



Der Vorsitzende des Promotionsausschusses

EINLADUNG

Hiermit lade ich ein zum öffentlichen Promotionskolloquium von

Frau M.Sc. Justine Bassil
Wirkstoffdesign und Optimierung
(Prof. Dr. Anna K. H. Hirsch)

am

Montag, 15. September 2025, 14:00 Uhr s.t.
per Videokonferenz; Link für MS Teams: <https://bit.ly/461uUjE>
Raum für die Prüfung: Gebäude E8.1 (HIPS), Seminarraum 0.27, EG

Thema der Dissertation:

Combating antimicrobial resistance through underexplored drug targets and drug-delivery systems

Antimicrobial resistance is a growing threat to modern medicine, calling for innovative treatment strategies. This dissertation tackles this challenge by investigating underexplored drug targets and enhancing drug delivery systems. The study presents new inhibitors of energy-coupling factor transporters (ECF-T), a unique bacterial nutrient-uptake system absent in humans. These inhibitors were identified and optimized through hit discovery techniques, SAR studies, and biological profiling. In addition, pH-responsive dynamic polymers, known as biodynamers, were designed to enable real-time intracellular degradation tracking and targeted drug delivery. These findings offer promising strategies to combat resistant infections and improve treatment efficacy.

Saarbrücken, 1. September 2025

Prof. Dr. Clouds-Michael Lehr
(stellv. Vorsitzender des Promotionsausschusses)