

Human brain: 'Squishy machine with chemical gears and switches'

The fields of behavioral and psychiatric genetics – which try to parse out how our genes affect what we do and think – is still new and still has a few kinks to sort out. There's so much we don't know but there are a few things about the genetics of our minds that we do know. We know there are certain drugs in your brain that seem important for your mood. And over time, prolonged moods kind of become who you are.

Things like [testosterone](#) play a role in [aggressiveness and drive](#), [serotonin](#) is linked to happiness ([or not](#), I can't really tell anymore), dopamine handles reward and on and on. Reading through handy tools like [Snpedia](#) that help you decipher your DNA makes one think that we humans are pretty easy to understand.

We're essentially squishy machines with lots of chemical gears and brain switches that scientists are diligently cataloging and sifting through to understand how we tick. Turn the [beta-endorphin](#) knob down, we get bummed out. Turn the cortisol up and we get nervous. Turn on the serotonin and we might have a religious experience.

Lately my favorite behavior gene has been COMT (or catechol-O-methyltransferase, as it's called for short). COMT codes for a special enzyme that, among other things, neutralizes dopamine. Amazingly, the work ethic of a COMT enzyme seems to boil down to a single base pair – just one rung of the DNA ladder – that codes for a tiny yet crucial part of its structure.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [The Brain I Wish I Had](#)