**Uruguay Database- PHP Functions**

Connect

Establishes connection to database.

**Parameters**:

$host

$user

$password

$db\_name

**Return**:

The connection (not sure what type, but its special). You can pass the returned connection into any other function in order to run the function on that connection.

TODO: When adding test tubes, print the return value of the add function to the user so that they can physically label their test tubes.

Add

Inputs rows into specified table. Column names, and the dictionary of column->value, are separated because the dictionary could contain non-column related metadata (ex. how many aliquots related to this sample to make)

**Parameters**:

$columns- contains array of strings, representing all columns in the table (refer to MySQL Tables document for column info)

$values- contains dictionary of strings to strings, representing mapping of column names to values.

$table- contains string, representing table name

$connection

**Return**:

The auto-generated ID from the table after inserting a row. Can be used to insert rows into other tables that reference the originally inserted row.

Aliquot

**Parameters**:

$aliquots- number of test tubes we aliquot into

$sample\_id- the id for the sample from which we aliquot

$connection

**Return**:

None

Deplete

**Parameters**:

$values- (should be named tube\_ids) id’s for the tubes that we are deleting

$connection

**Return**:

None

Retrieve\_all

**Parameters**:

$table- name of desired table

$connection

**Return**:

JSON object containing all data from table

TODO: For the below report functions, confirm column names (right now they are assumed to be type, child\_id, and eval).

TODO: Confirm that only consented samples are considered.

Report\_child

**Parameters**:

$type- one of {blood, hair, serum, urine…}

$connection

**Return**:

JSON object containing all data from table with a column of unique child id’s, and a column of the number of samples associated with each child id. Only samples with consent are considered.

Report\_eval

**Parameters**:

$type- one of {blood, hair, serum, urine…}

$connection

**Return**:

JSON object containing all data from table with a column of unique evals, and a column of the number of samples associated with each eval. Only samples with consent are considered.

Report\_child\_eval

**Parameters**:

$type- one of {blood, hair, serum, urine…}

$connection

**Return**:

JSON object containing all data from table with every child id/eval combination that exists in the database. Ordered by child id, then by eval. Only samples with consent are considered.