

Damaged or Missing Body Parts Could Be Regrown With the Flip of a Gene

A feature found in some creatures which allows for the regrowth of lost body parts may be possible in humans as well. Studies on mice have shown that altering gene p21 allowed damaged or lost tissue to regenerate, rather than scarring to take place.

Researchers at The Wistar Institute in Philadelphia found that the cells in altered mice didn't "mend" like normal adult mammalian cells do by scarring, but rather "created" like embryonic stem cells. The mice regrew their ears after being damaged.

Study lead Ellen Heber-Katz said that p21 responds to DNA damage by blocking cell cycle progression, preventing potentially cancerous growth. She proposes a therapy where p21 would only be altered at the site of the wound while a patient is healing.

