1135-B1-409  John Mayberry* (jmayberry@pacific.edu), 3601 Pacific Ave, Stockton, CA 95211. What can a
jump tell us about a pitcher?

Force plate testing is commonly used by trainers to monitor athlete strength and health. For example, ground reaction
forces during a counter-movement jump (CMJ) test can provide information about movement deficiencies which can in
turn be addressed through prescribed exercise plans. In this talk, we will discuss two surprising links between CMJ testing
and baseball pitcher wellness. First, we establish a link between CMJ and UCL strains which in worst case scenarios can
lead to Tommy John Surgery. In particular, pitchers who rely too much or too little on impulse momentum compared to
force production during CMJ are three times as likely to sustain elbow injuries compared to players with more balanced
profiles. Second, we provide evidence of a correlation between CMJ measurements and Field Independent Pitching (FIP)
in a sample of college pitchers. Combined, these results suggest that CMJ monitoring is a useful tool for tracking pitcher
development and ability. (Received August 31, 2017)