Podcast: Coronavirus 'antidote' from recovered patient blood? Did the virus escape from a lab? Anti-science activism causes needless harm



hile <u>political leaders</u> and <u>scientists</u> speculate that coronavirus is beginning to loosen its grip on the world, hospitals are considering using the blood of recovered patients as a preventative measure and treatment for COVID-19. Older folks may be more vulnerable to the disease, but that doesn't mean young people should think themselves invulnerable. There seems to be no

end to the rampant speculation (and conspiracy theories) about the origins of the novel coronavirus. Experts say we should be doing more to fight the anti-science movement that threatens to slow progress in biomedicine and cause unnecessary suffering.

On this episode of Science Facts and Fallacies, geneticist Kevin Folta and GLP editor Cameron English break down the science behind the latest headlines to keep you informed.

Searching for coronavirus 'antidote' in the blood of former patients

Beleaguered hospitals are considering using the blood of recovered COVID-19 patients as a treatment for the disease, and to immunize at-risk populations. This century-old strategy of infusing antibody-laden blood is seen as a potentially immediate stopgap while the world awaits effective drugs and vaccines to bring coronavirus to heel, which could take several years. More data are needed to confirm the efficacy of using blood infusions to treat COVID-19, but <u>preliminary studies</u> thus far are promising.

There's no such thing as 'too young' to be hospitalized by coronavirus

There has been a lot of attention paid to the vulnerability of the elderly during this pandemic. But that should not be interpreted as evidence that younger people are immune to COVID-19. An early study by the US Centers for Disease Control looked at more than 500 hospitalizations. Of those, nearly 40 percent were aged 20-54. And more than a third of intensive care admissions were under the age of 64. The data challenge assertions that coronavirus poses little threat to young, healthy individuals, many of whom opted to party during spring break instead of staying inside.

Was it a bat? A lab leak? A bioweapon? Virus hunters battle cornovarius origin speculation

We still don't know where the SARS-COV-2 coronavirus came from. And we don't know when, or even if, we ever will. That lack of certainty has created a fertile breeding ground for any number of theories about its origins. Included in the unsubstantiated speculation: It was a bioweapon that escaped (or was intentionally released) from a lab in Wuhan, China; it was taken to China by the US military. Experts, meanwhile, are divided over two other competing hypotheses: the virus came from one of China's 'wet markets'; or it was accidentally released from the Wuhan lab by an infected employee, though there is good evidence the virus wasn't engineered into a bioweapon.

Viewpoint: From GMOs to vaccines to climate change, we need to challenge anti-science activism in the 2020s

Are we doing enough to fight the anti-science activism that emerged during the past decade? Already, these movements have targeted GMOs, climate change and synthetic chemicals. They've also attacked vaccines and gene editing. If these contrarian forces aren't countered by more expert voices, they threaten to hamper important scientific progress and cause unnecessary suffering in the coming years.

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