Running plan:

About 3 months total per rat.

|  |  |  |  |
| --- | --- | --- | --- |
| Task version | Description | Stop criteria | Time |
| Random | Feeders 2,4,6,8 | Over 180 or 200 runs for 2 days | 1-2 weeks |
| Homebase training | Horizon 6 only, 2 drops | Over 150 runs for 2 days | 5-7 days |
| 0/1 both guided | Horizon 1,6, guided to both targets | 7-10 sessions | 7-10 days |
| 0/1 version | Horizon 1,6, guided to only 1 target | 7 sessions | 1 week |
| Both guided | Horizon 1,6,15 (chosen 2 out of 3), reward 0-5 drops | 7 sessions | 1 week |
| Guided 3 times | Horizon 1,6,15, reward 0-5 drops | 10 sessions | 2 weeks |
| Guided 1 time | Horizon 1,6,15, reward 0-5 drops | 10 sessions | 2 weeks |
| Free choice | Horizon 1,6,15, reward 0-5 drops | 10 sessions | 2 weeks |

Analysis plan:

Existing main results

A close up of a map

Description automatically generatedA close up of a map

Description automatically generated

1. Why do rats perform better in long horizon (in initial choices)?
2. Check the left-over memories from the previous games
3. Motivation has an opposite dependence of horizon
4. How is this task better than previous tasks from the perspective of electrophysiology
5. Win-stay Lose-shift strategy
6. (Experimentally) Take out the prior information
7. The free choice vs guided choice difference
8. Change of state space