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# Write-Up: Hacking Humans

*The article Hacking Humans: Protecting Our DNA from Cybercriminals highlights the growing risks associated with genetic data security and the potential consequences if it falls into the wrong hands. As DNA sequencing and genetic databases become more common in medicine, ancestry research, and forensic investigations, they also become prime targets for cybercriminals. Unlike passwords or credit card numbers, DNA is permanent, making breaches of genetic data especially concerning.*

## The Summary

The article underlines that while genetic research and personalized medicine provide huge benefits, they also introduce severe security and ethical challenges. Without proper defenses, regulations, and awareness, DNA data could become one of the most vulnerable forms of personal information. That's why protecting genetic data should be a global priority, requiring collaboration between governments, biotech companies, and cybersecurity experts to prevent misuse and ensure privacy in today's digital age. One major risk discussed in the article is identity theft. If hackers access a person's genetic data, they could exploit it for financial fraud, insurance manipulation, or even blackmail. Once someone has your DNA, they have your life. Another concern is genetic discrimination, where employers or insurance companies might use genetic information to deny opportunities or charge higher premiums based on predisposed health risks. Imagine you submit your DNA data and you get denied health insurance because you are predisposed to a disease you knew nothing about. This is why protecting this data is important. The article also raises the ethical problem of bioweapon development, where bad actors could potentially engineer targeted diseases using stolen DNA data. To tackle these threats, the article says there is a need for strong cybersecurity measures, including encryption, tighter access controls, and government regulations to protect sensitive genetic information. Public awareness is crucial, as individuals should understand how their data is stored and shared before submitting their DNA to testing companies.

## My Take

As someone who has considered doing a 23 and Me or Ancestry, this is very concerning. I never thought about what could happen after I send my DNA off. I'm kind of glad I haven't sent in anything. So, I believe protecting DNA data must become a top priority, requiring collaboration between cybersecurity experts, policymakers, and individuals to ensure genetic privacy and security in the digital age. The Government needs to make clearer laws, consumers need to be made aware of all the possible risk, and biotech experts need to work together with cybersecurity to develop a better security framework. The main concern should always be the safety of the privacy of the consumer, and I strongly believe that.

## References

Rizkallah, J. (2018, November 29). *Hacking humans: Protecting our DNA from cybercriminals*. Forbes.