

## Podcast: Coronavirus isn't just a bad flu; COVID-19 vaccine may be delayed; and have we cured HIV?

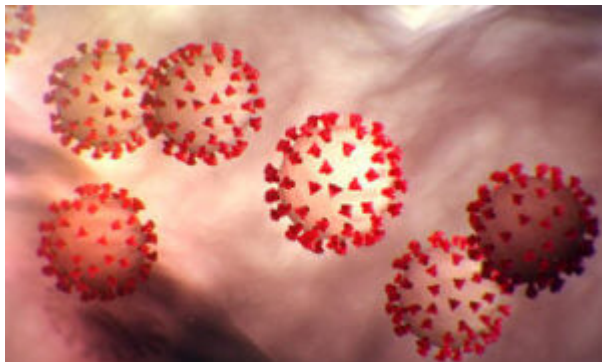
**T**he novel coronavirus is not just “the flu,” contrary to what you may have read on social media. There may already be a COVID-19 vaccine, but FDA clinical trials will likely keep it off the market until 2021. A second patient has apparently been cured of HIV following an experimental stem cell transplant—can the same treatment help millions of other infected individuals? The majority of Americans fear GMOs can harm their health, according to a new survey, but they also see crop biotechnology as a way to battle hunger around the world.

On this episode of Science Facts and Fallacies, geneticist Kevin Folta and GLP editor Cameron English break down the latest news from the world of genetics and biotechnology.

### [How the “F” word—flu—led to confusion as the coronavirus pandemic unfolded](#)

Just a month ago, many people, [even some physicians](#), said the new SARS-COV-2 coronavirus was “just another flu,” and a relatively insignificant one at that. This analysis hasn’t aged well. It turns out the virus that causes those miserable seasonal flu symptoms and the one responsible for COVID-19 are different in some fundamental ways—the latter [mutates much slower](#) than the former, for instance—which is influencing how we develop treatments and vaccines for the novel coronavirus.

### [There appears to be a coronavirus vaccine on the horizon—but it’s a GMO and the FDA would need to approve testing](#)



Credit: CDC

[35 companies and academic institutions](#) are rushing to create a coronavirus vaccine. Canadian biotech firm Medicago says it's beat everyone to the punch and developed a COVID-19 vaccine in less than a month, 20 days to be exact. After China released the virus's genome, the company's scientists utilized a novel genetic engineering technique to produce a viral protein in plants that can immunize people against the deadly infection. Medicago says the vaccine can be produced quickly and cheaply, though FDA testing could dramatically delay its release.

## **Second person cured of HIV after experimental stem cell transplant**

While the COVID-19 pandemic holds the world's attention, not all viral news is bad news. Researchers say a second individual—"the London patient"—has been cured of human immunodeficiency virus (HIV). Four years ago, the man received a bone marrow transplant meant to treat his Hodgkin's lymphoma. But doctors hoped the transplant would also help him fight off HIV, because a rare mutation in the donor's DNA confers immunity to the sexually transmitted infection. It worked. The London patient has been in HIV remission for 30 months.

Although his doctors pronounced the treatment a cure for HIV, other experts have urged caution, noting the treatment is risky, expensive and must be shown to work in many more people before we declare HIV defeated for good.

## **51% of Americans say GMO-derived food is unhealthy, 59% know very little about it, Pew survey shows**

A new Pew survey reveals that a slight majority of Americans (51%) believe foods derived from GMO seeds are less healthy than non-GMO alternatives, a slight increase in negative perceptions since 2016, and 59% say they know very little about the subject. However, a much greater majority, about three-quarters (74%), say GM foods will likely increase the global food supply, while 62% say GM foods will probably lead to more affordably priced food. What do these results mean for the future of biotechnology, and what do they say about science literacy in America?

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