# **R Workshop Cheatsheet**

Rstudio Commands	shortcut What is does	
<-	ctrl/alt + '-'	Assignment operator, "=" sign
%>%	ctrl/cmd + shift + m	Pipe function, effectively a "then" statement
comment	ctrl/cmd + shift + c	Annotating your code
new section	ctrl/cmd + shift + r	Creating a new section

tidyverse	shortcut	general formula
read_csv	read .csv file	read_csv("your_file.csv")
write_csv	create .csv file	<pre>write_csv(dataframe, "your_new_file.csv")</pre>
gather	wide -> long	gather(category, numerical, x:z)
spread	long -> wide	<pre>spread(category, numerical,)</pre>
separate	split column into multiple columns	<pre>separate(date, into = c("month","day","year"), sep = "_")</pre>
unite	merge multiple columns	<pre>unite(month_day, month, day, sep = "_")</pre>
filter	pick specific values	<pre>filter(gene == "SOX2") filter(gene %in% c("SOX2", "OCT4")</pre>
select	pick specific columns	select(genus, species, genes)

arrange	sort column names	arrange(column) arrange(desc(column)
rename	change column values	<pre>rename(new_name = old_name)</pre>
mutate	create new column from existing data	<pre>mutate(log2_value= log2(value)) mutate(new_column = col_A - col_B</pre>
group_by	ʻlock-in' by variables	<pre>group_by(dose,date,treatment)</pre>
summarise/summarize	aggregate data	<pre>summarise(avg_value = mean(value))</pre>

### Markdown

An elegant way to format text using plain text. Use this to format R markdown documents.

#### **Markdown editors**

**Windows** - markdowndownpad **MacOS** - macdown

What	Input	Output
Bold	**Your Text Here** OrYour Text Here	Your Text Here
Italics	*Your Text Here* or _Your Text Here_	Your Text Here
Bold and Italics	***Your Text Here***	Your Text Here

#Biggest header

## **Biggest header**

##Big header

## Big header

###Smaller header

### Smaller header

####Even smaller

#### **Even smaller**