



ABOUT THE COVER

The spectacular micrograph on the cover of this textbook shows a purple sea urchin zygote (*Strongylocentrotus purpuratus*) that is undergoing its first cell division. Tubulin, which is a protein found in the mitotic spindle, is labeled in orange, and the chromosomes are labeled in blue. As the sets of chromosomes are separating and moving in opposite directions, you can see that one of the blue chromosomes is lagging far behind the others. As discussed in this textbook, such events can cause abnormalities in chromosome number in the resulting daughter cells. In humans, changes in chromosome number result in genetic disorders such as Down syndrome.

