

GLP podcast: GE crops have lived up to the hype; Growing 'mini' organs from stem cells; How do we solve right-wing vaccine hesitancy?

Genetically engineered crops are nearly three decades old at this point. What impacts have they had on agriculture over those nearly 30 years? Hint: they're mostly positive. Scientists may be able to derive stem cells from amniotic fluid during a pregnancy and use them to treat birth defects before a child is born. Right-wing parental rights activists are leading a campaign to restrict school vaccine requirements. How do we convince these hyper-skeptical moms and dads that their kids should be vaccinated against preventable (and often deadly) diseases?

Podcast:

Join hosts Dr. Liza Dunn and GLP contributor Cameron English on episode 259 of Science Facts and Fallacies as they break down these latest news stories:

- [Viewpoint: Despite a sea of environmental activist disinformation, GMO plants have more than lived up to the hype](#)

The first generation of genetically engineered crops were commercialized roughly 30 years ago. Since then, critics of the technology have predicted it would lead to serious public health and environmental harms, but none of those ever came to fruition. Nobody suffered so much as a stomach ache from consuming food derived from GE crops; however, studies have documented significant yield increases and notable decreases in prices at the grocery store. Let's take a look back at the " Frankenfood " controversy and examine why it came to an unceremonious end.

- [With just a sample of fluid surrounding a baby in the womb, researchers can make mini organs to test out potential medical treatments](#)

Doctors routinely collect amniotic stem cells during tests administered throughout pregnancy. Researchers have recently discovered that these cells can be used to monitor and maybe prevent potential health conditions that could materialize later in the pregnancy. They could also be grown into mini organs that regulators could use to improve the safety testing of drugs and other chemicals before they are commercialized. Importantly, these procedures are unlikely to provoke opposition from conservatives who oppose the use of embryonic stem cells, which has often been a major hurdle to advances in scientific research.

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- [Parents' Bill of Rights: Vaccine wars heat up in states allowing exemptions for schoolchildren](#)

On the heels of the COVID-19 pandemic, several states have proposed or enacted laws that require birth

parents to consent before their children receive any vaccination. Such rules may seem uncontroversial, but they have generated unintended consequences. For instance, an adopted child may not receive routine immunizations because it's not possible to get consent from his or her biological parents. Some in the science community argue that these vaccine restrictions are pushed primarily by right-wing parental rights groups who have been misled by social media misinformation. It's therefore critical that scientists make a concerted effort to combat false claims about immunization. But what's the best way to do that?

Dr. Liza Dunn is a medical toxicologist and the medical affairs lead at Bayer Crop Science. Follow her on X [@DrLizaMD](#)

Cameron J. English is the director of bio-sciences at the [American Council on Science and Health](#). Visit [his website](#) and follow him on X [@camjenglish](#)