An integrative framework linking molecular signatures and locomotory phenotypes in space-induced sarcopenia

Authors and Affiliations: Brendan K. Ball[1+*], Hammad F. Khan[1+*]

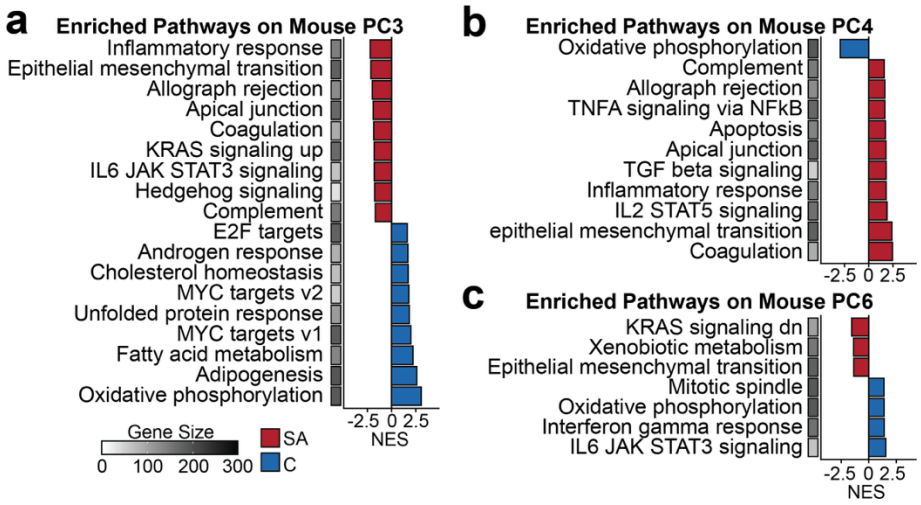
1. Weldon School of Biomedical Engineering, Purdue University, West Lafayette, IN 47907, USA

[+]These authors contributed equally to this work

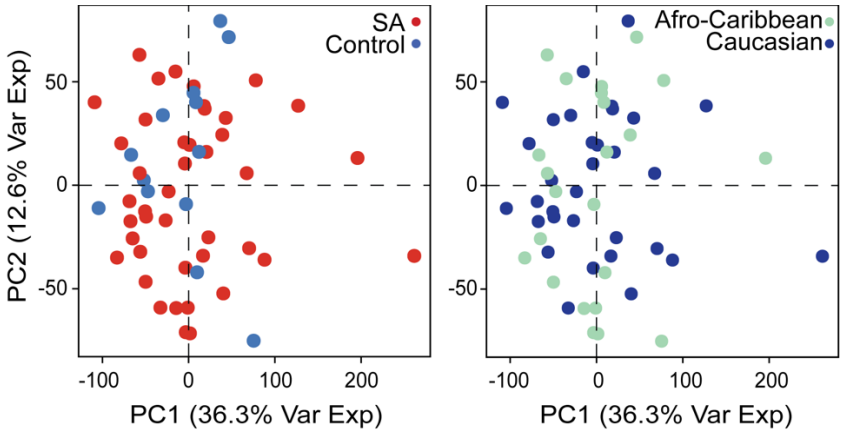
*Correspondence: bbkazu@purdue.edu, khan332@purdue.edu

Keywords: Spaceflight, sarcopenia, transcriptomics, locomotion, translational modeling, systems biology

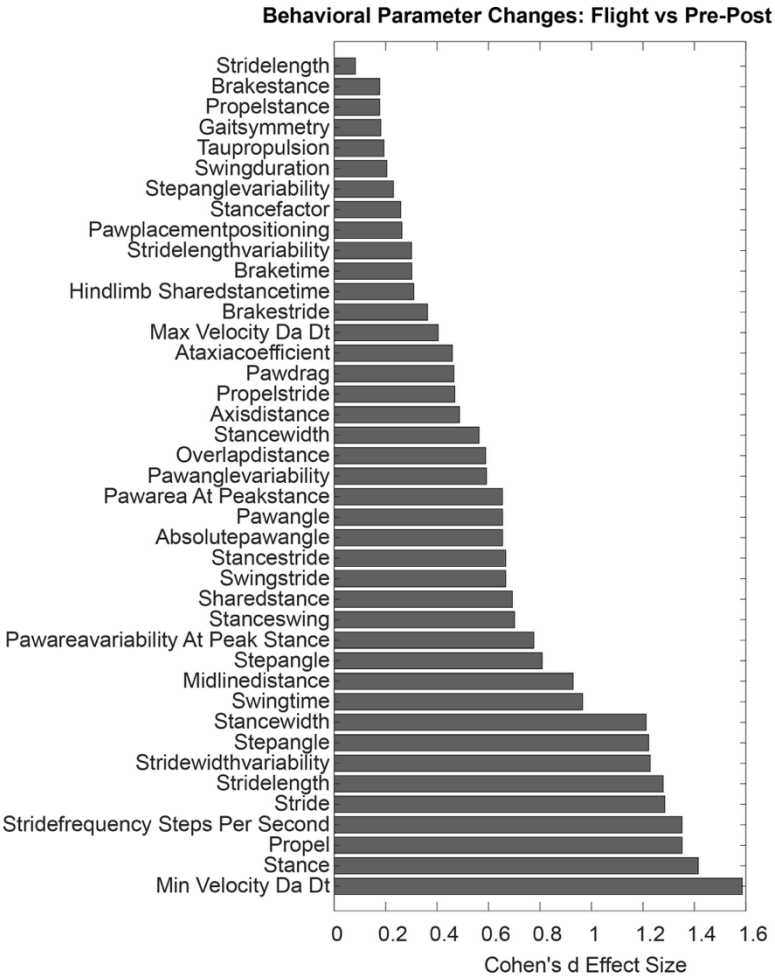
SUPPLEMENTARY INFORMATION



Supplementary Figure 1. Hallmark pathway enrichment analysis. (a) Significantly enriched pathways on mouse PC3, **(b)** PC4, and **(c)** PC6.



Supplementary Figure 2. Principal component analysis of the merged Afro-Caribbean and Caucasian dataset. Human patients are labeled by their disease condition and their association with a demographic cohort.



Supplementary Figure 3. Effect size of behaviors pre- and post-flight. All gait parameter effect sizes were calculated between pre- and post-flight time points.