

## **Curriculum Vitae**

**Date:** August 2022

Name: Brian Johnson

### **Contact Information**

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Program in Occupational Therapy  
Washington University School of Medicine  
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### **Present Position**

2022 – present      Assistant Professor of Occupational Therapy and Neurology, Program in Occupational Therapy  
Washington University School of Medicine, St. Louis, MO

### **Education (list all degrees in forward chronological order)**

#### **Undergraduate**

2011      BS; University of Wisconsin-Milwaukee, Milwaukee, WI

#### **Graduate**

2012      MS; University of Wisconsin-Milwaukee, Milwaukee, WI

2019      PhD; University of Maryland School of Medicine, Baltimore, MD

### **Post-Graduate Education and Training**

2010      Occupational Therapy Student Therapist (Level I Fieldwork)  
Inpatient Rehabilitation Department, West Allis Memorial Hospital, West Allis, WI

*Focus:* post-surgical, neurology, orthopedics

2010      Occupational Therapy Student Therapist (Level I Fieldwork)  
Milwaukee Center for Independence, Milwaukee, WI  
*Focus:* pediatrics, ergonomics, universal design, neurology, orthopedics

2010      Occupational Therapy Student Therapist (Level I Fieldwork)  
Midwest Orthopedic Specialty Hospital, Franklin, WI  
*Focus:* orthopedics, acute care, neurology

2012      Occupational Therapy Student Therapist (Level II Fieldwork)  
Outpatient Rehabilitation Department, The Rehabilitation Institute of Chicago (now Shirley Ryan AbilityLab), Chicago, IL

Focus: neurology

- 2012 Occupational Therapy Student Therapist (Level II Fieldwork)  
Inpatient Rehabilitation Department, University of Wisconsin Hospitals & Clinics,  
Madison, WI  
Focus: acute care, neurology, orthopedics
- 2019 - 2020 Postdoctoral Fellow, Department of Physical Therapy & Rehabilitation Science,  
University of Maryland School of Medicine, Baltimore, MD  
Mentors: Kelly P. Westlake, PT, PhD, & Leonardo G. Cohen, MD
- 2019 - Present Postdoctoral Fellow, Human Cortical Physiology and Neurorehabilitation Section,  
The National Institutes of Health, Bethesda, MD  
Mentor: Leonardo G. Cohen, MD

**Academic Positions / Employment:**

- 2010 Student Caller  
University Call Center, University of Wisconsin-Milwaukee, Milwaukee, WI
- 2010 – 2012 Graduate Research Assistant and Teaching Assistant  
Department of Occupational Therapy, College of Health Sciences, University of  
Wisconsin-Milwaukee, Milwaukee, WI
- 2011 – 2012 Transcription Analyst  
Student Accessibility Center, University of Wisconsin-Milwaukee, Milwaukee,  
WI
- 2013 – 2019 Graduate Research Assistant and Teaching Assistant  
Department of Physical Therapy & Rehabilitation Science, University of  
Maryland School of Medicine, Baltimore, MD
- 2019 – 2020 Postdoctoral Fellow  
Department of Physical Therapy & Rehabilitation Science University of Maryland  
School of Medicine, Baltimore, MD
- 2019 – present Postdoctoral Fellow  
Human Cortical Physiology and Neurorehabilitation Section, The National  
Institutes of Health, Bethesda, MD
- 2020 –  
present Adjunct Instructor  
Department of Physical Therapy & Rehabilitation Science, University of  
Maryland School of Medicine, Baltimore, MD

**Clinical Title and Responsibilities**

- 2013 Lead Occupational Therapist  
North Platte Care Center (outpatient, sub-acute, assisted living, skilled nursing),  
North Platte, NE

2014 – 2015	Per Diem Occupational Therapist Saint Elizabeth Rehabilitation & Nursing (outpatient, sub-acute, assisted living, skilled nursing), Baltimore, MD
2015 – 2019	Per Diem Occupational Therapist The International Center for Spinal Cord Injury (inpatient, outpatient), The Kennedy Krieger Institute & John Hopkins Medical Institute, Baltimore, MD
Fall 2021 - Present	Occupational Therapist United States Army Reserve (1 weekend/month, 2 weeks/year), Madison, WI

### **Teaching Title and Responsibilities**

#### **University of Wisconsin-Milwaukee, Graduate School, Department of Occupational Science & Technology: Entry-Level Occupational Therapy Master's Degree Program**

2011	Teaching Assistant, Occupational Therapy Evidence for Practice II (OT 542) 45 OT 2 <sup>nd</sup> year students – 20 contact hours
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#### **Community College of Baltimore County, School of Health Professions, Sleep Technology Program: Entry-Level Sleep technologist Associates Degree Program**

2014 – 2017	Guest Instructor, Sleep Physiology Polysomnographic Technology (35333) 12 sleep technology students – 2 contact hours/yr
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#### **University of Maryland, School of Medicine, Department of Physical Therapy & Rehabilitation Science: Entry-Level Doctor of Physical Therapy Program**

2014 – 2019	Guest Instructor and Lab Assistant, Physical Therapy Basic Sciences II (DPTE 513) 60 PT 1 <sup>st</sup> year students, 8 contact hours/yr
	Guest Instructor and Lab Assistant, Physical Therapy Neuromuscular I (DPTE 524) 60 PT 1 <sup>st</sup> year students, 9 contact hours/yr
2015 – 2019	Guest Instructor and Lab Assistant, Physical Therapy Basic Sciences III (DPTE 514) 60 PT 1 <sup>st</sup> year students, 5 contact hours/yr
	Guest Instructor and Lab Assistant, Physical Therapy Neuromuscular II (DPTE 527) 60 PT 2 <sup>nd</sup> year students, 17.5 contact hours/yr
2016 – 2019	Guest Instructor and Clinical Instructor, Physical Therapy Musculoskeletal II (DPTE 525)

60 PT 2<sup>nd</sup> year students, 6 contact hours/yr

2020 – 2022      Adjunct Instructor, Physical Therapy  
Basic Sciences III (DPTE 514)  
70 PT 1<sup>st</sup> year students, 8 contact hours/yr

**University of Maryland, School of Medicine, Department of Physical Therapy & Rehabilitation Science: PhD Program in Physical Rehabilitation Science**

2020 – 2022      Adjunct Instructor, Physical Therapy  
Foundations of Rehabilitation Science (PTRS 688)  
5 physical rehabilitation science PhD students, 3 contact hours/yr

2021 – 2022      Adjunct Instructor, Physical Therapy  
Foundations of Rehabilitation Science II (PTRS 689)  
5 physical rehabilitation science PhD students, 3 contact hours/yr

**Medical Licensure and Certification**

2009 – present      Cardiopulmonary Resuscitation Certification

2012 – 2014      Occupational Therapy, State of Wisconsin

2012 – 2015      National Board Certification in Occupational Therapy

2013 – 2015      Occupational Therapy, State of Nebraska

2013 – present      Physical Agent Modalities Certification

2014 – present      Occupational Therapy, State of Maryland  
License no: 07440

**Military Service**

- Occupational Therapist in the United States Army Reserve, Madison, WI

**Honors and Awards**

2009 – 2012      Dean's Honors List, College of Health Sciences, University of Wisconsin-Milwaukee

2010 – 2011      Maternal Child Health Pipeline Award & Scholarship

2011      B.Sc Honors Graduate, College of Health Sciences, University of Wisconsin-Milwaukee

2012      M.Sc Honors Graduate, College of Health Sciences, University of Wisconsin-Milwaukee

2012	University of Wisconsin-Milwaukee Outstanding Research Thesis Award
2015	Qualtrics Behavioral Research Student Grant
2015	Claude D. Pepper Older Americans Independence Centers (OAIC) Outstanding Poster Award
2016	American Physical Therapy Association (APTA) of MD Annual Conference 2 <sup>nd</sup> Place Poster
2016	Educators in Training (EDiT) Program Certificate, University of Maryland
2016	University of Maryland, Baltimore Student Entrepreneurship Pitch Day Winner
2017	University of Maryland, Baltimore 3-Minute Thesis Presentation Winner
2017	The American College of Sports Medicine Foundation Doctoral Student Research Grant
2017	2017 Fletcher H. McDowell Award for best clinical science abstract at The American Society for Neurorehabilitation
2018	Progress in Clinical Motor Control Training Fellowship, The National Science Foundation
2018	Outstanding Research Presentation Award, The 40 <sup>th</sup> Annual Graduate Research Conference at The University of Maryland
2019	Graduate Student Association Research Travel Award, The University of Maryland, Baltimore
2019	GGEAR Award for best geriatric poster, The 41 <sup>st</sup> Annual Graduate Research Conference at The University of Maryland

### **Editorial Responsibilities**

#### **Invited Journal Peer Review**

2015 – 2021	<i>American Journal of Occupational Therapy</i> (1x/yr)
2016	<i>Journal of Rehabilitation Research &amp; Development</i> (1x)
2016, 2018, 2020	<i>The Occupational Therapy Journal of Research: Occupation, Participation, and Health</i> (1x/yr)
2016 – 2021	<i>Neuroscience Letters</i> (2x/yr)
2016 – 2021	<i>American Journal of Physical Medicine &amp; Rehabilitation</i> (2x/yr)
2017	<i>RATE Journal</i> (1x)

2017 – 2021	<i>Rehabilitation Psychology</i> (1x/yr)
2018 – 2021	<i>Archives of Physical Medicine and Rehabilitation</i> (1x/yr)
2020	<i>Games for Health Journal</i> (1x)
2020	<i>Nature Communications</i> (1x)
2020	<i>Current Biology</i> (1x)
2020 – 2021	<i>Journal of Neurologic Physical Therapy</i> (2x/yr)
2020 – 2021	<i>Neurorehabilitation and Neural Repair</i> (1x/yr)
2020 – 2021	<i>Disability and Rehabilitation</i> (1x/yr)
2021	<i>Frontiers in Rehabilitation science</i> (2x,yr)
2021	<i>Journal of Occupational Science</i> (1x)
2021	<i>Brain Research</i> (1x)
2021	<i>Brain</i> (1x)
2021	<i>The Open Ophthalmology Journal</i> (1x)
2022	<i>Sleep Health</i> (1x)

#### **Scholarship Review**

2016, 2017	American Occupational Therapy Association, Elizabeth K. Wise Scholarship
2018	Outstanding Mentor Award, University of Maryland, Baltimore
2015 - 2019	Graduate Program in Life Sciences & Office of Postdoctoral Studies, University of Maryland, Baltimore

#### **Abstract Review**

2018	American Occupational Therapy Association Education Summit
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#### **Invited Textbook Review**

2016	Thieme Medical Publishers, Inc.
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#### **Federal Policy Advocacy**

2016 – 2020	American Occupational Therapy Association and American Society of Hand Therapists Hill Day
2017 – 2018	John Hopkins on the Hill Day

2017 – 2021	ADAPT Disability Rights Advocacy Group; Member
2018	American College of Sports Medicine Capitol Hill Day
2018	The National Council for Behavioral Health; Wisconsin State Captain
2019	American Physical Therapy Capitol Hill Day

### **National Panels, Committees, Boards**

2017 – 2019	Education Committee, American Society for Neurorehabilitation
2017	Item Development Committee Member, National Board Certification in Occupational Therapy
2018	Volunteer, American Occupational Therapy Association Virtual Career Fair
2018 – 2019	Conference Planning Committee Member, North American Society for the Psychology of Sport and Physical Activity
2021	Review Editor, <i>Frontiers in Rehabilitation Science</i>
2021	Invited Special Issue Editor, <i>Frontiers in Rehabilitation Science</i>

### **Community Service Contributions**

#### **University committees and activities**

2009 – 2011	Student Representative, UW-Milwaukee, Department of Occupational Science & Technology
2015 – 2019	Reviewing Member, Graduate Program in Life Sciences and Office of Post-Doctoral Studies Awards Committee, University of Maryland, Baltimore
2015 – 2019	Department Representative, Student Advisory Council, University of Maryland, Baltimore
2017 – 2019	Department Representative, University of Maryland, Baltimore Graduate Student Association
2018 – 2019	Career Advisory Group, University of Maryland, Baltimore

### **Professional Societies and Organizations**

2009 – present	American Occupational Therapy Association
2010 – 2021	Pi Theta Epsilon, Occupational Therapy Honor Society

2012 – 2014	Wisconsin Occupational Therapy Association
2014 – 2020	The American Society for Neurorehabilitation
2014 – present	The Society for Neuroscience
2014 – 2016	American Physical Therapy Association
2015 – 2017	The American Heart Association
2016 – 2019	The American College of Sports Medicine
2016 – 2017	The University of Maryland, Baltimore Educators in Training Program
2016 – 2019	Brain Science Research Consortium Unit at the University of Maryland School of Medicine
2016 – 2017	The University of Maryland Entrepreneurship & Innovation Network
2016 – 2020	National Center of Neuromodulation for Rehabilitation
2017	Bridges in Biotech Program, Johns Hopkins University/University of Maryland/National Institutes of Health
2017 – 2018	The Canadian Partnership for Stroke Recovery
2017 – 2018	The Heart and Stroke Foundation Canadian Partnership for Stroke Recovery
2018 – present	Society for the Neural Control of Movement

#### **Major Invited Professorships and Lectureships**

Mar 2016	Improving motor learning through sleep-dependent memory reactivation The National Institutes of Health, Bethesda, MD
June 2017	What might stroke rehabilitation look like in the future? John Hopkins University, Baltimore, MD
Oct 2017	Investigating the use of acoustic neuromodulation during sleep on sensorimotor performance The Medical College of Wisconsin Brain Injury Research Conference, Milwaukee, WI
Jan 2019	Use of targeted memory reactivation during sleep to enhance non-dominant upper extremity sensorimotor performance The National Institutes of Health, Bethesda, MD
May 2020	Modulation of Sensorimotor Skill Consolidation in Individuals with and Without a History of Stroke The University of Maryland's Physical Therapy & Rehabilitation Science Annual Research Day, Webinar



Nov 2020                      Manipulation of Memory Consolidation  
The Indian Institute of Technology at Gandhinagar, Webinar

### **Grant Support**

2015 – 2019                      Qualtrics Behavioral Research Student Grant  
\$2,000 awarded.

2017 - 2019                      The American College of Sports Medicine Foundation Doctoral Student Research  
Grant  
\$5,000 awarded.

### **Trainee/Mentee/Sponsorship Record**

#### **Undergraduate Students**

2013                              Rachel Neff, *Cognitive input to impaired balance*  
University of Maryland, College Park, Summer Research Project

2021                              Aanika Singh, *Complex motor skill learning through reconsolidation*  
University of Virginia, Summer Research Project

#### **Doctor of Physical Therapy Students**

Fall 2019 –                      Christopher Heydrick, *Interaction between upper and lower extremity motor*  
Spring 2021                      *learning*  
University of Maryland, Baltimore, Volunteer Research Assistant

Fall 2020 –                      Shannon Cooley, Emily Cockey , Yamileth Nolasco, Sydney Rogers, Mariah  
Spring 2021                      Torbit, & Matthew Wolfe, *Complex motor skill learning through reconsolidation*  
University of Maryland, Baltimore, Doctor of Physical Therapy Research  
Experience

#### **PhD Students**

Summer 2021 –                      Kylie Tomlin (co-advisor)  
present

### **Bibliography**

#### **Original, peer reviewed articles in refereed journals**

1. Westlake K & **Johnson B** (2016). Commentary on “Facilitation of the Lesioned Motor Cortex during Tonic Contraction of the Unaffected Limb Corresponds to Motor Status Following Stroke”. *J of Neurol Phys Ther.*, 40(1), 22-23. doi: 10.1097/NPT.0000000000000118.
2. Westlake K., **Johnson B**, Creath R, Neff R, & Rogers M. (2016). Influence of non-spatial working memory load on reach-grasp responses to loss of balance: Effects of age and fall risk. *Gait & Posture*, 45, 51-55. doi: 10.1016/j.gaitpost.2016.01.007.

3. **Johnson B**, Johnston M (2017). Determining the feasibility, content validity, and internal consistency of a newly developed care coordination scale for people with brain injury. *OJOT*. 5(3). doi.org/10.15453/2168-6408.1331.
4. **Johnson B**, Westlake K (2017). Link between Parkinson's disease and rapid eye movement sleep behavior disorder with dream enactment: Possible implications for early rehabilitation. *Arch Phys Med Rehabil*. 99(2), 411-415. doi: 10.1016/j.apmr.2017.08.468.
5. **Johnson B**, Scharf S. M., Westlake K. (2018). Targeted memory reactivation during sleep, but not wake, improves sensorimotor skill performance in healthy young adults: A pilot study. *J MOTOR BEHAV*. 50(2), 202-209. doi: 10.1080/00222895.2017.1327411.
6. **Johnson B**, Verceles A, Scharf S, Westlake K (2019). Use of targeted memory reactivation enhances skill performance during a nap and enhances declarative memory during wake in healthy young adults. *Journal of Sleep Research*. doi: 10.1111/jsr.12832.
7. **Johnson B**, Shipper A, Westlake K (2019). Systematic review of non-pharmacological interventions applied during sleep to enhance rehabilitation outcomes in people with neurologic diagnoses. *Neurorehabil Neural Repair*. 33(5), 345-354. doi: 10.1177/1545968319840288.
8. **Johnson B**, Westlake K (2020). Chronic post-stroke deficits in ipsilesional upper extremity gross and fine motor control. *American Journal of Physical Medicine & Rehabilitation*. doi: 10.1097/PHM.0000000000001569.
9. **Johnson B**, Verceles A, Scharf S, Westlake K (2020). Sensorimotor performance is improved by targeted memory reactivation during a daytime nap in healthy older adults. *Neuroscience Letters*. doi: 10.1016/j.neulet.2020.134973.
10. **Johnson B**, Cohen LG, Westlake K (2021). The intersection of offline learning and rehabilitation. *Frontiers in Human Neuroscience*. doi: 10.3389/fnhum.2021.667574.
11. **Johnson B**, Censor N, Dayan E, Cohen LG (2021). Crowdsourcing in cognitive and systems neuroscience. *The Neuroscientist*. doi: 10.1177/10738584211017018.
12. **Johnson B**, Verceles A, Scharf S, Westlake K (2021). Enhancing motor learning in people with stroke via memory reactivation during sleep. *Rehabilitation Psychology*.
13. **Johnson B**, Whittall J, McCombe Waller S, Westlake K (2022). Development and psychometric testing of a bimanual assessment measure for people with chronic stroke. *AJOT*.
14. **Johnson B**, Censor N, Tomlin K, Cohen LG, Westlake K (In Review). Enhancing inter-limb transfer via long-term motor memory reconsolidation.

## Books

1. **Johnson B**, Cohen LG. (In Press). Movement. Contribution in: Haaland, K, Brown G, Crosson B, King T. *APA Handbook of Neuropsychology, Volume 2*. American Psychological Association

2. **Johnson B**, Cohen LG. (2022). Reward and Plasticity: Implications on Neurorehabilitation. Contribution in: Quartarone A, Ghilardi M, Boller F. *Handbook of Clinical Neurology 3rd Series*. Elsevier Publisher Inc.

## Abstracts

1. **Johnson B**, Creath R, Neff R, & Westlake K (2014). Variability in grasp response and the relationship with response time to balance perturbations: Effects of age and fall risk, *Neuroscience 2014 Abstracts*.
2. **Johnson B**, Scharf M., & Westlake K. (2016). T8: Targeted Memory Reactivation to Improve Motor Learning. *Neurorehabil Neural Repair*, 30(2):1-44.
3. **Johnson B**, McCombe Waller S, Whitall J, & Westlake K. (2016). Bimanual Assessment Measure (BAM): Development of a Measure of Bimanual Function for Use After Stroke. *AJOT*, 69(Suppl. 1), 6911500004p1.
4. **Johnson B** & Westlake K. (2017). Targeted memory reactivation during a daytime nap to improve sensorimotor skill performance. *Psychology of Sport and Exercise*.
5. **Johnson B** & Johnston M. (2017). Health self-management and care coordination by people with disabilities and chronic health conditions, *AJOT*.
6. **Johnson B**, Scharf S, Verceles A, & Westlake K (2018). The effects of targeted memory reactivation during a daytime nap on sensorimotor skill performance in healthy young adults. *SLEEP*.
7. **Johnson B** & Westlake K. (2018). Is targeted memory reactivation throughout a daytime nap sufficient to enhance sensorimotor skill performance? *Neurorehabil Neural Repair*.
8. **Johnson B** & Westlake K. (2018). Impact of error magnitude on sensorimotor skill performance changes before and after consolidation. *Neuroscience 2017 Abstracts*.
9. **Johnson B**, Westlake K (2018). Acoustic stimulation during a daytime nap to enhance sensorimotor skill performance in older adults with and without a history of stroke. *Neurorehabil Neural Repair*.
10. **Johnson B**, McCombe Waller S, Whitall J, & Westlake K (2019). Development and psychometric testing of a measure of bimanual function following stroke: Bimanual assessment measure (BAM). *Psychology of Sport and Exercise*.
11. **Johnson B**, Heydrick C, Whitall J, & Westlake K (2020). Investigating interference between learning two different motor sequences with the upper and lower extremities. *Psychology of Sport and Exercise*.
12. **Johnson, B**, Iturrate I, Fakhreddine R, Bönstrup M, Buch E, Robertson E, & Cohen LG (Accepted). Rapid generalization during early motor skill learning. *Neuroscience 2021 Abstracts*.

## Audiovisual/Media

### Selected Poster Presentations

1. **Johnson B** & Johnston M.V. Quality and coordination of care for persons with brain injury in the community: Developing a survey measure, *Health Sciences Research Symposium*, University of Wisconsin at Milwaukee, Milwaukee, WI, December, 2011.
2. Westlake K, **Johnson B**, Creath R, & Rogers M. Neurocognitive function is associated with reach to grasp protective responses to balance perturbations in older fallers. *Annual Pepper Meeting*, Arlington, VA, April, 2015.
3. **Johnson B**, McCombe Waller S, Whitall J, & Westlake K. Development of a bimanual assessment measure (BAM) to assess upper extremity sensorimotor function following stroke, *The American Physical Therapy Association's Annual Mid-Atlantic Regional Meeting*, College Park, MD, October, 2016.
4. **Johnson B**, Scharf S.M., & Westlake K. Using targeted memory reactivation (TMR) during sleep, but not wake, improves sensorimotor skill learning in healthy young adults, *The American Physical Therapy Association's Annual Mid-Atlantic Regional Meeting*, College Park, MD, October, 2016.
5. **Johnson B**, McCombe Waller S, Whitall J, & Westlake K. Development of the bimanual assessment measure (BAM) to assess function after stroke, *World Congress for Neurorehabilitation Annual Meeting*, Philadelphia, PA, May, 2016.
6. **Johnson B**, Scharf S.M., & Westlake K. Targeted memory reactivation during sleep improves sensorimotor skill learning in healthy young adults, *World Congress for Neurorehabilitation Annual Meeting*, Philadelphia, PA, May, 2016.
7. **Johnson B** & Westlake K. Investigating the use of acoustic neuromodulation during sleep on sensorimotor performance. *The Medical College of Wisconsin Brain Injury Research Conference*, Milwaukee, WI, October, 2017.
8. **Johnson B** & Westlake K. Enhancing sensorimotor skill performance in healthy young adults via targeted memory reactivation during a nap. *Johns Hopkins 3<sup>rd</sup> Annual Sleep & Circadian Rhythm Research Day*, Baltimore, MD, June, 2018.
9. **Johnson B** & Westlake K. Use of targeted memory reactivation throughout a daytime nap to enhance sensorimotor performance in healthy young adults. *Progress in Clinical Motor Control*, State College, PA, July, 2018.
10. **Johnson B** & Westlake K. An investigation into the behavioral effects of targeted memory reactivation during sleep on sensorimotor skill performance in older adults with and without a history of stroke. *The University of Maryland School of Medicine's 2<sup>nd</sup> Annual Aging Research Symposium*, Baltimore, MD, April, 2020.

11. **Johnson B**, Cockey E, Cooley S, Nolasco Y, Rogers S, Torbit M, Wolfe M, & Westlake K. Brief practice across days optimize intermanual transfer of motor skill through memory reconsolidation: Less is more. *The University of Maryland Department of Physical Therapy & Rehabilitation Science's Annual Research Day*, Baltimore, MD, May, 2021.

### **Selected Podium Presentations**

1. **Johnson B** & Mertes J. Awareness and insight training to increase safety in chronic TBI and CVA survivors. University of Wisconsin Hospital & Clinics, Madison, WI, June, 2012.
2. **Johnson B** & Fischer M. Increased speed and intensity of exercises improve motor and functional outcomes following stroke. The Rehabilitation Institute of Chicago (now known as Shirley Ryan AbilityLab), Chicago, IL, March, 2012.
3. **Johnson B** & Westlake K. Motor inhibition during REM sleep. University of Maryland School of Medicine, Baltimore, MD, December 2013.
4. **Johnson B**, Hegdekar N, Katorcha E, & Kurland D. Bilateral arm training with rhythmic auditory cueing for neurorehabilitation. University of Maryland, Baltimore Student Entrepreneurship Pitch Day 2016, Baltimore, MD, May, 2016.
5. **Johnson B** & Westlake K. Use of Targeted Memory Reactivation (TMR) during sleep to enhance non-dominant upper extremity sensorimotor performance in healthy young adults. Johns Hopkins University Annual Sensorimotor Research Day, Baltimore, MD, December, 2016.
6. **Johnson B**. Sensorimotor memory consolidation. The University of Maryland, Baltimore 3-Minute Thesis Competition. Baltimore, MD, April, 2017.
7. **Johnson B**. Topics in stroke rehabilitation research. Prince George's Hospital Center, Cheverly, MD, February, 2017.
8. **Johnson B**. The role of sleep in learning and rehabilitation. Shady Grove Adventist Medical Center, Rockville, MD, January, 2017.
9. **Johnson B** & Westlake K. Can targeted memory reactivation during a daytime nap enhance sensorimotor performance? Johns Hopkins 2<sup>nd</sup> Annual Sleep & Circadian Rhythm Research Day, Baltimore, MD, June, 2017.
10. **Johnson B**. The role of sleep in motor learning and rehabilitation. Canadian Partnership for Stroke Recovery Stroke Program in Neurorecovery Workshop, The University of Calgary & Calgary Children's Hospital, Calgary, AB, Canada, September, 2017.
11. **Johnson B**. Investigating the use of targeted memory reactivation during sleep to enhance performance of a real-world sensorimotor skill. The Society for Neuroscience Annual Meeting, Washington, D.C., November, 2017.
12. **Johnson B**. Use of repetitive acoustic stimulation during sleep to enhance non-paretic arm performance in individuals with chronic stroke. The Canadian Partnership for Stroke Recovery, Webinar, April, 2019.

13. **Johnson B** & Westlake K. Motor learning in rehabilitation: From brain to behavior. The University of Maryland's Physical Therapy Month Continuing Education Course, Baltimore, MD, October, 2020.