

Viewpoint: Misleading rhetoric fuels belief that our genetic code is a deterministic ‘instruction book’ – but it’s far more interesting than that

[G]enes aren’t quite what we thought (in fact, there’s no consensus about [what they even are](#)). Yet plenty remain happy to propagate the misleading idea that we are “gene machines” and our DNA is our “[blueprint](#)”. It is no wonder that public understanding of genetics is so blighted by notions of genetic determinism.

...

It’s now clear that traits such as height, as well as susceptibilities to many common ailments such as type 2 diabetes, cancer and heart problems, have a genetic component that is immensely complicated. Perhaps hundreds of genes might be involved, each with only a tiny influence. Environmental or simply random factors matter too. As a result, it’s often hard to identify effective genetic targets for drugs, and there’s little value in doing so if we don’t know how a particular gene actually influences health conditions.

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

[SIGN UP](#)

As well as offering such valuable resources and technologies for healthcare, the [Human Genome Project] paradoxically revealed the limitations of a gene-centered view of life. We don’t come with instructions included after all: you are not programmed into your chromosomes. Life is not a readout of genes – it’s a far more interesting, subtle and contingent process than that.

[Read the original post](#)