

Tenth episode of the science podcast "exzellent erklärt" now online

Start Time: Friday, April 1, 2022

End Time:



Microbial balance is the basis for a healthy life - whether in humans, animals or plants. Even waters and soils, and thus entire ecosystems, depend on it. If this dynamic equilibrium of bacteria, fungi and other microorganisms becomes unstable, this can have serious consequences.

Research into the microverse is all about the communication and interaction of the tiny creatures with each other and with their environment. After all, they have often been living together for millions of years and are rarely found in isolation.

Prof. Brakhage tells us that the next antibiotic agent may be waiting to be discovered in our front garden. And from this, in the best case, a drug can be developed that specifically attacks undesirable microorganisms and does not affect the beneficial ones.

[Prof. Axel Brakhage](#) is the spokesperson of the [Balance of the Microverse](#) Cluster and Director at the [Leibniz Institute for Natural Product Research and Infection Biology](#). Among other things, he researches human pathogenic fungi that can pose a threat to us humans. His focus is on the mould *Aspergillus fumigatus*. This fungus can be found everywhere in our environment and can trigger life-threatening aspergillosis in pre-diseased, immunosuppressed people.

The [Balance of the Microverse](#) Cluster of Excellence combines the strengths of microbiology, chemical biology, infection biology, medicine, ecology, optics/photonics, materials science, bioinformatics and ethics at the Friedrich Schiller University Jena, the University Hospital and eight non-university research institutes. The basis for the concept of the Microverse Cluster is the successful excellence graduate school Jena School for Microbial Communication. Four collaborative research centres, other coordinated research programmes and regional industrial partners strengthen the Microverse Cluster.

The German science podcast on current science topics reflects the research diversity of Germany's leading research institutions and Clusters of Excellence: from Africa Studies to Quantum Physics. In each episode, listeners can expect insights into the interdisciplinary work of one research network. The researchers of the clusters of excellence, funded by [DFG](#) talk to podcaster Larissa Vassilian about how they want to find scientifically based answers to relevant topics of our time – for the society of tomorrow. Listen in and follow us: <https://exzellente-erklart.podigee.io/>