

## **UPRIGHTVR VALIDATION LITERATURE (papers, proceedings, presentations)**

- Wright WG, McDevitt J, Appiah-Kubi K (2015) A portable virtual reality balance device to assess mild traumatic brain injury symptoms: A pilot validation study. *IEEE Proc International Conference on Virtual Rehabilitation (ICVR)*, pp 72-79. doi: [10.1109/ICVR.2015.7358591](https://doi.org/10.1109/ICVR.2015.7358591)
- Wright WG, McDevitt J, Tierney R, Haran FJ, Appiah-Kubi K, Dumont A (2017). Assessing subacute mild traumatic brain injury with a portable virtual reality balance device. *Disability and Rehabilitation*, 39(15):1564-72.
- Wright WG, Handy JD, Avcu P, Ortiz A, Haran FJ, Doria M, Servatius RJ (2018). Healthy Active Duty Military with Lifetime Experience of Mild Traumatic Brain Injury Exhibits Subtle Deficits in Sensory Reactivity and Sensory Integration During Static Balance. *Mil Med*.183(suppl\_1):313-320.
- Marchetto J, Wright WG (2019). The validity of the Oculus Rift to assess postural changes during a balance tasks. *Hum Factors*, 61(8):1340-52.
- Ma L, Wright WG (2021). "Validation Study of a Wireless Virtual Reality Head-Mounted Display for Sensory Integration in Balance Testing of Older Adults." *Proc of ICVR*. July 2021, Virtual.
- Wright WG, Handy J, Haskell, Servatius L, Servatius R (2022). History of Mild Traumatic Brain Injury Affects Static Balance Under Complex Multisensory Manipulations. *J Neurotrauma*. 39:821–828. doi: 10.1089/neu.2020.7600.
- Quinn, Ellis, Reter, Wright. "Detecting Risk of Falls in Healthy Older Adults Using a Virtual Reality Balance Assessment." APTA CSM, San Antonio, TX, 5 Feb 2022. <https://apta.confex.com/apta/csm2022/meetingapp.cgi/Paper/33557>
- Myers BL, Bunin G, *Comparison of Head-worn Virtual Reality Device and Platform Computerized Dynamic Posturography in the Older Adult Population*. Virtual poster presented at American Balance Society Annual Meeting; Scottsdale AZ, March 2022.
- Ma L, Kramer P, Hussain S, Wright WG. "Comparison of postural kinematics between wireless virtual reality headset and research-grade-motion capture". *Proceedings of RehabWeek 2022*, July 25-29, 2022, Rotterdam, Netherlands.
- Myers BL, Bunin G, *Is Virtual Reality the New Posturography? A Comparison of Head-Mounted VR to CDP*. Research podium presentation at American Academy of Audiology Meeting; Seattle WA, April 2023.
- Wright WG, Hussain S, Ma L, Wu J, Butler K, Biester R, Heath K, Swanson R, Robinson KM, "Validation of portable VR assessments of balance and vestibulo-ocular function", *Proceedings of the WCISVR 2023*, Montreal, Jul 23-25, 2023.
- Hussain S, Ma L, Swanson R, Biester R, Butler K, Heath K, Wu J, Robinson KM, Wright WG, "Measuring the Effects of Mild Traumatic Brain Injury and Post-traumatic symptoms in Veteran and Civilian Populations using Novel Virtual Reality (VR) Technology". 2023 NCA-TBI Research Symposium, March 9-10, 2023, College Park, MD.
- Wright WG, Hussain S, Ma L, Wu J, Butler K, Biester R, Heath K, Swanson R, Robinson KM, "A portable VR headset for detecting deficits in balance, vestibular, and oculomotor function following TBI, PTSD, and other disease/injury", Military Operational Medical

Research Program (MOMRP) Neurosensory Prevention and Treatment Meeting, Aug 8-10, 2023.

- Wright WG, Hussain S, Ma L, Wu J, Butler K, Biester R, Heath K, Swanson R, Robinson KM, “A Novel Virtual Reality Technology Application to Measure Postural, Vestibular, and Oculomotor Function in Mild Traumatic Brain Injury in Veterans and Civilian Populations”, Military Health System Research Symposium (MHSRS), Kissimmee, FL, Aug 13-17, 2023.
- Wright WG, Hussain S, Ma L, Wu J, Butler K, Biester R, Heath K, Swanson R, Robinson KM, “A Novel Virtual Reality Application to Measure Postural, Vestibular, and Oculomotor Function in Individuals with a History of Physiogenic and/or Psychogenic Brain Injury”, Annual World Congress - Society of Brain Mapping and Therapeutics (SBMT), Los Angeles, CA, Mar 14-17, 2024.