

What causes drug-resistant ‘superbugs’? E. coli research provides clues

New data from a study conducted by the [Wellcome Trust Sanger Institute](#) suggests that drug-resistant “superbugs” are not necessarily out-competing other strains. The UK-based study is the first large-scale genetic study of Escherichia coli (E. coli).

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Results from the study, published in Genome Research, indicate that bloodstream infections were caused by over 200 different strains of E. coli. [...] New strains of E. coli were found to emerge over time, but rather than continuously rising, the strains tapered off reaching a balance with other strains.

Dr. Sharon Peacock, MRCP, PhD, a professor of clinical microbiology at the London School of Hygiene & Tropical Medicine said in a [press release](#), “The reason for this equilibrium may relate to the fact that all bacteria are constantly competing with others to survive in places where they are carried, such as the gut.”

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Researchers determined that the various types of genes each strain carried were a predisposition to their overall success. Some of the strongest genes endowed the bacterium to either survive in digestive tracts, or eliminate adversaries by cutting off their resources or killing them.

[The original study can be found [here](#)]

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Diversity of E. Coli Create a Complex View of Bloodstream Infections in Superbugs Study](#)