We saw that activation of Dorsal, which causes it to move to the nucleus, is regulated by an extracellular signal secreted at the ventral surface of the embryo. What phenotype would you expect of mutant where signal was secreted evenly around the embryo?

**Ventralized embryo**

In Drosophila, Bcd functions in a syncitium to pattern the A-P body axis. Human development does not include formation of a syncitium. Would you expect humans to have a Bcd homolog that acts in the same way as flies?

**No; Bcd is a transcription factor. A gradient of Bcd in the mammalian egg would not have access to multiple nuclei because no syncitium forms.**