

# Working with the BioradConfig Package

*Andrew Borgman*

*2015-05-06*

## Purpose

BioradConfig facilitates the creation of Bio-Rad Bio-Plex 200 plate configurations. The package will provide the middleware for the Jovinge Lab's plate configuration application – interacting with the SQLite data base storing relevant information and updating appropriately.

## Data Back-End

The SQLite database on the back end was created with the following schema:

```
CREATE TABLE aliquot
( "id" TEXT,
  "barcode" TEXT,
  "redcap_id" TEXT,
  "plate_id" REAL,
  "is_depleted" REAL,
  "box_number" TEXT,
  "row_letter" TEXT,
  "col_number" REAL,
  "timepoint" TEXT
);
CREATE TABLE patient
( "id" TEXT,
  "redcap_id" TEXT,
  "project_id" REAL,
  "is_complete_0" REAL,
  "is_complete_48" REAL,
  "is_complete_192" REAL,
  "all_complete" REAL
);
CREATE TABLE plate
( "id" INTEGER,
  "run_date" INTEGER,
  "is_processed" INTEGER
);
```

## BioradConfig Classes

Each table in the database has a corresponding BioradConfig class.