# ***Experimental Design***

# **(Before Radioactive Assay Test)**

1.) Collect 15-20 test tubes that will fit into a centrifuge. Label them according to the people that you sample.

2.) After finding a large sample size to work from (use of 15-20 people should be plenty), collect the cheek cells via use of a buccal scrape.

* *Buccal Scrape*: Collection of cheek cells as the sample materials
* Use approximately 3-4 scrapes to allow for plenty of cells to be gathered.

3.) Fill the test tube approximately ¾ up with a sterile saline solution.

4.) Place the collected cells into the appropriate test tubes and make sure as many cells come off the scraper as is possible.

5.) Stopper the test tubes for a run in the centrifuge.

6.) Place the test tubes into the centrifuge and cover the machinery. ·

* ***WARNING***: Centrifuges are *very* dangerous if you leave the cover open!! ***NEVER*** put anything into the machine while it is running and **always** close the cover (if there is one) **before** starting any runs!!!

7.) Centrifuge the mixture for approximately 2 minutes. This will allow for the cheek cells to concentrate at the bottom of the test tubes. After centrifuging the mixtures, remove the test tubes.

8.) Drain the solution to leave approximately 1 cc of fluid within the tube. Allowing some of the solution to be in the test tube will ensure that the cells will not dry out.

9.) Cover the test tube again tightly with Parafilm M or a stopper.

10.) Refrigerate the test tubes until ready for use in [assay](http://docs.google.com/Download/Temp%20Bio/Testing.html).