

## Why did sex evolve? It may protect against rare cancers, researchers suggest

In an essay published in the journal [PLOS Biology](#), scientists presented a theory which they say could answer a 50-year question of why sexual reproduction is preferred by 99 percent of eukaryotes: organisms whose nucleus is wrapped inside a membrane, from humans to mushrooms.

The scientists argue it could stop what are known as cheater cells, or transmissible cancer cells. Rare transmissible cancers exist in some animals including dogs, Tasmanian devils, and water-dwelling molluscs called bivalves. Cheater cells put the rest of a population of cells at risk by exploiting the community for [selfish gain](#).

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[I]n order to survive and reproduce, the first multi-cellular organisms had to fight internal cheater cells as well as infectious malignant cells from the outside. And as asexual reproduction makes identical organisms, this raises their risk of being invaded by transmissible cancers, the authors think.

Sexual reproduction, meanwhile, lowers the chance of an organism not only catching an infection, but passing it on to their children. Transmissible cancers are also less likely to be compatible with their host's cells if they are made sexually. This could help the immune system pick up and kill nasty invaders.

**Read full, original post:** [Sex evolved because it protects against rare contagious cancers, scientists think](#)