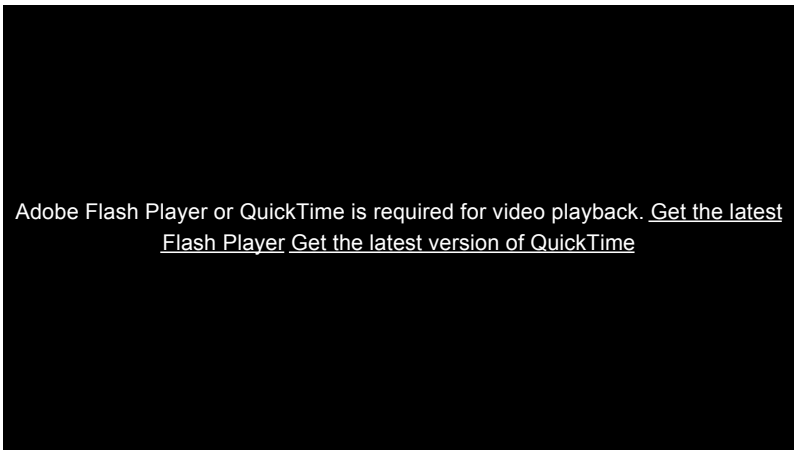
Dr Anne-Marie Krachler

Dr Anne-Marie Krachler, from the Institute of Microbiology and Infection at the University of Birmingham describes, in 60 seconds, her research into developing drugs which aim to prevent attachment of bacteria to body tissue and thereby reduce the chances of infection.



I'm Anne-Marie Krachler, from the Institute of Microbiology and Infection.
My research group studies how bacterial pathogens attach themselves to host tissue and how this contributes to infections. Bacteria use sticky proteins on their surface, so called adhesins, to attach themselves and we study how these molecules work.

Why are we studying this? Antibiotic resistant bacteria are a rising problem which means we have to come up with new ways to prevent and treat infections.

Attachment of bacteria to host tissues is a universally required early step during infections so targeting this process holds promise as an alternative approach to conventional antibiotics. If we can develop drugs that prevent attachment, bacteria would just get washed away by body fluids and cleared from the organism before they could do any harm.

We have successfully tested some prototypes of anti-adhesive molecules against infections in the lab. But, ultimately, we would like to be able to move them towards clinical use to treat infections which have become resistant to conventional antibiotics.

Dr Anne-Marie Krachler's profile (http://www.birmingham.ac.uk/schools/biosciences/staff/profile.aspx?ReferenceId=33241&Name=dr-anne-marie-krachler)