VERSION 2

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Protocol status: Working
We use this protocol and it's
working

🌐 Rotarod (40 RPM and 20 RPM with docking) V.2

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ASAP Collaborative Research Network   Kaplitt Protocols

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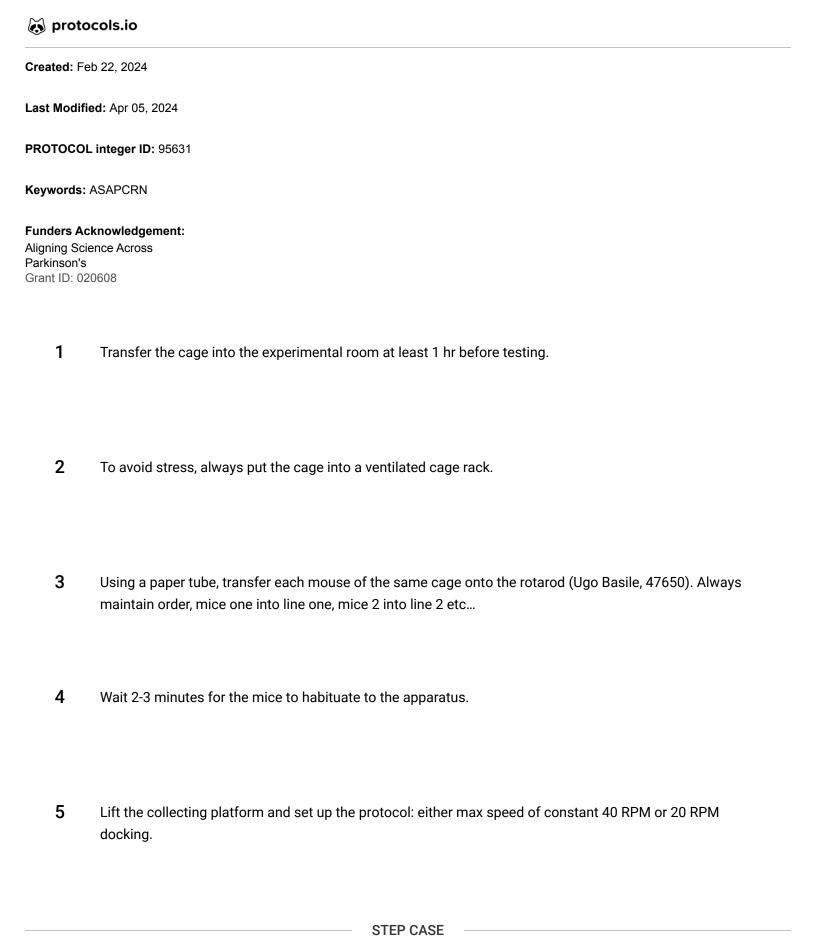Weill Cornell Medicine

ABSTRACT

This protocol describes motor function testing in mice using the rotarod by the
Svenningsson lab.

Two options for the protocol are included: 1) 40 RPM constant speed after habituation and
2) 20 RPM with docking.

MATERIALS

Mouse Rotarod (Ugo Basile 47650)
50% ethanol

1   Transfer the cage into the experimental room at least 1 hr before testing.

2   To avoid stress, always put the cage into a ventilated cage rack.

3   Using a paper tube, transfer each mouse of the same cage onto the rotarod (Ugo Basile, 47650). Always maintain order, mice one into line one, mice 2 into line 2 etc…

4   Wait 2-3 minutes for the mice to habituate to the apparatus.

5   Lift the collecting platform and set up the protocol: either max speed of constant 40 RPM or 20 RPM docking.

──────────────── STEP CASE ────────────────

40 RPM `4 steps`

6 Following habituation, start the rotarod program to reach a speed of 40 RPM within the first 5s of the protocol.

7 The time to fall is defined as the moment the mice fall in the receptacle or the moment the mice turn around the rotor more than 5 consecutive times. The maximum trial length is 2 min.

8 Repeat the experiment 3 times with at least 6 hr between each trial. If an animal does not fall or turn more than 5 times within 120s of the trial, stop the trial and record "120" as the individual time.

9 Analyze for each mouse, the time to fall for each session, the average and and max time.