

Gut-invading worms turn enemy T cells into friends

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Intestinal worms sidestep the immune system by inducing the development of suppressive T cells, according to a study published on September 27th in the *Journal of Experimental Medicine*.

Immune [T cells](#) are essential for the clearance of invading microbes, including intestinal worms, but turning off immune responses is essential for avoiding collateral tissue destruction. This job falls in part to a population of suppressive T cells called regulatory T (T reg) cells.

A team of researchers, led by Rick Maizels at the University of Edinburgh, show that gut-invading worms produce a [protein](#) that generates T reg cells in mice; in this way, the worms facilitate their own survival. When this T reg-inducing pathway was blocked, the worms were expelled from the body.

T reg cells allow worms to establish a foothold in the gut, but they're not all bad news. These cells also suppress allergic responses, which may explain why humans infected with intestinal worms tend to suffer less from allergies.

More information: Grainger, J.R., et al. 2010. *J. Exp. Med.*
[doi:10.1084/jem.20101074](https://doi.org/10.1084/jem.20101074)

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