October 19, 2020

Dr. Brad Postle

Reviewing Editor

*eNeuro*

Dear Dr. Postle,

We are submitting a revised version of manuscript **eN-RGR-0265-20 (“How movement variability constrains locomotor use-dependent learning”)**.

We appreciate the reviewer’s comments regarding our power analysis section. We now clarify exactly which data we used for the estimated effect size calculation (Experiment 2 from Wood et al 2020)and provide a clearer rationale for this decision. Importantly, to address the reviewer’s overall concern regarding statistical power, we are increasing our sample size by 20%, for a total of 18 participants. This will allow us to both increase the power of our proposed study and maintain our ability to counterbalance the order of conditions. We hope the changes we have made here satisfy all remaining concerns.

The submission includes clean and tracked changes copies of the revised manuscript as well as point-by-point responses to the reviews. Please note that the only changes made to the manuscript are within the Power Analysis section.

We look forward to hearing from you.

Sincerely,

Jonathan Wood, Susanne Morton, and Hyosub Kim