

**Figure S1.** Changes in EMG activity due to exoskeleton assistance for the Hamstring, Rectus Femoris, Vastus Medialis, Gluteus Medius, and Gluteus Maximus. Changes in EMG activity for these muscles were generally nonlinear and unique to each participant. More consistent trends across participants were seen with the Soleus, Gastrocnemius and Erector Spinae (Fig. 2). Data show EMG activity averaged across each gait cycle for the right and left legs and normalized to the baseline condition.