SQL SELECT and WHERE tutorial

Why should scientists care?

- Being able to select only certain records will speed up and clean up the retreval of information
- SELECT and WHERE are fundamental operations that will be used whenever you work with databases

Start sqlite3 and create a database

```
$ sqlite3 /tmp/test.db
```

This creates an empty database and starts the sqlite3 shell interpreter. Now let's insert one row.

```
sqlite3> CREATE table Experiments (Scientist text, Project text, Hours real);
sqlite3> INSERT into Experiments values('Sofia Kovalevskaya', 'Antigravity', 6.5);
```

Check that the row is there with

```
sqlite3> SELECT * FROM Experiments;
```

Now insert some more rows (don't be afraid to cut-and-paste) "' sqlite3> INSERT into Experiments values('Sofia Kovalevskaya', 'Teleportation', 11.0);

sqlite3> INSERT into Experiments values('Sofia Kovalevskaya', 'Teleportation', 5.0);

sqlite3> INSERT into Experiments values('Mikhail Lomonosov', 'Antigravity', 4.0);

sqlite3> INSERT into Experiments values('Mikhail Lomonosov', 'Time Travel', -2.0);

sqlite3> INSERT into Experiments values('Dmitri Mendeleev', 'Antigravity', 9.0);

sqlite3> INSERT into Experiments values('Ivan Pavlov', 'Teleportation', 9.0);

sqlite3> INSERT into Experiments values('Ivan Pavlov', 'Time Travel', -7.0);
"'

Look at all rows with

```
sqlite3> SELECT * FROM Experiments;
```

The basic SELECT statement