

IS THE REDUCED SPIKE-JUMP PERFORMANCE IN ELITE FEMALE VOLLEYBALL PLAYERS DETERMINED ONLY BY SEX DIFFERENCES IN ANATOMY, STRENGTH, AND POWER?

- Jump height: High importance, difference w/m
- Cause: Biology / technique ?
- Aims:
 - Sex dependent differences
 - Sex specific training intervention



Methods

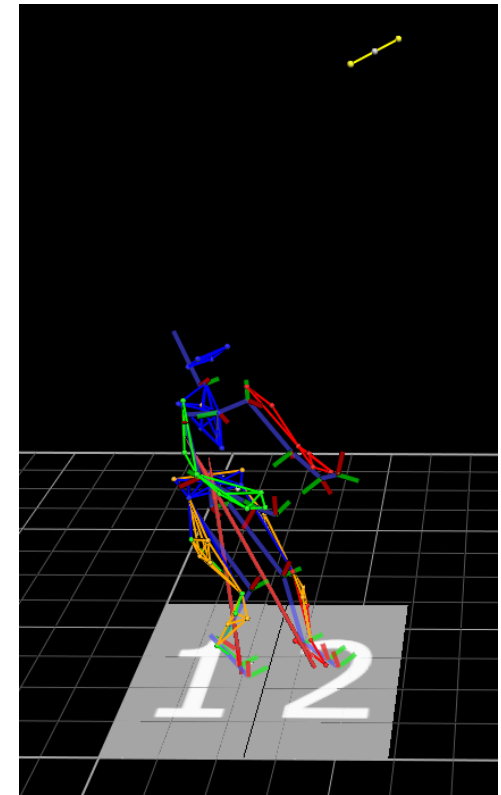
- 14 female, 14 male elite players
- 10 spike jumps per participant



5 lower limb muscles
2000Hz (Myon EMG)



8 Vicon MX-13
250Hz

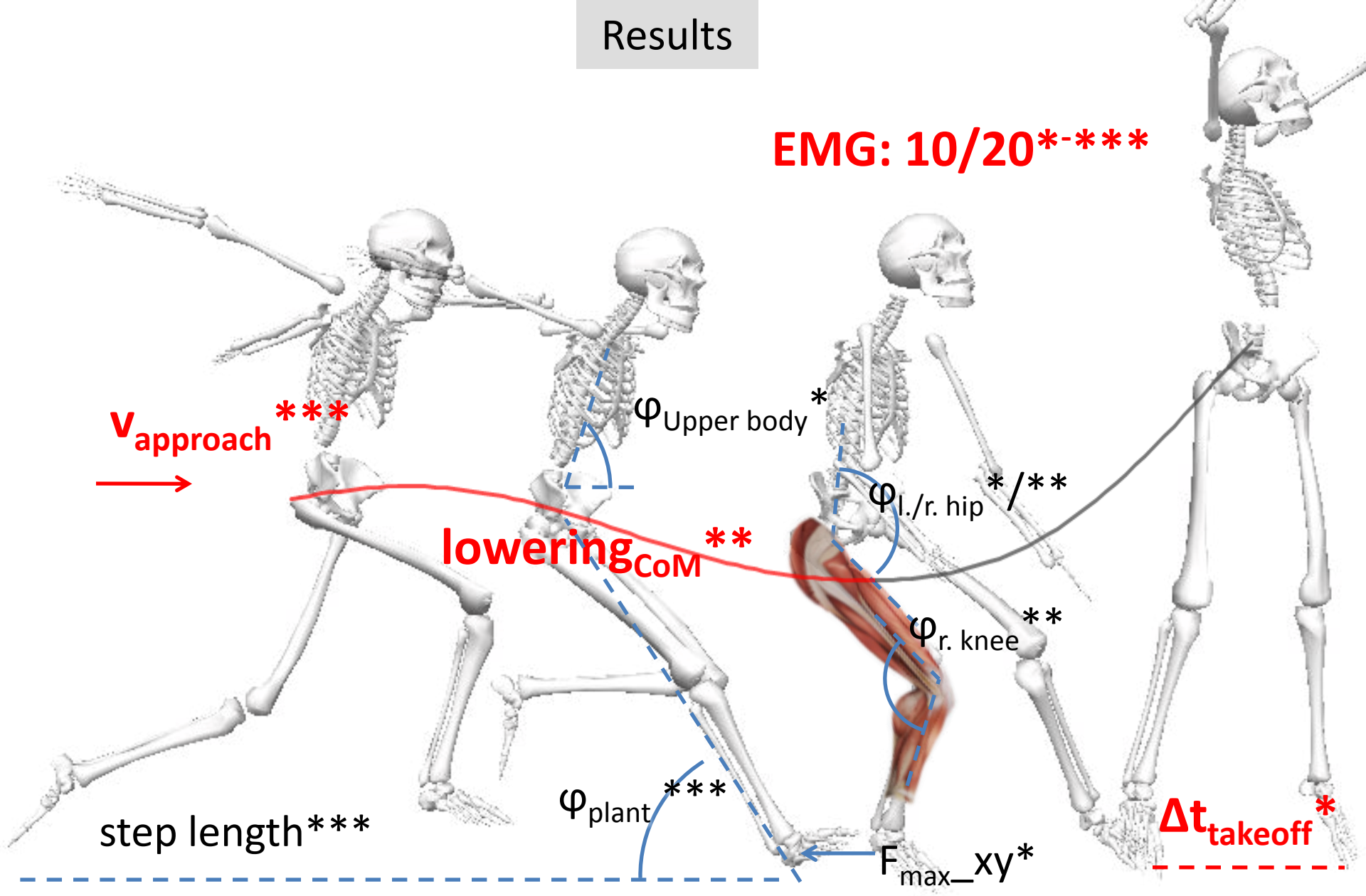


2 AMTI force plates
2000Hz

- Full Body Plug-In Gait + Clusters + V3D model

Results

EMG: 10/20^{*-***}



- Beneficial motion characteristics of males
- Investigated variables affected by biology?
- Maybe some but clearly not all!
- Sex specific training:
 - Possible + seems beneficial
 - Applicable, effective?

