

Chlamydia utilizes Trojan horse tactics to infect cells

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A novel mechanism has been identified in which *Chlamydia trachomatis* tricks host cells into taking up the bacteria. Researchers from University of California San Francisco, led by Joanne Engel, report their findings in the Open Access journal *PLoS Pathogens* on October 6th.

Dr. Engel and colleagues show that *Chlamydia* coat themselves with a growth factor made by the cells of the organism they are infecting. This disguise allows the bacteria to infect cells, much like a Trojan horse. Once inside, *Chlamydia* induces the [host cell](#) to churn out more of the growth factor. This production of excess growth factor enables more of bacteria to camouflage themselves and infect other cells creating a positive feedback loop which enhances bacterial infection and spread.

C. trachomatis is the leading cause of non-congenital blindness in developing countries and is the number one cause of sexually transmitted disease and non-congenital infertility in Western countries. Understanding the [molecular mechanisms](#) of the host-pathogen interactions of *Chlamydia* infections will lead assist in the development of novel therapeutics, diagnostics, and preventative strategies.

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