**Suggested reading:** [OpenIntro Statistics, 3rd edition](https://www.openintro.org/stat/textbook.php?stat_book=os" \t "_blank), Chapter 1, Sections 1.7 - 1.8

**LO 1.** Use frequency tables and bar plots to describe the distribution of one categorical variable.

**LO 2.** Use contingency tables and segmented bar plots or mosaic plots to assess the relationship between two categorical variables.

**LO 3.**Use side-by-side box plots for assessing the relationship between a numerical and a categorical variable.

***Test yourself:***

1. *Interpret the plot in Figure 1.30 of OpenIntro Statistics (page 39).*
2. *You collect data on 100 classmates, 70 females and 30 males. 10% of the class are smokers, and smoking is independent of gender. Calculate how many males and females would be expected to be smokers. Sketch a mosaic plot of this scenario.*