

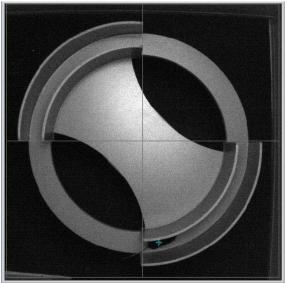
Zero Maze Protocol

Set up all 4 chambers with appropriate zoom/focus on the cameras.

- Allow 15-60 minutes for animal room acclimation
- Wipe down each chamber before and after each animal with Clidox
- Use white light and keep the shades up

Open Limelight 4 Software

- File -> Open data file
 - Create a new file: ZM_Date
- Make sure there is space available on the desktop. See bottom right corner for GB available
- Double click on the chamber you want to set up
 - Set your grid resolution to 2x2 (can be changed during analysis)
 - o Click on the find cursors button and set up the blue grid lines
 - \circ Set the view size to 64 cm



- Click OK and move onto the next chamber until you are set up to begin your experiments
- Under duration enter: 600
- Enter each animal ID
- Take a reference with no animal inside the chamber box
- Grab your animal and place in the bottom right closed portion of maze
- Press Start; Do the same for all chambers
- When the trial is over, the animal ID changes to yellow. Grab the mouse and wait for the rest of the animals to finish their session
 - Count the droppings if you want to use it as a measure of anxiety



- Wipe down the mazes with Clidox. Reset the boxes in case they moved during cleanup. Enter new animal IDs and repeat for the steps for the set of animals
- When done with experiment, wipe down all the mazes and return in proper place
- Transfer your data off of the computer and into your BPC server folder

Written & edited by Mary J. Kando mary.kando@northwestern.edu Behavioral Phenotyping Core 5/16/16 Updated: 2/15/21