

TB's secret 'pact'

Humans and the bacteria, *Mycobacterium tuberculosis* (Mtb), have formed an “agreement” through co-evolution that allows Mtb to persist peacefully in the body. The key to this relationship, the study’s researchers say, is the body’s tolerance of the bacteria, which is achieved by keeping immune responses by T cells under control. Scientists identified a protein in mitochondria, called CypD, that helped enhance survival in mouse models of tuberculosis by controlling T cell expansion and conferring tolerance to Mtb infection. Their study, published in *Science Immunology*, found that mice lacking CypD had increased susceptibility to Mtb. The scientists caution that T cells (common targets of current tuberculosis vaccination strategies) could inadvertently harm the body if not tightly regulated to maintain this tolerance. Although a third of the world’s population is chronically infected with Mtb, only five to 10% develop active disease, suggesting that certain infected individuals have evolved strategies to tolerate Mtb, rather than resisting and fighting it.

Apps that prompt parents about immunisation, because let’s admit, we’re not all super-parents

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