Morris Water Maze
1. In MATLAB, navigate to autotyping directory and run autotyping.
2. Select Morris water maze from the drop-down menu
3. You should get a window like below
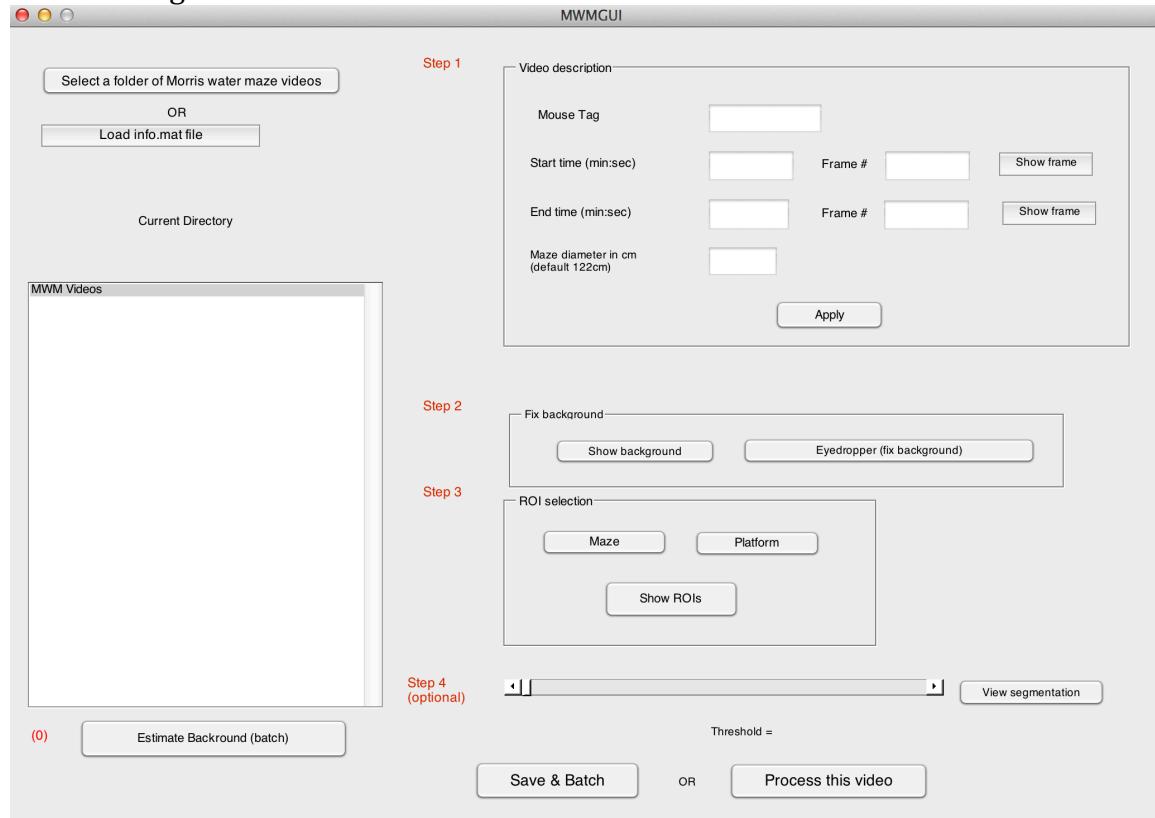
4.
5. Place all Morris water maze videos in a single directory and "Select a folder of Morris water maze videos". The name of videos will be populated in the listbox
6. Select the first video and fill in the mouse tag, start time (when the mouse is placed in the pool and the experimenter's hands are completely out of the maze), end time = when the mouse finds the platform or when the experiment ends, maze diameter = the diameter of the maze in cm. Click "Apply". This will estimate the background frame and determine the frame numbers that correspond to the start and end times. You can view the frames by clicking on "Show frame" and adjust the frame numbers to get the most accurate start and end frames for analysis.
7. Click "Show Background" to see the estimated background. Use the eyedropper tool to find parts of background as needed.
8. Draw ROIS: Maze = an ellipse around the inside of the maze. Draw the Maze ROI such that its diameter approximates the diameter value entered above (122cm). Draw an ROI for the platform; if there is no platform, draw an arbitrary ROI.
9. Click on View Segmentation to see the segmentation of an randomly selected frame. If you use the slidebar to adjust the threshold, this threshold will be

used for all frames. Rather, if you do not use the slidebar at all, an optimal threshold for each frame is used (recommended).
10. Move onto the next file in the listbox and when done, click "Save and Batch"
11. For each file processed, a file_summary.txt is generated and summary figure is placed in MWM_results directory. MWM_results directory also has results.txt file. For each file, the latency to platform in seconds, path-length in meters (total distance travelled), and average swim speed in meters/seconds is listed.