

Press release**Universität Greifswald****Jan Meßerschmidt**

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<http://idw-online.de/en/news758001>Miscellaneous scientific news/publications
Medicine
transregional, national**Greifswald Junior Research Group in Search of New Anti-Infectives in the Fight against Multi-Drug Resistance**

Multi-drug resistant microbes have been on the rise for several years. They were responsible for more than 33,000 deaths in Europe alone in 2018. The Federal Ministry of Education and Research (BMBF) has granted funds to a junior research group at the University of Greifswald that amount to two million euros over a period of five years. The junior research group, which was successfully proposed by Dr. Katharina Schaufler, investigates alternative therapy strategies in the fight against multi-drug resistant microbes.

We find ourselves at the start of an age in which we can no longer rely on the guaranteed effectiveness of antibiotics. Even today, certain infectious diseases, such as sepsis, pneumonia and urinary tract infections can no longer be treated reliably. Multi-drug resistant microbes are already and will continue to be one of the greatest challenges to the global health system. Two important multi-drug resistant bacteria can be found in the species *Escherichia coli* and *Klebsiella pneumoniae*. The BMBF junior research group 'Disarming Pathogens as a Different Strategy to Fight Antimicrobial-Resistant Gram Negatives' (DISPATch MRGN) identifies and investigates the success features of these bacteria.

'Our junior research group aims to find out which tricks and knacks are used by these bacteria to make us ill and themselves resistant. We require knowledge about these bacteria to be able to develop new anti-infectives to combat infectious diseases. For example, it is possible to develop anti-infectives that attack the characteristics of bacteria that make us ill, thus weakening the effects of an infection. Particularly for milder infections, this kind of anti-infective can represent a sensible alternative to the use of traditional antibiotics,' explains Dr. Katharina Schaufler, head of the University of Greifswald's junior research group for research into infectious diseases.

Adopting new approaches, the BMBF junior research group applies a broad range of methods to specifically combat the bacteria that trigger diseases. These range from traditional methods of micro and molecular biology, to bioinformatics and novel methods of pharmaceutical biology. The results of the fundamental research shall flow directly into application. Therefore, the project brings together national and international experts from science and industry to work hand in hand.

Further InformationResearch group Pharmaceutical Microbiology at the University of Greifswald's Institute of Pharmacy <https://pharmazie.uni-greifswald.de/en/institut/abteilungen/pharmaceutical-biology/pharmaceutical-microbiology/research/>**Media Photo**<https://www.uni-greifswald.de/universitaet/information/aktuelles/medienfotos/medienfotos-november-2020/>Contact at the University of Greifswald
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Portrait of Dr. Katharina Schaufler, PhD
Photo: Till Junker