

## PROFILE AREA

# INFECTIONS AND INFLAMMATIONS

### Our Research

Inflammation is one of the most common clinical phenomena in medicine and it may or may not be induced by infections. In spite of the development of antibiotics and vaccines, infections are still responsible for a large number of diseases and deaths worldwide every year. This applies both to the industrialised world with its annually recurring flu epidemics, and to infectious diseases associated with poverty that may spread quickly round the world via modern transport routes – diseases such as HIV or malaria.

62% of Germans are worried about resistance to antibiotics (source: consumer poll by BfR Verbrauchermonitor 02/18). In 2015, the estimated number of deaths caused by antibiotic resistance was 33,000, tendency increasing. However, general practitioners test antibiotic resistance in only 15 out of 350,000 infections treated by antibiotics (= 0.004%).

Scientists within the Campus Profile Area are working towards a better understanding of infections and the illnesses they cause. Their goal is to develop preventive and diagnostic procedures and to identify and validate new approaches to therapies.

### Our Key Questions

- Sick because of antibiotic-resistant germs?
- What helps when antibiotics no longer work?
- How can we identify new pathogens in the early stages and render them harmless?

### FCMH Partners



### Contact

Forschungscampus Mittelhessen  
(FCMH)

Management Office

Senckenbergstr. 3

35390 Giessen

+49 641 99 16481

[geschaeftsstelle@fcmh.de](mailto:geschaeftsstelle@fcmh.de)

[www.fcmh.de](http://www.fcmh.de)



[fcmh.de/infect](http://fcmh.de/infect)

## PROFILE AREA

# INFECTIONS AND INFLAMMATIONS

### Current Research Projects

- DFG FOR 2497 Pemphigus – from Pathogenesis to Therapeutics (Pegasus)
- DFG RTG 2355 Regulatory Networks in the mRNA life cycle: from Coding to Noncoding RNAs
- DZIF core network for the study of multidrug-resistant bacterial organisms (R-Net)
- DFG CRC 1021: RNA Viruses – RNA Metabolism, Host Response and Pathogenesis (joint project with Campus Research Focus Microbiology and Virology)
- DFG CRC 84 Innate Immunity of the Lung: Mechanisms of Pathogen Attack and Host Defence in Pneumonia
- LOEWE-Centre Novel Drug Targets Against Poverty-Related and Neglected Tropical Infectious Diseases (DRUID)
- German Centres for Health Research (funded by the Federal Ministry for Education and Research): German Centre for Infection Research (DZIF), site network Giessen–Marburg–Langen (carried by Justus Liebig University Giessen, Philipps-Universität Marburg, THM University of Applied Sciences and Paul Ehrlich Institute)
- German Centres for Health Research (funded by the Federal Ministry for Education and Research): German Center for Lung Research (DZL), site network UGMLC–Universities Giessen and Marburg Lung Centre (Justus Liebig University Giessen, Philipps-Universität Marburg and MPI for Heart and Lung Research), formerly a LOEWE centre

### Research Infrastructure

- German Centre for Infection Research (DZIF); joint institution by Justus Liebig University and Philipps-Universität Marburg; speaker Trinad Chakraborty (JLU), deputy speaker Stephan Becker (UMR); in cooperation with the Campus Research Focus Lung and Heart Medicine
- Centre for Infection and Genomics of the Lung (CIGL); Justus Liebig University Giessen: Central site of the national lung biobank and of the national reference centre for the genomics of pulmonary infections with the necessary processing plants, robotics and storage facilities for tissue and cells.

### Contact Persons

**Justus Liebig University Giessen**

**Prof. Dr. Trinad Chakraborty**  
Institute for Medical Microbiology  
+49 641 99 41250  
[trinad.chakraborty@mikrobio.med.uni-giessen.de](mailto:trinad.chakraborty@mikrobio.med.uni-giessen.de)

**Philipps-Universität Marburg**

**Prof. Dr. Stephan Becker**  
Department of Medicine  
Institute for Virology  
+49 6421 28 66253  
[becker@staff.uni-marburg.de](mailto:becker@staff.uni-marburg.de)

### More Information



[fcmh.de/infect](http://fcmh.de/infect)

Photo Credit: Anna Schroll/Hessen schafft Wissen