

Here we're going to go through quickly the early stages of development again. And then we're going to get to this stage when the germ layers are set aside. The three germ layers - the ectoderm, mesoderm, and endoderm. So here you'll see that the inner cell mass gives rise to the entire adult animal, in this case a human. The same process would occur in a mouse as we'll see a bit later. If we now look at the embryo after the 3 germ layers have formed this video will highlight what comes from the blue germ layer, or the ectoderm. You'll see that it makes the nervous system including the brain, and the skin. The middle part, the mesoderm, green here, gives rise to the muscle including the kidneys, the heart. And the endoderm gives rise to the whole gut tube. There you see the lung, the liver, the intestine. And to give one more detail of an example of this let's think about the development of the endoderm and in this case the formation of the pancreas. So there's the pancreatic bud, which comes out of the endodermal derivative. Now I'm going to talk to you a bit today about the pancreas as an example of how and organ and then the cell types within that organ get made.