Podcast: Neuralink brain chips; Flu vaccines during COVID; US farm system unraveling?



Ion Musk's company Neuralink recently debuted its brain implant in pigs, pushing us a little closer to integrating humans and computers. As the COVID-19 pandemic continues, getting a flu shot this fall could be the difference between life and death, say some experts. Critics fear America's farming system is about to unravel in the face of climate-change fueled water and unsustainable growing practices that jeopardize soil health. How serious is this threat to

shortages and unsustainable growing practices that jeopardize soil health. How serious is this threat to our food supply?

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:

• Elon Musk unveils Neuralink brain implant in live pigs that could lead to integrating computers into humans

Brain implants that read and write neuron signals are one step closer to widespread use after Neuralink demonstrated how the devices work in pigs. The initial goal is to use these tiny computer chips to bypass spinal cord injuries and restore movement for people who are paralyzed, a reasonable goal since similar devices have already been employed.

More distant applications may include restoring sight to people with eye injuries, minimizing pain and even recording memories. As the technology continues to develop, though, some scientists warn that Neuralink has to carefully consider the risk of serious brain injury, particularly brain bleeding.



• Getting a flu shot this fall as the pandemic rages could literally save your life

It's important to get a flu shot every year, but it could be essential in 2020, say some infectious disease experts. With the deadly SARS-COV-2 virus already circulating, a bad flu season may lead to many more illnesses and deaths, the results of an overburdened health care system unable to treat people suffering from one or both infections. Conversely, social distancing measures and masking used to stem COVID-19 transmission have apparently mitigated this year's flu season in the southern hemisphere, and could have the same effect in the US. Whatever the case, the flu vaccine is a wise insurance policy in the face of uncertain risk.

• Viewpoint: American agriculture could 'unravel' without major sustainability changes

America's agricultural system produces an abundance of affordable food, but unsustainable practices

employed on many conventional farms has locked that system "in a state of slow-motion ecological unraveling," writes Guardian contributor Tom Philpott. As climate change accelerates, the problem can only get worse—unless we right the ship and rethink how we produce food.

But the question remains: how do we do that? Do we solve this problem with "a direct political challenge to big agribusiness" firms that profit from conventional farming, as Philpott maintains, or a greater reliance on technology that reduces land use while increasing crop yields?

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