So let's look, for example, just at 3 cells here. They are equivalent in potential, they could give rise to any region of the nervous system, but by chance they occupy different positions, and that position exposes them to different concentrations of this graded signaling molecule. So can see three cells, exposed to three different concentrations of this signaling factor. These factors interact with cells by binding to receptors on the cell surface. And then by virtue of the amount of signal, you activate receptors to different amounts, and then as a consequence of that you initiate the activation of a third set of these transcription factors that are sitting in the cell waiting for the signal. So these cells, these factors are present, but they need to be activated by the addition of a phosphate group or clipping off a bit of the protein. And so as a function of the concentration of signal you activate different levels of these transcription factors, the purple triangles shown here. And these are proteins that once activated will seek out target DNA sequences with which to bind. And we see at this point that there's a difference between these three cells measured in the different concentration of transcription factor. So the cell on the left has a low concentration that is sufficient only to bind to gene A, whereas the cell on the right has a higher concentration that can activate genes A, B and C. And as a consequence these cells begin to acquire different profiles of gene expression in the way that we saw. And these target genes are by and large themselves transcription factors so this is a cascade of signal to first transcription factor to second transcription factor that then these genes really start to mediate the process of establishing cell differences and finally through their secondary actions, cells acquire in this case different colors, but different identities.