



"You want, if possible – and there is no more insane "if possible" – to abolish suffering. And we? It really seems that we would rather have it higher and worse than ever. Well-being as you understand it – that is no goal, that seems to us an end, a state that soon makes man ridiculous and contemptible – that makes his destruction desirable. The discipline of suffering, of great suffering – do you not know that only this discipline has created all enhancements of man so far?"

(Nietzsche, *Beyond Good and Evil*, 1886, p 225)  
ref: <https://www.nietzsche.com/nietzschelink.html>

# Health:

"a state of complete physical,  
mental and social wellbeing"

Constitution of the World Health  
Organization (1948)

ref:

[https://www.who.int/governance/eb/who\\_constitution\\_en.pdf](https://www.who.int/governance/eb/who_constitution_en.pdf)



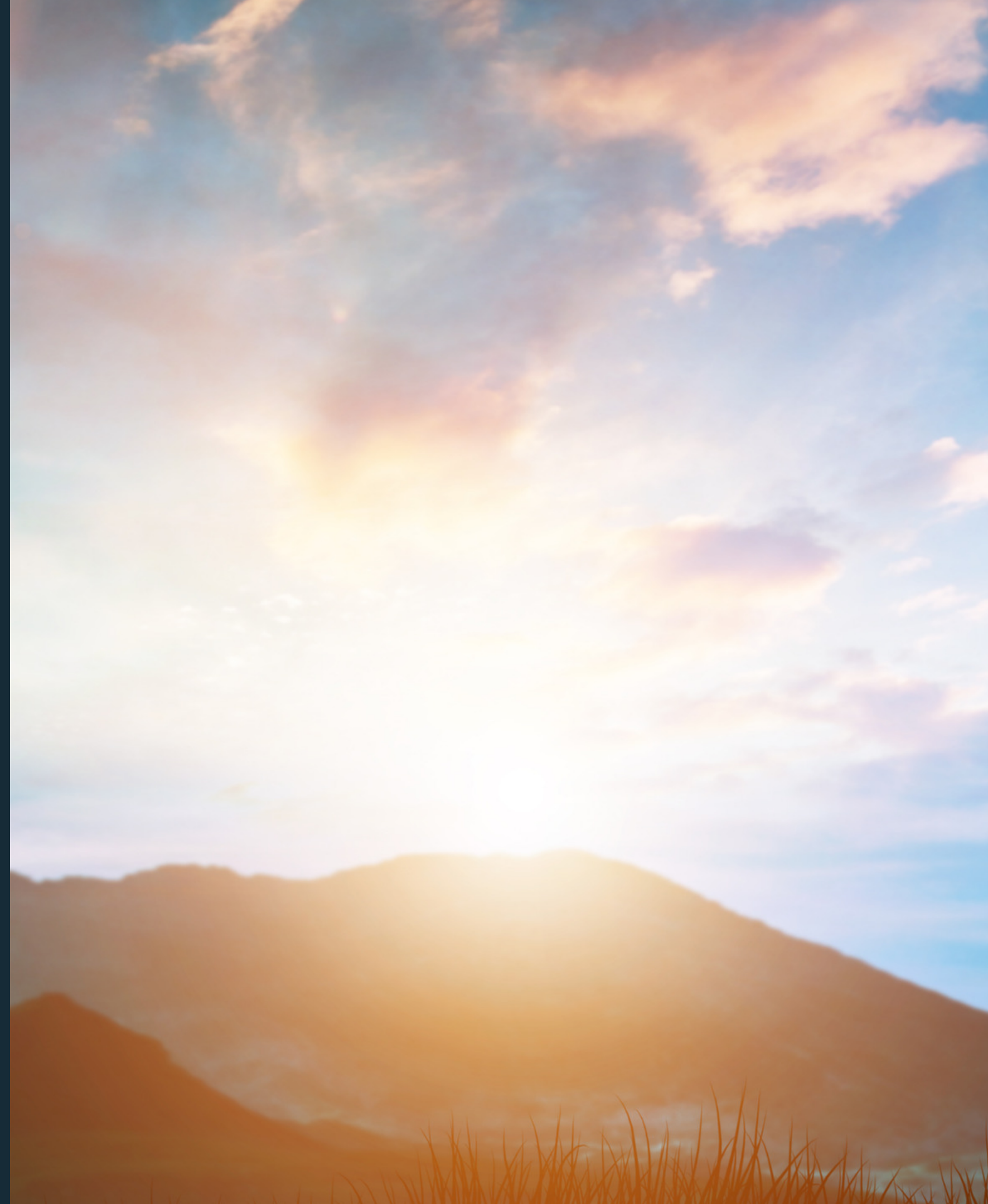
**World Health  
Organization**

DAVID PEARCE (2021)

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# THE BIOHAPPINESS REVOLUTION

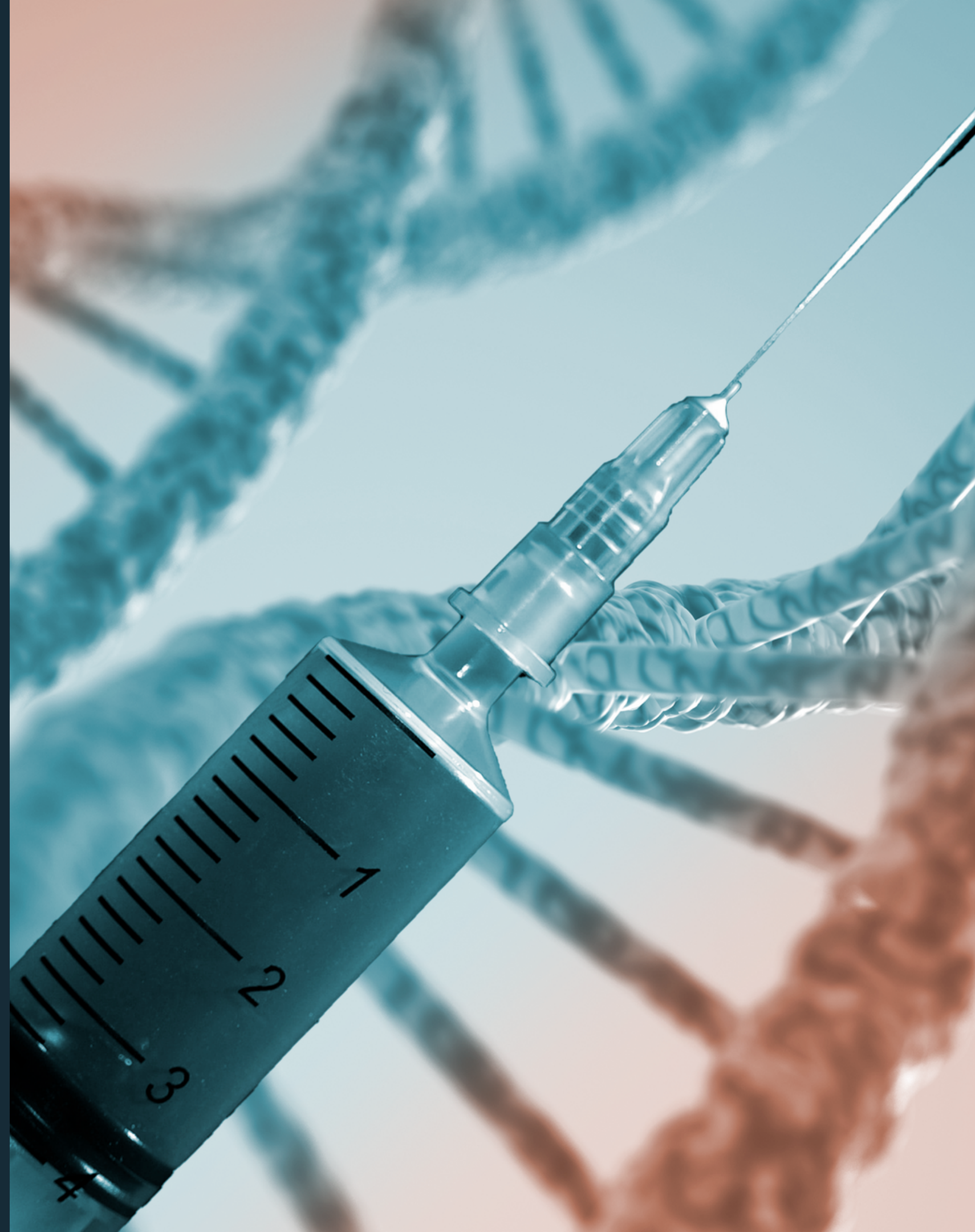
A Genetic Vaccine for Mental Health?





How intravenous  
CRISPR infusion could  
revolutionise mental  
health

A universal one-shot  
genetic vaccine against  
mental and physical  
pain?





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**Intravenous gene therapy:**  
“a critical first step in being able to inactivate, repair, or replace any gene that causes disease, anywhere in the body.”

(Jennifer Doudna, the co-founder of Intellia Therapeutics who shared a Nobel Prize for developing the gene-editor CRISPR from a bacterial immune system)



# Intravenous Gene Therapy for Transthyretin Amyloidosis

CRISPR-Cas9 is a scissors-like tool that can cut and edit DNA.

Treatment involves (1) lipid nanoparticles that carry a payload of CRISPR machinery (2) a strand of guide ribonucleic acid; and (3) a sequence of messenger ribonucleic acid (mRNA).

1. Billions of the CRISPR-carrying nanoparticles are infused into the bloodstream. The nanoparticles make their way to the liver, the source of the dysfunctional protein.
2. The mRNA instructs the cells to produce the Cas9 protein (CRISPR's genetic "scissors"). The Cas9 protein then links up with the guide RNA, seeks out the target gene, and snips it.
3. The cell repairs the DNA at the site of the break, but imperfectly. Imperfect repair switches off the gene and shuts down production of the misfolded protein.

ref: CRISPR-Cas9 In Vivo Gene Editing for Transthyretin Amyloidosis

<https://www.nejm.org/doi/full/10.1056/NEJMoa2107454>



# Intravenous Gene Therapy for Anandamide Deficiency Disorder (ADD)

## HIGH ON LIFE

### Case Study

Jo Cameron, vegan retired Scottish school teacher  
never anxious, never depressed, never stressed,  
never in pain

exceptional FAAH and FAAH OUT genes  
elevated anandamide  
ananda = "joy, bliss, delight (Sanskrit)

ref: A World Without Pain Does hurting make us human?

<https://www.newyorker.com/magazine/2020/01/13/a-world-without-pain>



# Blissful but not Blissed Out?

**Transhumanism:** a new architecture of mind

Life should be based on information-sensitive gradients of intelligent bliss.

refs:

<https://www.abolitionist.com>

<https://www.transhumanist.com>



## PITFALLS:

How can information-sensitivity best be conserved?

How can the functional counterpart of depressive realism best be conserved?

ref: <https://www.gradients.com>







THE END

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