

## Introduction to R

### Session 3: Plotting functions and formulas

1. Using the `crab` data (for the last time!);
  - a. Plot number of satellites versus width
  - b. Plot number of satellites versus weight, and color-code the points differently if their width exceeds 26cm
  - c. Illustrate the distribution of number of satellites, for crabs of different colors. (There are several ways to do this)

For all of these, try re-sizing the graph after it is drawn; what happens to the axes?

2. Save one of your plots from Q1 as a graphics file (e.g. PNG, JPEG, PDF) and then place it in an external document (e.g. a PowerPoint slide). Are the axes big enough?
3. The `titanic` dataset, on the course site, contains information on who survived the [sinking of the Titanic](#), amount Males/Females, 1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> class passengers and Crew, Adults/Children. For each category, `n` denotes the total number, and `prop` denotes the proportion of them who survived.

Using the `stripchart()` function and the formula syntax, illustrate which categories were most and least likely to survive. (Hint: you will need to use the help page for `stripchart()`, but its syntax follows the commands seen in the slides)