

Extinguishing the memory of fear, with a drug that changes the epigenome

A hurricane, a car accident, a roadside bomb, a rape — an estimated 50 to 60 percent of Americans experience extreme stress at some point in their lives. About 8 percent will be diagnosed with post-traumatic stress disorder, or PTSD.

One of the only effective treatments for PTSD is ‘exposure therapy,’ in which people are repeatedly exposed to their fear in a safe context. This treatment works partly because of how our brain encodes memories. Whenever we actively recall a memory, it becomes vulnerable to modification.

About half of people who get exposure therapy for PTSD get better, and half don’t. A mouse study published in *Cell* throws the spotlight on a drug that acts in concert with exposure therapy to help extinguish fear memories by changing the epigenome.

Read the full, original story: [Drug Tweaks Epigenome to Erase Fear Memories](#)

- [Can we inherit fear of a smell? The latest on transgenerational epigenetics](#), Genetic Literacy Project
- [Scientists Identify Genetic Changes that May Increase Risk of PTSD](#), Time