Over 500 doctors and scientists from 35 establishments collaborate at the German Center for Infection Research (DZIF), jointly developing new approaches to prevent, diagnose and treat infectious diseases. This synergistic alliance of universities, hospitals and research institutes has established a globally unique infrastructure—aiming to effectively translate research results from bench to bedside, and vice versa: applying insights from clinical practice to research.
**CHALLENGES IN INFECTION RESEARCH**

Infectious diseases are a leading cause of death worldwide. Current problems such as antibiotic resistance, emerging viruses and bacteria, as well as the rapid spread of pathogens across national borders present physicians with new challenges. The World Health Organisation’s figures speak for themselves:

- Approximately 10.4 million people contracted tuberculosis in 2015.
- In 2015, around 212 million new cases of malaria were registered, with 429,000 deaths.
- At the end of 2015, approximately 36.7 million people were living with HIV worldwide, and 2.1 million people newly contracted the disease that year.
- 400 million people suffer from chronic viral hepatitis.
- Half the world’s population carries the gastric pathogen Helicobacter pylori; it can cause gastric ulcers and gastric cancer.
- According to Robert Koch Institute estimates, several hundred thousand patients get infected with so-called hospital superbugs in Germany alone every year—with up to 15,000 deaths.

**RESEARCH AREAS AND INFRASTRUCTURES**

**Research Areas**
- Emerging Infections
- HIV
- Infections of the immunocompromised Host
- Healthcare-associated and Antibiotic-resistant bacterial Infections
- Tuberculosis
- Hepatitis
- Novel Antibiotics
- Malaria
- Gastrointestinal Infections

**Infrastructures**
- Biobanking
- Data 
- Clinical Trials
- Animal Models
- Workforce
- Product Development
- Vaccine Development
- Clinical Development
- Public Health
- Epidemiology
- Technology
- Clinical Trials

**TRANSLATION: GETTING TO NEW DRUGS FASTER**

The DZIF’s fundamental goal is to more rapidly translate laboratory findings into new drugs, vaccines and diagnostics, and to use knowledge from clinical practice for research. Close collaborations between scientists, doctors, trial participants and patients, as well as a continuous multi-directional exchange of information, help to avoid costly wrong decisions.

**COLLABORATING INTERNATIONALLY**

Taking up global challenges in infection research calls for international collaborations. From the start, the DZIF has been strengthening collaborations with partner institutions in Africa in order to investigate diseases like malaria, tuberculosis and HIV where they predominantly occur. Additionally, a hospital in Romania has been included in the network for tuberculosis research. The DZIF is working on HIV and hepatitis together with the French institute INSERM and the Institut National de la santé et de la recherche médicale.

Furthemore, the DZIF is one of nine founding organisations of CARA (Conscience of Antimicrobial Resistance Accountability): an international alliance that aims to ensure that effective antibiotics will also be globally available in future. Beyond this, the DZIF is involved in the newly founded vaccine initiative CEPI (Coalition for Epidemic Preparedness Innovations). CEPI aims to develop vaccines that can be used immediately in the event of an emergency, following the experiences made with Ebola, Zika and MERS.