## HERE BE DRAGONS —

## Ars on your lunch break: Robert Green on what darkness lurks in our DNA

We discuss the knowns—and the unknowns—of gazing into our genetic heritage.

**ROB REID - 7/17/2018, 12:00 PM** 



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This week we're serializing yet another
episode of the After On Podcast here on
Ars. The broader series is built around
deep-dive interviews with world-class
thinkers, founders, and scientists and tends
to be very tech- and science-heavy. You can

https://arstechnica.com/science/2018/07/ars-on-your-lunch-break-robert-green-on-what-darkness-lurks-in-our-dna/

access the excerpts on Ars via an embedded

audio player or by reading accompanying transcripts (both of which are below).

## **FURTHER READING**

Ars on your lunch break, week 4: Fermi's Paradox and the empty universe

My guest this week is medical geneticist Robert Green, and our topic is the promise and peril that could come from reading your full genome. The cost of full-genome sequencing is falling so quickly and the actionable insights it can reveal are growing fast enough that this data will eventually be as widely collected as cholesterol levels (perhaps within a decade or so).

This will divulge the precise contents of your 20,000-ish genes to you and your doctor. Since some human genes literally have thousands of known mutations, that's a lot of data—and on the day you first receive it, we still won't know how to interpret the crushing majority of it.



Traveling With Asthma



Click here for a transcript and click here for an MP3 direct download.

Whole-genome sequencing will nonetheless become a mass phenomenon, because it will be better to know something than nothing in enough cases to justify the effort. But not in all cases! For instance, your genes might reliably foretell an appalling nearterm fate—one you can do nothing to avoid. Conversely, you might unearth a horrific

condition that can be painlessly avoided with a few simple steps.

Green and I discuss present-day examples of both of these outlier situations. We also discuss how psychologically awkward the ambiguity of personal genetic data can be. Awkward enough, in fact, that some expert and caring people deem genetic information to be medically toxic information. Though that sounds like a euphemism, the field of medical genetics conducted itself as if toxic information was a literal phenomenon for years, and many in the field still do.

Today's installment opens all these issue, which we'll explore in greater depth over the next two days. If you enjoy the conversation, you can access the full podcast archive of thirty-plus episodes on my website, or just search for "After On" in your favorite podcasting app.

Lastly, if you're curious about the latest episode in the main After On podcast feed, this week it's an interview with Yale ornithologist and evolutionary heretic Richard Prum. Prum boldly and brilliant refutes much of the common wisdom about sexual attraction, aesthetics, and more. And the wellspring of his unorthodox ideas is... Charles Darwin himself. Even if you're not at all into birds, you'll find this interview intriguing if you're interested in the deep roots of human behavior and biology.

This special edition of the Ars Technicast podcast can be accessed in the following places:

## iTunes:

https://itunes.apple.com/us/podcast/thears-technicast/id522504024?mt=2 (Might take several hours after publication to