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The Golden Age of Genomics

Nature is the ultimate genomic tinkerer, for billions of years running experiments and letting the results speak for themselves. A few thousand years ago, a particularly successful creature started running its own experiments, incorporating intention into the evolutionary process. Modern genomics, rooted in the understanding that DNA is genetic material, is a mere 150 years old. Many breakthroughs have been made – the identification of the nucleic acid bases, the structure of the double helix, the cracking the genetic code, DNA sequencing – just to list a few. The field is littered with Nobel prizes. Now we're entering the golden age of genomics, where DNA reading, analysis, and genetic design are being supercharged by digital technologies. The implications for humanity and the environments that we touch are nothing less than profound.