

Elements of R for Genetics & Bioinformatics

Session 2: Learning to Draw

Download the 'faculty salary' dataset, available at

<http://faculty.washington.edu/kenrice/sisg/salary.txt>

and load it into R using `read.table(... , header=T)`

1. Using the `plot()` command, illustrate the following relationships;

year vs salary

rank vs salary

field vs rank

(hint; use the commands on the 'Drawing' slide!)

2. The dataset was collected for an investigation of gender discrimination, so we are interested in the spread of salaries for men and women. Illustrate this relationship with a boxplot.
3. Using `summary()`, describe what else is in the dataset. Produce either scatterplots or boxplots of a relationship you think might be interesting.
4. Load the `MASS` package (which contains code and datasets from a book by Venables and Ripley). Part of this package is a data frame object called `mammals`. For this collection of mammals, plot brain weight against body weight, using log scales on both axes. What relationship does this plot suggest? What does it indicate about humans? How about Water Opossums?