

Controversy whether tardigrade product of massive horizontal gene transfer

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A team from the University of North Carolina at Chapel Hill published the first ever genome of a tardigrade — a group of endearing microscopic animals with a reputation for being nigh-invincible. Astonishingly, as recently reported, they found that around 6,600 of the animal's genes — a full sixth of its genome — had jumped in from bacteria and other foreign sources. And perhaps, they speculated, this massive horizontal gene transfer (HGT) explained the tardigrade's famed ability to withstand extreme conditions.

Just one week later, those claims are starting to unravel. A second team from the University of Edinburgh had also been sequencing the genome of the same species of tardigrade, ordered from the same supplier. And their results, [released as a preprint paper](#), are totally different.

They found very few horizontally transferred genes — as few as 36, and just 500 at the very most. They concluded that their rivals had sequenced DNA from bacteria that were living alongside the tardigrades and, despite their best efforts, had mistaken the genes of those microbes for genuine tardigrade genes.

Worryingly, they found that the UNC data included many reads that they hadn't seen at all — even though both groups sequenced the same animals! And most of these phantom reads were rare. Based on this, the Edinburgh team concluded that around 30 percent of the UNC genome probably came from contaminating microbes.

Read full, original post: [Rival Scientists Cast Doubt Upon Recent Discovery About Invincible Animals](#)