

In general, how do you feel about humans purposely modifying organisms or species so they will be more useful to us?

"If humans can benefit from modifying organisms or species they should, as long as it is done in a humane sustainable way." How would you define humane use of animals?

"By humane I mean in a way that doesn't cause unnecessary suffering or excruciating pain to the animals because life is precious and shouldn't be mistreated if we can help it."



Do you think there is a limit in how far we should go with syn bio?

"Synthetic biology is an area of research which has unlimited potential for growth and innovation. I believe that synthetic biology has the capacity to be hugely advantageous to the scientific community and to society as a whole. It would be irresponsible to ignore the potentially harmful applications of synthetic biology, however, the potential benefits provided by research in this area exceed the disadvantages. Through establishing firm regulations in this area I believe that research can be conducted in a safe and productive manner. I believe it is the responsibility of members of society, including those in the scientific community, to establish the ethical groundwork which will shape the aims and applications of synthetic biology."



Synthetic biology creates biological systems that do not natural exist. Does anything about synthetic biology make you feel uncomfortable?

"The idea of synthetic biology doesn't make me feel uncomfortable but the applications and potential outcomes are somewhat worrisome. I don't know much about the topic on hand but just as long as there are regulations in place and governing bodies to overlook the research and applications, I would feel at ease with it all."



What is your favourite application of synthetic biology?

"I know it's an old school example, but my favorite application of syn bio would have to be when they got E. coli to make human insulin. That definitely revolutionized how we look at type 1 diabetes and really improved people's lives."



How do you feel about humans purposely modifying organisms or species so that they will be more useful to us?

"I'm sure that there are benefits that do go along with that type of research, but I am a firm believer in the earth is where it is for a reason and we are where we are for a reason and life has evolved over millions of years without us having to make it better. We've made a lot of mistakes along the way so I don't know if I trust research and peoples' judgment. (I explained to her that domesticating animals is a way we've done this in the past, to which she responded...) I think all that would've naturally fallen into place anyways. Dogs really do love humans and they need to connect with a pack. Horses, if they really didn't want to be trained, I don't know if you could train them. Whereas, I believe they feel good when they're serving a purpose as well. So I think those connections would've happened automatically. I don't know if we can take complete credit for those modifications. I guess what I'm thinking is more that horses were the size of a dog and they evolved into the size they are today. I don't know. I'm all for research certainly, but there's also the question how far will it go. Is that going to be to evolve to the perfect human? And whose perception is the perfect human?"