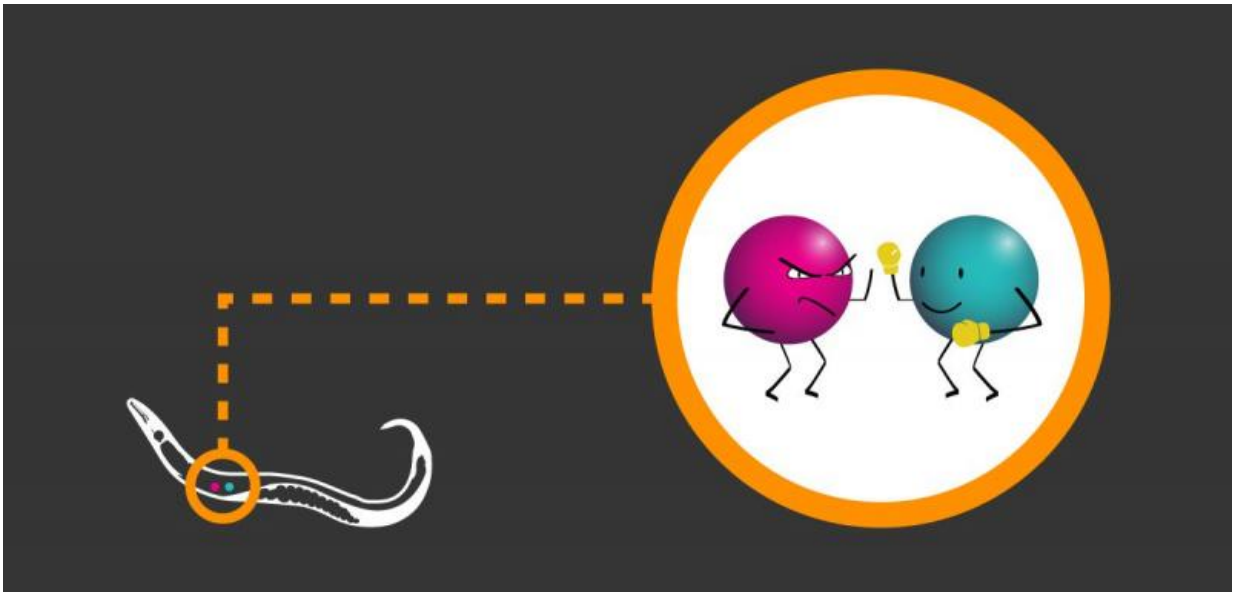


## Video: 'Good bacteria' make diseases less deadly

November 16 2016, by Stuart Gillespie, Oxford Science Blog

---



Defensive microbes could be used in the fight against disease. Credit: Dan Guy

In a new paper published in the journal *Nature Communications*, Oxford DPhil student Suzanne Ford from the Department of Zoology shows how the use of 'good bacteria' – or defensive microbes – could help fight diseases.

Using a [microscopic worm](#) infected both with a host-protective microbe and a harmful pathogen, the study demonstrates that the presence of a defensive microbe can force a pathogen to become less virulent.

Defensive microbes can also 'steal' [vital proteins](#) from pathogens to make themselves stronger, causing the pathogens to evolve to produce fewer such proteins. This, in turn, makes the defensive microbes weaker – but enough damage has already been done to the pathogen to stifle its future growth and virulence.

In a video produced by fellow Oxford DPhil student Sally Le Page for her 'Shed Science' YouTube series, Suzanne explains how, in the era of [antibiotic resistance](#), alternative strategies for disease control are of the utmost importance.

**More information:** Suzanne A. Ford et al. Microbe-mediated host defence drives the evolution of reduced pathogen virulence, *Nature Communications* (2016). [DOI: 10.1038/ncomms13430](https://doi.org/10.1038/ncomms13430)

Provided by University of Oxford

Citation: Video: 'Good bacteria' make diseases less deadly (2016, November 16) retrieved 18 April 2024 from <https://phys.org/news/2016-11-video-good-bacteria-diseases-deadly.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.