

Australia uncovers resistance gene in deadly E. coli

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This could be used to more efficiently track emerging resistance against critical last-line antibiotics

Scientists have pinpointed a gene that helps deadly E. coli bacteria evade antibiotics, potentially leading to better treatments for millions of people worldwide.

Australia's University of Queensland (UQ)-led study found a particular form of the bacteria – E. coli ST131 – had a previously unnoticed gene that made it highly resistant to commonly prescribed antibiotics.

Professor Mark Schembri, from UQ's School of Chemistry and Molecular Biosciences, said this 'resistance gene' can spread incredibly quickly.

The findings have given the team the first clues to explain how antibiotic-resistant E. coli ST131 has emerged and spread so quickly around the world.

E. coli causes more than 150 million infections each year, primarily urinary tract infections (UTIs). It's also one of the most common causes of sepsis, a disease that kills around 11 million people every year.

Now researchers' sights are set on creating better treatments to stop E. coli ST131 infections in their tracks.