

Worksheet 7: Plots

Lab worksheet: Plots

For this worksheet, you'll need the variable `fibSeq` that you created in paste worksheets.

R is a great tool to quickly make sophisticated (and pretty) plots, making it very popular for biologists across fields. There are tons ways you can plot in R (check out <http://www.gastonsanchez.com/> for some aRt).

First, we'll consider a scatter plot. For this you'll use the function `plot()`.

Experiment with the function by

1. Looking at the manual page for the `plot` function
2. Using that to draw a plot of the first seven Fibonacci numbers (so the `x` coordinates are just whole numbers 1 through 7 and the `y` coordinates are the Fibonacci numbers).
3. Change the 'type' of the plot to two alternates. Decide which you think is most informative.
4. Give the `x` and `y` axes informative labels (use `xlab` and `ylab`).
5. Give the whole plot an informative label (use `main`).
6. Bonus: look up the manual page for `par` and experiment with other graphical parameters (you can list many of them as arguments to `plot`). Maybe start with `pch` or `col`.

The plot will automatically pop up in RStudio, but you may want to save it to refer to later. The function `pdf(file=FILENAME)` can be used for this purpose. Call `pdf()` before your `plot()` command and the plot will be written directly to `FILENAME`. You then have to call `dev.off()` to close output to `FILENAME`. For instance,

```
> pdf(file="myPlot.pdf")
> plot(x=ages, y=heights)
> dev.off()
```

7. Save the scatter plot you made to a pdf