

How gene-swapping microbes helped humans evolve

Bacteria have been carrying out these horizontal gene transfers, or HGT for short, for billions of years. But it wasn't until the 1920s that scientists first realized what was happening. They noticed that harmless strains of *Pneumococcus* could suddenly start causing disease after mingling with the dead and pulped remains of infectious strains.

Sixty years on, we know that HGT is one of the most profound aspects of bacterial life. It allows bacteria to evolve at blistering speeds.

Animals aren't so fast. We adapt to new challenges in the usual slow and steady way. Individuals with mutations that leave them best suited to life's challenges are more likely to survive and pass on their genetic gifts to the next generation.

Except sometimes, they can...

Animal bodies are home to so many microbes that occasionally, their genes make their way into our genomes. And sometimes, these genes bestow their new hosts with incredible abilities.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [How Miraculous Microbes Help Us Evolve Better, Faster, Stronger](#)