

Figure 1. Diagram of Robogator and foraging apparatus. Rats were placed in the Safe Nest and given two minutes to habituate before the gate into the foraging area was lifted. When in close proximity with the pellet the Robogator would be triggered, causing it to surge forward and snap its jaws. Three minutes were allowed for the rat to retrieve the pellet at each distance, at which time the gate would be lowered and the rat would no longer be able to enter the foraging area. Trials progressed with the riskiest (pellet farthest from nest/closest to Robogator) trial first, becoming less risky as the pellet was moved closer in subsequent trials. Baseline trials were conducted without the Robogator present.

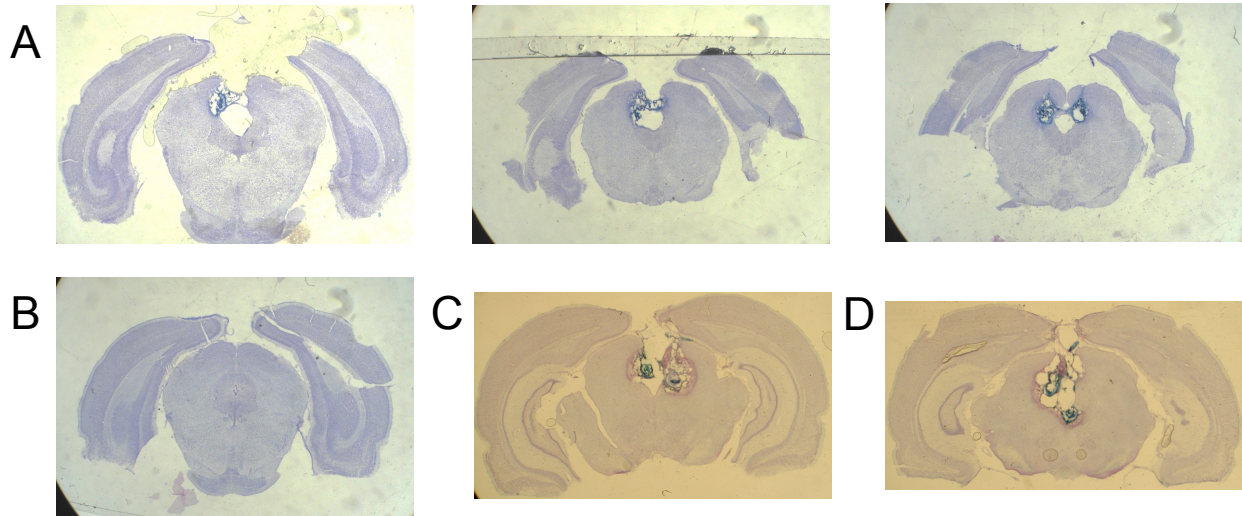


Figure 2. Rat brain histology showing (A) one slice from each of the dPAG lesioned rats, (B) a representative SHAM lesion slice, and a representative slice from each (C) advPAG and (D) pdvPAG lesions.

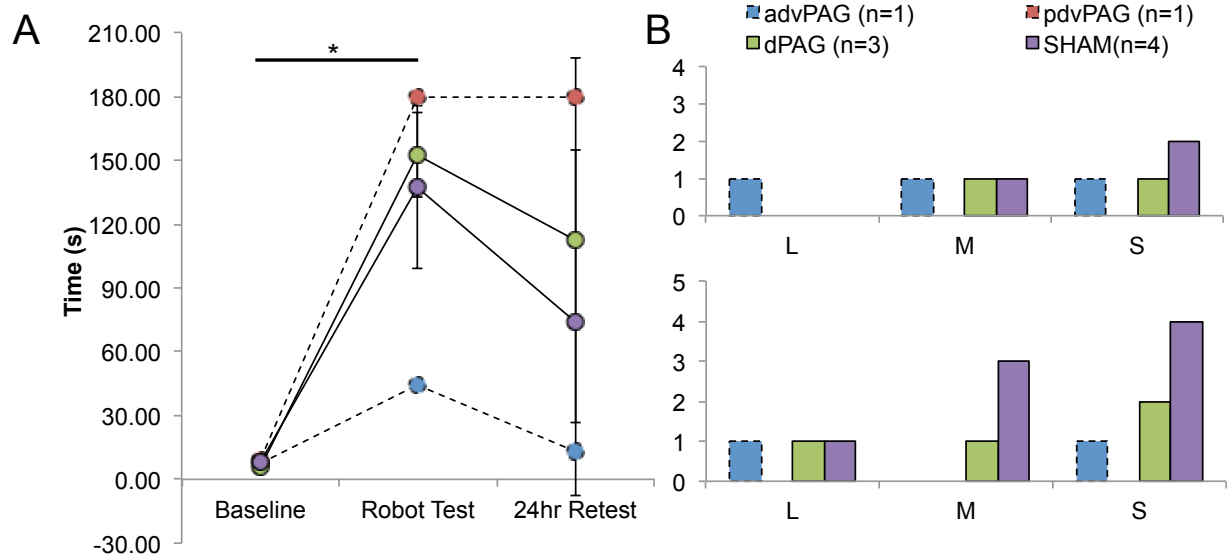


Figure 3. Pellet retrieval data. (A) Time taken to retrieve the pellet was equal between the dPAG and SHAM groups during baseline. After exposure to the robot, both groups displayed an increased latency to retrieve the pellet, if they were able to retrieve it at all within the 3-minute time limit. (B) Number of rats from the dPAG (n = 3), SHAM (n = 4), advPAG (n = 1) and pdvPAG (n = 1) that were able to successfully retrieve the pellet during the initial robot test (top) and 24hr retest (bottom). Error bars represent SEM.

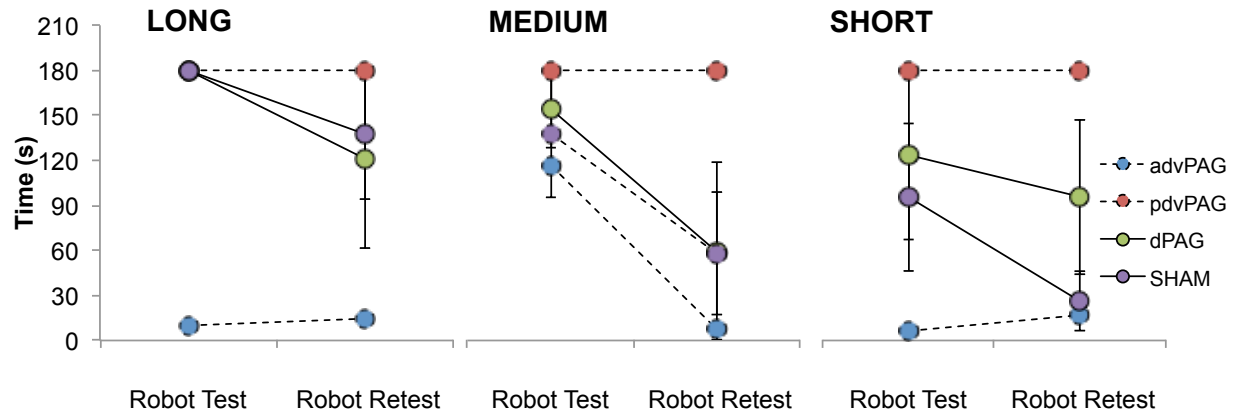


Figure 4. Pellet retrieval times over the two-day testing period broken down by distance to the pellet. At all three distances, the rats showed a decreased latency to retrieve the pellet, thus seem to habituate to the presence of the robot. Error bars represent SEM.

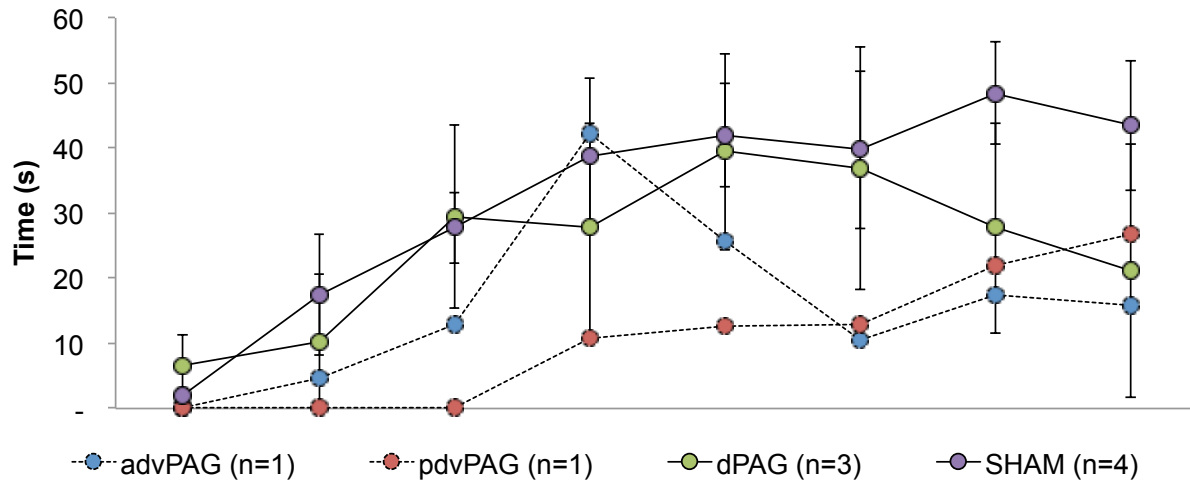


Figure 5. Contextual Fear Conditioning. Freezing behavior was measured in 1-minute bins over the course of the 8-minute session. The dPAG and SHAM groups did not differ in responding to the fearful context. Error bars represent SEM.