

## Biohacking pioneer Ryan Bethacourt on why genetic engineering is tool for progress

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

**Note: This is an interview with Ryan Bethencourt — a scientist, entrepreneur and biohacker best known for his work as program director and venture partner at Indie.Bio, a biology accelerator and early stage seed fund.**

I'd describe myself as someone who sees the potential and power of low cost biotech, using biology as technology to solve some of humanity's most intractable problems.

The reason it should interest us is that low cost tools for genetic engineering, that are now available for everyone, with products like Synbiota, Arcturus Biocloud and [Amino labs](#), allow anyone, even children as young as five years old, to explore and understand the source code of life itself and how to reprogram it. I imagine a day, some time in the not too distant future when children and teenagers will be able to create their own genetically engineered machines, cure the diseases of the old and find new ways to build and extend the capabilities of humanity, moving from programming software to program the material world, [through biology](#).

I think people often fear change and things they don't understand. There's a term which I've found really helpful in explaining a fallacy that many (including myself) often have to new technologies: the [naturalistic fallacy](#). Anything that is "natural" is good but anything that isn't is bad. ... **farming itself is unnatural**, it's just a few ten's of thousands of years old. GMOs are just the latest tool. I often find that people who are against the use of GMOs in their corn or soy, are the same people who will enjoy their cheese ( [in which 95 percent have GMO rennet](#)) and wine (fermented, i.e. altered grapes) without blinking.

GMOs are just a technology and **in the US alone, 3 million + diabetics owe their lives daily to [GMO insulin](#)**, so do many people whose lives are saved daily by engineered biotherapeutics. This is something that's often conveniently left out by those that try to demonize the use of GMOs in society.

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