Podcast: Greenpeace CRISPR study debunked; Public accepts gene-edited babies? Cancer vaccine progress

A Greenpeace-funded study alleges that gene-edited crops can be detected and should therefore be regulated as “GMOs.” However, experts say the research demonstrates exactly the opposite. Is the public ready for CRISPR babies? A new survey seems to say yes, but critics maintain the study was a “case of spinning results you don’t want,” and claim the public is more confused about gene editing than accepting of it. Finally, a cancer vaccine is progressing through clinical trials. How does it work, and when might it be available?

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

- Can gene-edited crops be ‘detected’? Claims by Greenpeace and anti-biotech activists dismissed by safety officials, scientists

In an effort to spur tighter regulation of gene-edited crops, anti-GMO groups led by Greenpeace financed a study claiming that conventionally bred plants can be distinguished from those engineered with techniques like CRISPR. The research was panned by independent experts and food safety regulators, who pointed out that the new “detection method” is a simple test biologists have routinely used for years, which cannot determine how a plant’s genome was edited, only that it was edited. As a result, the study appears to undermine Greenpeace’s conclusion that the testing “method is highly sensitive and specific.”

- Viewpoint: Public confused and divided about genetically engineering diseases out of babies

A new survey suggests the public may be ready to embrace germline editing, a genetic engineering technique that can modify disease-causing genes in embryos. The results are good news for proponents of the technology, but critics say the study was an attempt to manufacture public opinion. Parents, religious believers, women and anyone with a scientific background surveyed—those who are arguably more invested in the outcome of germline editing—were skeptical of the technology relative to their counterparts. So, is public support for this gene-editing application growing, or are people just confused and divided?

- Vaccine advances for gastric, pancreatic, esophageal and colon cancer

Scientists have made important progress on a vaccine that could prevent the recurrence of gastric, pancreatic, esophageal, and colon cancers. By modifying the virus used to deliver the immunization, researchers prevented patients' immune systems from counteracting the vaccine before it could induce its cancer-fighting effect, boosting the drug's effectiveness from 50 percent to 90 percent. The vaccine is now making its way through clinical trials and inching toward commercialization.

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