

## **"HyReKA" investigates the spread of antibiotic-resistant bacteria by sewage**

*Thomas U. Berendonk*

### **Abstract**

Antibiotic-resistant bacteria are increasingly being isolated from the outpatient population, while the number of newly approved antibiotics is decreasing. Modern medicine is faced with the problem that infections may have to be treated with a considerable amount of time or, in the worst case, can not be treated. This problem is not only by the WHO defined as a threat to the world's population, and calls for strategies to stop the spread of antibiotic resistance in pathogens. As these multiresistant bacteria are also increasingly isolated from the outpatient population. This suggests that resistant pathogens enter the environment and are transmitted back to humans.

The partners of the HyReKA Collaborative Project have set out to characterize the entry pathways of antibiotic-resistant bacteria, antibiotic resistance genes and antibiotic residues of humans or animals in the environment qualitatively and quantitatively. Unlike previous projects, classical hygienic microbiological methods are combined with modern molecular biology methods, to identify potential risks.