Hobbyist gene editing could cure dogs of genetic disorders—or not. What will the FDA do about biohackers?

[Editor's note: An <u>FDA proposal</u> for the regulation of gene editing in animals has been widely <u>criticized</u> by animal biotechnologists as being too restrictive. Released during the final days of the Obama administration, it faces an uncertain future.]

David Ishee's plan was simple, if not exactly free of complication. From the shed that functions as his laboratory in rural Mississippi, he hoped to use genetic engineering to rid dogs of the types of terrible disorders caused by decades of high-end breeding.

Ishee is a biohacker, one among a growing number of do-it-yourself scientists that the federal government is having an increasingly difficult time figuring out what to do with.

Since the DIY bio community first developed in the early aughts, it has largely avoided government regulation. But in 2017, cheaper equipment and simpler genetic engineering technologies mean that garage scientists can dream much bigger than simply turning yellow yeast red. We now live in a world where anyone can order custom DNA sequences on the internet to tinker with in their home. And the rules that govern genetic engineering today were not written with the foresight that it would one day be possible for 30-year-old hobbyists in Mississippi to try their hand at genetically engineering dogs.

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[In December 2016], the FDA intervened after finding out that a Bay Area biohacker was selling kits for homebrewers to genetically engineer their own glowing beer, questioning whether the green fluorescence protein used to make the beer's yeast glow was a color additive for food that had yet to be recognized as safe for consumption.

DIY scientists argue that imposing more rules will make new technologies <u>less accessible</u>, and many in the scientific community <u>agree</u> that home-brewed biohacking poses little threat. Others find it <u>hard to dispel</u> the image of a lone scientist in a garage somewhere accidentally creating a deadly pathogen and unleashing it upon the world.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: The FDA Is Cracking Down On Rogue Genetic Engineers