

Speed = 2.9 miles/hour Speed = 3.1 miles/hour

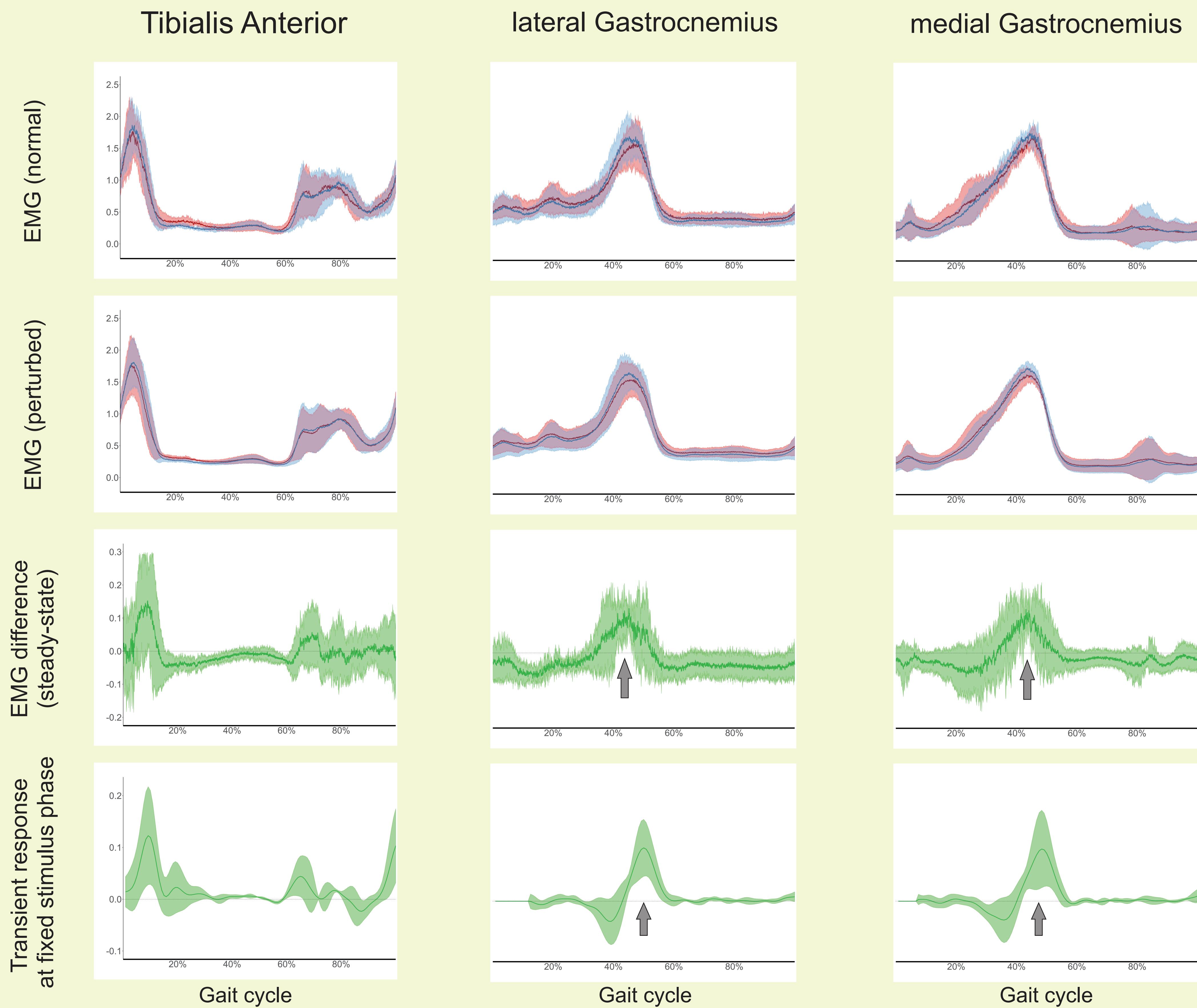


Figure 1. Muscle activities.

1st & 2nd rows: EMGs for two speeds during normal & perturbed gait; 3rd row: Difference between EMGs at different speeds during perturbed gait which represents steady-state changes; 4th row: Impulse response for a gait cycle at fixed stimulus phase which represents transient changes.

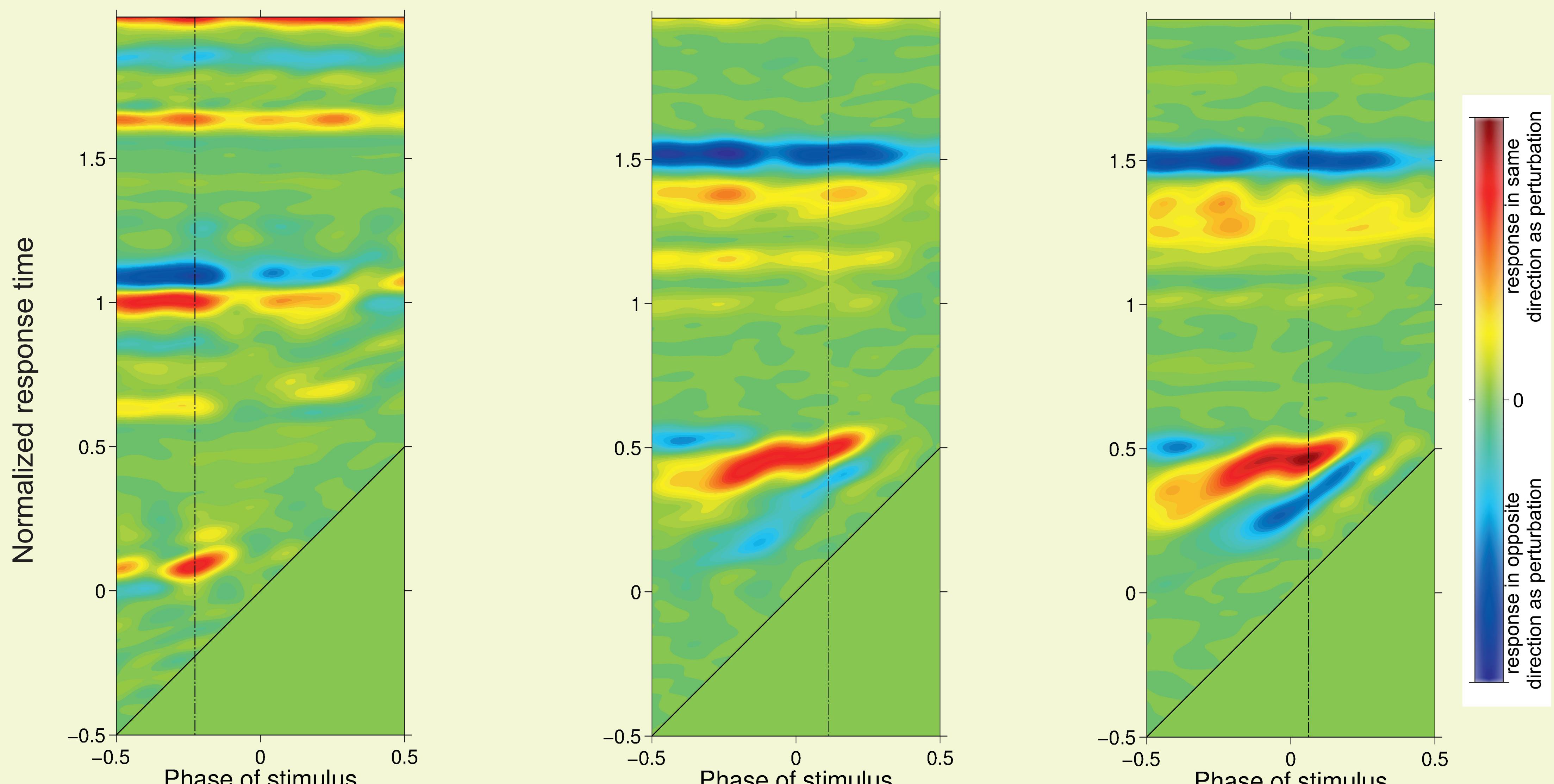


Figure 2. Impulse response functions.

Relationship between muscle activity and the visual stimulus: At each phase of the stimulus, change in muscle activity is presented over the first two gait cycles. Red color corresponds to higher activity. Zero on each axis is the heel strike.