

**Department of Biochemistry and
Microbiology Fermentation Webinar:**

Wednesday, October 14, 2020

1:00 pm – 2:00 pm

Join Zoom Meeting:

<https://zoom.us/j/97980073745?pwd=Um9scnBBVWJWQzZkbnidHZMSy9lUT09>

Meeting ID: 979 8007 3745

Passcode: qS0Ztn



Dr. Kornelia Smalla

Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for
Epidemiology and Pathogen Diagnostics, Braunschweig

**The transferable resistome of bacteria in the agro-ecosystem –
potentials and limitations of methods**

Summary:

The environmental dimension of antibiotic resistance is an important component of the ONE health concept in the fight against antibiotic resistance. In my talk, I will focus on antibiotic resistance genes in plant and soil associated bacteria - the intrinsic and the acquired resistome. I will show recent insights on how organic fertilizers influence the abundance and transferability of antibiotic resistance genes in soil and affect the transferable resistome of plant-associated bacteria.

Bio:

Kornelia Smalla studied chemistry and did her PhD in Biochemistry at the Martin-Luther-University in Halle. Beginning of the nineties, she started to pioneer the development of cultivation-independent methods for microbial ecology. After the habilitation in the field of microbiology was obtained she became a Professor at the Technical University Braunschweig. Her main scientific interest is how soil and plant associated bacterial communities change in response various biotic and abiotic factors. Her particular long-term interest is antibiotic resistance and horizontal gene transfer.

Host: Dr. Tamar Barkay