysaccharide on bacteria. He will also discuss how *Shigella*, a cytosol-adapted bacteria avoid restriction by anti-bacterial autophagy.

Tuesday, January 13, 2026, 04:00 pm

Ludwig Prandtl Hall, MPI-NAT, Faßberg Campus, Göttingen

Hosted by Dr. Sonja Lorenz