DETERMINATION OF BEHAVIORAL ANALYSIS TESTING FOR QUANTIFICATION OF PARKINSONISM IN RODENTS. Lydia Galvin, George Weistroffer & Mark Baron, US Department of Veterans Affairs. Animal models of the motor disorders Parkinson’s disease and dystonia are integral to studies aimed at understanding the diseases but determining behavioral and motor effects within these models can be challenging as the classic symptoms such as tremor are uncommon or subtle in them. Post-mortem staining can be used to show pathological evidence of disease but recapitulating behavioral symptoms whose improvement with treatment can be quantified provides a more complex understanding. Akinesia, rigidity, and abnormalities in gait were found via literature review to be the most consistent motor symptoms exhibited in rodents with forepaw adjusting, a gentle push test, and video based gait analysis being the most reliable and commonly used methods of testing respectively. This talk will explore the process of identifying and implementing sufficient behavioral tests for the quantification of parkinsonian and dystonic symptoms in rodents. (Supported by: VA Merit Review Award). Author contact: Lydia Galvin, lcgalvin19@vt.edu.