**Multi Class Color Vis Instructions for Running**

1. Sign in participant on Reservax (ask for student ID, write down number in notes).
2. Have participant sign the paper consent form in the lab.
3. Have participant complete the color arrangement task and make sure they are not color blind (should be bookmarked in browser- otherwise just google “color arrangement task”.
4. Determine which computer to seat the participant, based on the running key.
5. Set up first experiment condition:
   1. Folder: MutliClassColorVis
   2. Program (Color\_Cond\_Target): Determine color and shape target from the running key – always run in this order: **1. \_Lum, 2. \_Chro, 3. \_Hue** !
   3. Open jar file and select: *JND > Design > DistShapeTest* *> staircase* || *Configure > randomized*
   4. Click start and **enter participant number** (IMPORTANT- **you must hit “return” on the keyboard**; do NOT click the button or it will not record data!!)
   5. Allow participant to fill out survey, but do not let them start the experiment.
   6. Give instructions:

“Are you familiar with the concept of correlation?”

“[[This may be review for you]], but correlation is the measure of a relationship between two variables. It is measured on a scale from 0 to 1, where 0 represents no relationship between two things, and 1 represents a maximally strong relationship between two things.”

“Correlation is most typically represented in a visualization called a scatterplot [show scatterplots]. You may have seen these before. Here is a scatterplot showing a very weak relationship, here is a scatterplot showing a very strong relationship.”

“An example of two things that are strongly related/highly correlated in real life are: height and weight — the taller you are, the more body mass you have and thus, the more you weigh. An example of two things that are weakly related/weakly correlated in real life are shoe size and math acuity — the size of your feet generally does not predict how well you do on math tests.”

“So your experiment today will look a lot like this, you will see two scatterplots side by side, and your job is to select the one with the higher/stronger correlation value.”

“Which of these two scatterplots is more strongly correlated?”

“The only difference is that today, you will be viewing scatterplots that contain two data populations: one will be depicted with squares, and the other with diamonds. You should only make your correlation judgements on the squares, and always ignore the diamonds in the display. Go ahead and press the space bar to view the display”

\* point out that the populations they need to make judgements on are depicted by squares, remind to ignore diamonds \* At this point you can tell them the color of the squares they should be focusing on in this condition (R G B or Y).

“When you see the plots on the screen, if you believe the plot on the right is showing a more highly correlated population of squares, you’ll press M, if you believe it’s the graph on the left, you’ll press Z, space bar will take you to the next trial.”

“There is no time limit for each guess, so please be as accurate as possible. If you are totally unsure, it’s okay to make your best guess — don’t take too long and just keep going.”

“Any questions about the task?” 🡨 make sure they really understand before they press the keys. Observe the first couple trials so you can make sure they get the task.

**\*\* When you change subconditions (\_Lum, \_Chro, \_Hue), do not need to repeat instructions. Simply explain that the instructions have not changed, the color and target shape are the same. Open the next file, enter the participant number again (press return!!), enter their initials and age for them, and skip to the end and press start.**

**When you change conditions (Color), you can explain that the instructions are the same, but this time they are judging the new color of squares.**