## **Skewness Exploration Questions**

This applet lets you see how the results of an experiment with a lot of trials might look if the mean, median, and mode aren't the same. Experiment with moving the median and standard deviation lines to change the shape of the graph. Try to answer these questions:

• Move the median line a small amount away from center, about half a box. Where is the mode? Did it move farther than the median? The same amount? Not as far?

• Create a 100-trial histogram with the median off-center. Is the mode of the histogram where you expect it to be? The median? Repeat the trial a few times. Also try with a 1000-trial histogram, and experiment with the bin size. Are the median and mode close to where the curve has them?

• Do you think it would be easier or harder to recognize this kind of distribution than the normal distribution in an experiment?