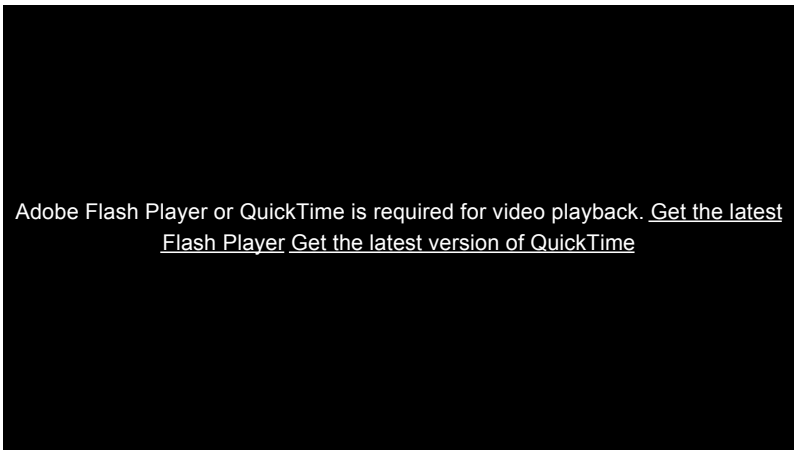
Professor Chris Thomas

Professor Chris Thomas, of the School of Biosciences at the University of Birmingham, describes, in 60 seconds, his research into the problems of antibiotic resistant bacteria that affect the health of humans, animals and plants in our environment.



I'm Chris Thomas, a professor of molecular genetics in the School of Biosciences.

The research in my lab is driven by the problems of antibiotic resistant bacteria that affect the health of humans, animals and plants in our environment. In the 70 years since the introduction of penicillin into clinical use, and the successive waves of new antibiotics, multiply resistant bacterial strains have developed.

Many antibiotics are made naturally by bacteria using assembly lines of enzymes. We are using genetic manipulation to understand these factories so that we can build new factories and thus create new antibiotics. But we are also working with the little genetic elements called plasmids that carry many of the resistance genes in bacteria and trying to devise ways to kick them out along with their resistance genes.

We have a system that works in the lab but need to take it into clinical trials to see if it works in practice.

Professor Chris Thomas' profile (http://www.birmingham.ac.uk/schools/biosciences/staff/profile.aspx?ReferenceId=9733&Name=professor-chris-thomas)

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