How The Brain Adjusts to Damage

So, I'm going to give you a very easy to understand picture of what neuroplasticity is. So for instance, if this region has to do with the hand, you've got the little finger, the ring finger, the middle finger, index, thumb, and that's all in this portion of your cortex. What happens if all of a sudden, you're missing a hand? What do you think happens to this area? It's going to rewire to accommodate and instead of this right here being a big deal. We're going to move over here and we're going to shift the whole lot of our energy right here. We're going to grow more neurons, bigger neurons, more dendrites, everything because we don't have this anymore. We're not getting input from this. This is turning into a dirt road. By the way, since we only have one hand, we may also want to increase a little bit from the eye, and we may also want to increase a little bit from say the nose. Because now I'm going to need other input to take up for this right here, that I've lost.