Viewpoint: Where do we draw the lines on human gene editing to prevent or treat disease

Pushing boundaries is essential to human achievement, but the harder the push, the greater the responsibility. At a minimum, you need consent from those involved, which is why editing the DNA of a human embryo is an ethical abyss: Unborn children cannot give consent. In any matter related to public health, there must also be some form of collective consensus about the risks involved – and when it comes to the integrity of the human gene pool, the bar couldn't be higher.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter.

SIGN UP

I am by no means against gene editing – it is my passion and livelihood. It has potential to cure our most intractable diseases and possibly address some of our most pressing environmental issues. Part of the promise of CRISPR is safety: Because it is so precise, the risk of unintended negative outcomes is much smaller and easier to mitigate than the previous generation of genetic engineering tools. We have conclusive evidence regarding safety for many applications of CRISPR technology. But this is not universally the case.

. . .

I expect that human genetic engineering, both therapeutic and "vanity" applications, will become an unfathomably profitable industry in the coming decades. I am open to the possibility that germline editing could be ethically applied in narrowly defined arenas of public health. But the determination of where to draw the lines should not be left up to venture capitalists and self-centred founders, as it was to a large extent with the IT industry. They are already salivating.

This is an excerpt. Read the original post here