

Transcript of Tamara Franz-Odendaal, Developmental Biologist

The coolest thing about my job is... discovering things never seen before!

I teach developmental biology which is a course that explains, and in which students learn, how an organism develops.

I am also a researcher and in my lab we currently are studying how skulls develop. So how cells organize themselves to create the different shapes of skulls that we see today.

So, for example, why an elephant skull is different to a mouse skull; the same cells are making those skulls. Some of my research is funded by the Canadian Space Agency, and we're working with 2 centimeter long zebra fish and we are trying to find out what the effects of gravity is on the development of this organism. We made a huge discovery when we discovered that some bones in the skull are affected and others are not affected by gravity. So, this work is really important to understand both the implications for future space launches when an astronaut goes up into space and they might fall pregnant what then would happen to the unborn child and also to how bones develop.

I have quite a broad background for a scientist because I've tried different things so that I can get different perspectives. So, for example I've dug fossils up in Africa, I've worked in a pharmaceutical lab, I've worked in a human genetics lab, and now I work in a developmental biology research lab.

One of the most meaningful times in my science career was when I worked in a human genetics lab and I was part of a team in which I was analyzing blood samples so we could track a disease in a family. Being a scientist enables you to understand the world around you, to understand everyday life. So, for example, if you hear a crazy media report you can look at the solid facts behind that report and interpret for yourself whether it's valid. So it teaches you to think critically and to think for yourself.

Anyone can be a scientist, and you don't have to be at the top of your class to be a scientist, you just need to be passionate and curious. My advice to you is to follow your passion and believe in yourself, and find ways to overcome obstacles when they get thrown at you. You can do it!