**Weekly Roadmap: Journ Galvan**

**Stier Lab**

**Objectives for 4/27/2020 – 5/1/2020**

1. R code:
   1. Create column of average branch width in branch\_width.csv and merge with coral dimensions and invert dataframe
   2. Include branching column(wide or tight)
2. R code scatterplot:
   1. Coral volume vs. invert abundance for both wide and tight corals
   2. Surface area vs. invert abundance for both wide and tight corals
   3. **Ask about convex hull in imagej and (discuss available space vs. invert abundance and convexity measurements)**
3. R code bargraph
   1. X axis- wide and tight corals, y axis- trapezid abundance
   2. X axis- wide and tight corals, y axis- Alpheus abundance

**Objectives for 5/4/2020 – 5/8/2020**

1. Practice with ggplot and make graphs presentable
2. Run paired t-test between data from photogrammetry measurements to hand measurements
3. Run 2-sample t-test to find difference in means of the two samples wide and tight (if data is normal, if not transformations

**Objectives 5/11/2020 – 5/15/2020**

1. Finish methods
2. Begin write up on results, analysis, and sources
3. Update on convex hull measurements and incorporate data if successful

**Objectives 5/18/2020 – 5/22/2020**

1. Finish rough draft of methods, results, and analysis
2. Finish updated convex hull measurements
3. Begin thinking about peer review

**Objectives 5/25/2020 – 5/29/2020**

1. Peer reviewed draft with annotated suggestions- don’t be shy, ask lab for help
2. Peer review from Joe and maybe one other person in lab?
3. Work on final draft

**Objectives 6/1/2020 – 6/5/2020**

1. Continue working on final draft – ask lab for help