

## Nucleus Accumbens

The next one is the nucleus Accumbens. Why is this guy right here important? Anybody know? Everybody in this room, myself included, you like this one. This is the place, not necessarily where dopamine is all generated. This is the place that when dopamine hits it, you get that feeling like “ahhh” These two things right here, we're going to talk about the VTA here in just a second, but this guy has got dopaminergic neurons that go to the Nucleus Accumbens. When those fire, that is the pleasure center. In fact, when they were doing experiments with mice, one of the things they did was they would drop very very fine electrodes down into the brain and they would hit it with electricity. And what they wanted to see is where's the reward center and where's this pleasure center at? And they trained the mice, “Hey, anytime you feel really good, hit this lever”. When they dropped it right here into the Nucleus Accumbens. Guess what the mouse did? He forgot about everything else. He just kept hitting that button. So, this plays a major role in the reward circuitry of the brain. It is the primary site mediating reward behavior. And it's thought to be directly involved in reinforcing and addictive behaviors in response to drug use. It's the core involved in cognitive processing of motor function. Basically, these two things that we're going to talk about right here. That's where a lot of the problem and the solution happen. So, when you hear me say Nucleus Accumbens. What I want you to remember is, “That's the reward place. That's the pleasure place”. That's that mouse hitting that lever over and over again.