

September 3, 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 are grateful for the insightful critiques from both reviewers and have made substantive changes to our revised submission in response to their suggestions. The major changes in this revision are the additional information and analyses regarding aftereffects now provided in our pilot data figure, stronger rationales for our modeling analyses, and clarification of our main predictions. In our new pilot data figure, we added stride-by-stride data for each participant as well as aftereffect predictions for each pilot subject. We have also added Supplemental Figure 1 in the body of our responses to reviewers which includes model fits to each of these pilot subjects and the distinct predictions of each model. We plan to perform the same analyses and create a similar figure after data are collected. We believe these changes have substantially strengthened the current revision.

The submission includes clean and tracked changes copies of the revised manuscript as well as point-by-point responses to the reviews.

We look forward to hearing from you.

Sincerely,

Jonathan Wood, Susanne Morton, and Hyosub Kim