

GLP Podcast: Trauma changes your DNA? Lifelike sex robots; Have we cured leukemia?



Can traumatic life experiences leave an imprint on our DNA that we pass down to our children? Get ready, because AI-powered sex robots may be available in the near future. Have we finally found a cure for some cancers? Recent success with a novel gene therapy has some physicians crossing their fingers.

Join geneticist Kevin Folta and GLP contributor Cameron English on episode 152 of Science Facts and Fallacies as they break down these latest news stories:

- [Epigenetics and trauma: How the Rwanda genocide scarred survivors' yet-to-be-born children](#)

Do traumatic life experiences trigger epigenetic changes in our DNA that can be passed down to the next generation? Quite possibly. A recent study found that some pregnant women who survived the Rwandan Genocide may have experienced trauma-induced [DNA methylation](#) that their children also possess. Pregnant women who were not exposed to the same traumatic experiences and their children did not have the same differentially methylated regions (DMRs).

The researchers were only able to establish an association between trauma and changes in the epigenomes of women in the study; they did not show that the former caused the latter. Future studies with bigger sample sizes will be needed to further explore this epigenetic phenomenon.

- [Robosexuals: How close are we to the inevitable era of artificial intelligence-driven sex robots?](#)

The era of AI-powered sex robots—"talking, walking dolls that can carry a conversation, discern what a user wants, and give it to them"—may be closer than you think. Their rapid development speaks to our ability to harness technology to fulfill our desires, though it also raises some difficult ethical questions. How will these life-like dolls affect our ability to form romantic relationships? Could they discourage people from getting married and starting families? We may get answers to these questions in real time, as an increasing number of customers enter the market for AI sex robots.

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- [Cure for cancer? Two patients leukemia free a decade after breakthrough gene therapy](#)

CAR-T (Chimeric Antigen Receptor) therapy involves engineering a cancer patient's T-cells to target and destroy tumor cells circulating in the bloodstream. The immune cells are removed from the patient and armed with receptors that allow them to identify the cancer cells. After they're infused back in the patient's bloodstream, the souped up T-cells serve as "living drugs" that remain active throughout the patient's life.

Two of the first individuals to receive this groundbreaking treatment in 2010 were tumor free 10 years later. The therapy does not work equally well for everyone, and it can only be used to treat blood cancers. But scientists are cautiously optimistic that we may be nearing a cure for some cancers.

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