



**CURRICULUM VITAE**  
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**I. BASIC INFORMATION**

**EDUCATION**

<u>INSTITUTION AND LOCATION</u>	<u>DEGREE</u>	<u>YEAR</u>	<u>FIELD OF STUDY</u>
Virginia Polytechnic Institute & State U. Blacksburg, VA	BS	1986-1990	Aerospace Engineering Mathematics minor
Northeastern University Boston, MA	MA	1994-1996	Experimental Psychology Advisor: David J Bryant
Brandeis University Waltham, MA	PhD	1997-2002	Cognitive Neuroscience Advisor: Paul DiZio Jim Lackner
Ludwig-Maximilians-University Munich, Germany	Post-Doc	2002-2004	Neuroengineering Advisor: Stefan Glasauer
Oregon Health & Science University Beaverton, OR	Post-Doc	2004-2007	Neurological Sciences Advisor: Fay Horak Victor Gurfinkel

**ACADEMIC EXPERIENCE AND PROFESSIONAL EMPLOYMENT**

2017- Director, Neuromotor Sciences (NMS) Graduate Programs, Temple University  
2015- Research Scientist (WOC), Syracuse Veterans Administration Medical Center  
2014- Assoc. Professor with tenure, Temple University  
2007-2014 Asst. Professor, Depts of Physical Therapy and Bioengineering, Temple University  
2004-2007 Post-doctoral research fellow, OHSU, Neurological Sciences Institute, Portland, OR  
2002-2004 Post-doctoral fellow, German Academic Exchange Service (DAAD) Fellowship  
Ludwigs-Maximilians-Universität, Großhadern Klinikum Munich, Germany  
1998-2002 Research Assistant, Ashton Graybiel Spatial Orientation Lab  
NASA KC-135 Parabolic Flight Program, JSC, Houston, TX  
1997-2001 Instructor/Teaching Assistant, Brandeis University, Waltham, MA  
1995-1997 Instructor/Teaching Assistant, Northeastern University, Boston, MA  
1990-1994 Officer, US Air Force, Satellite & Operational Test Engineer, Falcon AFB, CO  
1987-1988 Automated Sciences Group, Inc., Aerospace Engineer, Dahlgren, VA

## **MILITARY EXPERIENCE**

1990-1994 Regular Officer, US Air Force, Satellite & Operational Test Engineer, Falcon AFB, CO  
1994-2006 Officer, US Air Force, Individual Ready Reserve  
1994 USAF Commendation Medal for Meritorious Achievement  
1991 National Defense Service Medal, Persian Gulf War  
1991 Top Graduate, USAF Undergraduate Space Training, Lowry AFB, Denver, CO  
1990 Distinguished Graduate USAF-ROTC  
1989 Basic Airborne Course, Parachutist Badge, US Army Airborne School, Fort Benning, GA  
1986-1990 USAF 4-year Reserve Officer Training Corps (ROTC)

## **HONORS AND AWARDS**

2018 International Society for Virtual Rehabilitation (ISVR), Treasurer, Elected BOD  
2017 International Conference for Virtual Rehabilitation (ICVR) 2017 Program Co-Chair  
2016- International Society for Posture & Gait Research (ISPGR), Elected to Executive Board  
2014- Philadelphia Area Society for Neuroscience (PASfN), Elected as Board Councilor  
2014-2015 DoD Congressionally Directed Medical Research Program - Invited Grant Reviewer  
2014 DoD Clinical and Rehabilitative Medicine Research Program - Invited Grant Reviewer  
2013 NSERC Invited Grant Reviewer  
2013-2016 ISPGR Conference Scientific Content Committee  
2013-2017 ICVR Steering Committee  
2013 CHPSW Teaching Excellence Award Nominee, Temple University  
2013 ICVR2013 Student Awards Chair  
2012 CHPSW Research Seed Grant Award, Temple University  
2011-2013 Local Organizing Committee for International Conference for Virtual Rehabilitation 2013  
2011 Faculty Mentoring & Proposal Development Program Fellowship (Bauer & Associates)  
2011 Session Chair for ICVR, International Conference of Rehabilitation Robotics (ICORR), and International Neurorehabilitation Symposium (INRS)  
2011 Awards committee for ICVR2011/ICORR/INRS  
2009 Faculty Senate Seed Grant Award, Temple University  
2008 Provost Interdisciplinary Seed Grant Award, Temple University  
2008 Netherlands Organization for Scientific Research (NOSR), Invited Grant Reviewer  
2007 American Heart Association, Invited Grant reviewer (invited to become full-time member)  
2006 NIH fMRI Training Award, Psychology Department, University of Michigan.  
2005-2007 NIH (NS45553) Post-Doctoral Fellowship, NSI, OHSU, Portland, OR (2005-07)  
2004 NIH (1 T32 DC005945) Post-Doc Fellowship, Otolaryngology, OHSU, Portland, OR  
2002-2004 Deutscher Akademischer Austausch Dienst, Post-Doc Fellowship, Munich, Germany  
1998 Verna Reagan Teaching Award (Runner-up), Brandeis University, Psychology Dept.  
1994 USAF Commendation Medal for Meritorious Achievement  
1991 National Defense Service Medal, Persian Gulf War  
1991 Top Graduate, USAF Undergraduate Space Training  
1990 Distinguished Graduate USAF-ROTC  
1990 B.S. with honors, *Cum laude*, VPI&SU  
1990 Phi Beta Kappa, National Honor Society  
1988 Sigma Gamma Tau, Aerospace Engineering Honor Society  
1987 Tau Beta Pi, Engineering Honor Society  
1986-1988 VPI Corp of Cadets, Colonel Hobak Academic Scholarship  
1986-1990 USAF 4-year ROTC Scholarship recipient  
1985-1986 Congress-Bundestag/YFU Scholarship winner, Academic-cultural German exchange

## **II. SCHOLARSHIP**

### **1. PEER REVIEWED ARTICLES AND PROCEEDINGS PAPERS**

1. **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.
2. \*Cheever KM, McDevitt J, Tierney RT, **Wright WG** (2018). Effects of concussion recovery phase on symptom provocation using vestibular and oculomotor assessments. *Int J Sport Med.* 39(2):141-14.
3. \*Kuznetsov NA, Robins RK, Long B, Jakiela JT, Haran FJ, Ross SE, **Wright WG**, Rhea CK (2018). Validity and reliability of smartphone orientation measurement to quantify dynamic balance function. *Physiol Meas.* 39(2).
4. Servatius RJ, Handy JD, Doria MJ, Myers CE, Marx CE, Lipsky R, Ko N, Avcu P, **Wright WG**, Tsao JW (2017). Stress-Related Mental Health Symptoms in Coast Guard: Incidence, Vulnerability and Neurocognitive performance. *Frontiers in Psychology.* 8:1513[E-collection].
5. Thompson ED, Agada P, **Wright WG**, Reimann H, Jeka J (2017). Spatiotemporal gait changes with use of an arm swing cueing device in people with Parkinson's disease. *Gait and Posture.* 58:46-51.
6. **Wright WG**, Tierney R, McDevitt J (2017). Visual-vestibular processing deficits in mTBI. *J Vest Res.* 27(1):27-37.
7. \*Agresta C, Ward CR, **Wright WG**, Tucker CA (2017). The Effect of Unilateral Arm Swing Motion on Lower Extremity Running Mechanics Associated with Injury Risk. *Sports Biomechanics.* 2017 Feb 28:1-10. doi: 10.1080/14763141.2016.1269186. [Epub ahead of print]
8. Dale ML, Horak FB, **Wright WG**, Schoneburg BM, Nutt JG, Mancini M. (2017). Impaired perception of surface tilt in progressive supranuclear palsy. *PLoS One.*12(3):e0173351.
9. Rhea CK, Kuznetsov NA, Ross SE, Long B, Jakiela JT, Bailie JM, Yanagi MA, Haran FJ, **Wright WG**, Robins RK, Sargent PD, Duckworth JL (2017). Development of a portable tool for screening neuromotor sequelae from repetitive low-level blast exposure. *J Mil Med.* 182(S1):147-154.
10. **Wright WG**, McDevitt J, Tierney R, Haran FJ, Appiah-Kubi K, Dumont A (2016). Assessing subacute mild traumatic brain injury with a portable virtual reality balance device. *Disability and Rehabilitation,* 39(15):1564-72.
11. \*McDevitt J, Appiah-Kubi K, Tierney R, **Wright WG** (2016) Vestibular and Oculomotor Assessments May Increase Accuracy of Subacute Concussion Assessment. *Int J Sports Med.* 37:738-747. doi: <http://dx.doi.org/10.1055/s-0042-100470>
12. Haran FJ, Slaboda JC, King LA, **Wright WG**, Houlihan D, Norris JN (2016). Sensitivity of the Balance Error Scoring System and the Sensory Organization Test in the Combat Environment. *Journal of Neurotrauma.* 32:1-7. PubMed PMID: 26560740.
13. Ojha HA, Brandi JA, Finn KM, **Wright WG** (2016) Cost Efficiency of Direct Access Physical Therapy for Temple University Employees with Musculoskeletal Injuries. *Orthopaedic Physical Therapy Practice.* 27, 4:15.
14. **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 ICVR2015,* pp 72-79. doi: [10.1109/ICVR.2015.7358591](https://doi.org/10.1109/ICVR.2015.7358591)
15. Rhea CK, Kiefer AW, **Wright WG**, Raisbeck LD, Haran FJ (2015) Interpretation of postural control may change due to data processing techniques. *Gait Posture,* 41(2):731-5.

16. Rhea CK, Kiefer AW, Wittstein MW, Leonard KB, MacPherson RP, **Wright WG**, Haran FJ (2014). Fractal gait patterns are retained after entrainment to a fractal stimulus. *PLoS One*. 9(9): e106755.
17. **Wright WG** (2014) Using virtual reality to augment perception, enhance sensorimotor adaptation, and change our minds. *Front Syst Neurosci*, 8:56.
18. **Wright WG** (2013) Using virtual reality to induce cross-axis adaptation of postural control: Implications for rehabilitation, *IEEE Proc ICVR2013*.
19. Ivanenko YP, **Wright WG**, St George RJ and Gurfinkel VS (2013) Trunk orientation, stability, and quadrupedalism. *Front. Neurol.* 4:20. doi: 10.3389/fneur.2013.00020
20. **Wright WG**, Agah M, Darvish K, Keshner EA (2013). Head stabilization shows multisensory dependence on spatiotemporal characteristics of visual and inertial passive stimulation. *IEEE Trans Neural Syst Rehabil Eng.* 21(2):191-7.
21. Haran FJ, Tierney RT, **Wright WG**, Keshner EA, Sitler MR (2013). Acute postural control changes after soccer heading. *Int J Sports Med.* 34(4):350-4.
22. **Wright WG**, Ivanenko YP, Gurfinkel VS (2012). Foot anatomy specialization for postural sensation and control. *J Neurophys.* 107:1513-21.
23. **Wright WG** (2011) Tonic postural lean after-effects influenced by support surface dynamics. *Hum Mov Sci.* 30(2):238-48.
24. Franzén E, Gurfinkel VS, **Wright WG**, Cordo PJ, Horak FB (2011). Haptic touch reduces sway by increasing axial tone. *Neuroscience*, 174: 216-23.
25. \*Agah M, Darvish K, **Wright WG**, Keshner EA (2011). Dependency of spatiotemporal characteristics of head stabilization on visual and inertial stimulation. *Proc Am Soc Biomech*
26. **Wright WG**, Gurfinkel VS, King LA, Nutt J, Cordo PJ, Horak F (2010). Axial kinesthesia in Parkinson's disease: Effects of levodopa. *Exp Neurol.* 225(1):202-9.
27. **Wright WG**, Schneider E (2009), Manual motor control during “virtual” self-motion: Implications for VR rehabilitation, *IEEE Proc ICVR2009*, pp.166-172.
28. \*Chen J, Darvish K, **Wright WG**, Keshner EA (2009), Multimodal Control of Orientation in Space, *Proceedings ASME International Mechanical Engineering Congress*.
29. **Wright WG** (2009), Linearvection in virtual environments can be strengthened by discordant inertial input, *IEEE Proc Eng Med Biol Soc*, pp.1157-1160.
30. **Wright WG**, Schneider E, Glasauer S (2009). Compensatory motor responses of object-wielding during combined linear visual and physical roll tilt stimulation, *Exp Brain Res.* 192:683-694.
31. Cordo PJ, Lutsep, H, Cordo L, **Wright WG**, Cacciatore TC, Skoss R (2009). Assisted Movement with Enhanced Sensation (AMES): Coupling Motor and Sensory to Remediate Motor Deficits in Chronic Stroke Patients, *Neurorehabil Neural Repair*, 23(1):67-77.
32. **Wright WG**, Gurfinkel VS, Nutt J, Horak F, Cordo PJ (2007). Axial hypertonicity in Parkinson's disease: Direct measurements of trunk and hip torque. *Exp Neurol.* 208(1):38-46.
33. **Wright WG**, Horak F (2007). Interaction of posture and conscious perception of gravitational vertical and surface horizontal. *Exp Brain Res.* 182(3):321-32.
34. **Wright WG**, Gurfinkel VS, King L, Horak F (2007). Parkinson's disease shows perceptuomotor asymmetry unrelated to motor symptoms. *Neurosci Lett* 417(1):10-15.
35. **Wright WG**, DiZio P, Lackner JR (2006). Apparent self-motion in two visual contexts: Dissociable mechanisms underlie perception. *J Vest Res* 16:23-28.
36. **Wright WG**, Glasauer S (2006) Subjective somatosensory vertical during dynamic tilt is dependent on task, inertial condition, and multisensory concordance. *Exp Brain Res* 172(3): 310-321.
37. Ivanenko YP, **Wright WG**, Gurfinkel VS, Horak FB, Cordo PJ (2006) Interaction of involuntary post-contraction activity with locomotor movements. *Exp Brain Res* 169(2):255-60.
38. **Wright WG**, Horak F (2005). Perception of verticality during dynamic postural tasks. *Gait and Posture* 21(Supp.1) S57.

39. **Wright WG**, DiZio P, Lackner JR (2005) Vertical linear self-motion perception during virtual visual and inertial stimulation: More than weighted summation of sensory inputs. *J Vest Res* 15(4): 185-195.
40. **Wright WG**, Glasauer S (2003). Haptic subjective vertical shows context dependence: Task and vision play a role during dynamic tilt stimulation. *Ann NY Acad Sci.* 1004: 531-5.
41. Bryant DJ, **Wright WG** (1999). How body asymmetries determine accessibility in spatial frameworks. *Q J Exp Psych*, 52 (2):487-508.

***Manuscripts under review and in preparation***

42. **Wright WG**. Adaptation during postural lean aftereffects differs in Elderly and Parkinson's Disease. *Submitted to Frontiers*.
43. \*Cheever KM, **Wright WG**, McDevitt J, Sitler M, Tierney R. Differences in Cervical Sensorimotor Integration in Contact Sport Athletes versus Non-Contact Controls. *Submitted to Clinical Journal of Sport Medicine*.
44. \*Rolheiser T, **Wright WG**. Subcortical activity and tonic neuromuscular behavior: An fMRI study. *Under revision*.
45. \*Braverman ML, **Wright WG**. "Supraspinal influence on tonic neuromuscular processing in postural musculature in healthy, aging, and PD populations". *In prep for Movement Disorders*
46. \*Rolheiser T, **Wright WG**. Diffusion tensor imaging techniques map supraspinal pathways connecting areas involved in tonic neuromuscular processing in postural muscles. *In prep for Journal of Magnetic Resonance Imaging*.

\* - denotes student or post-doc

**2. BOOK CHAPTER**

1. **Wright WG**, Creem-Regehr SH, Warren WH, Anson E, Jeka J, Keshner EA (2014). Sensorimotor Recalibration in Virtual Environments. In *Virtual Reality for Physical and Motor Rehabilitation* (PL Weiss, EA Keshner, M Levin, Eds.). New York, NY: Springer.
2. Rhea CK, Kuznetsov NA, **Wright WG**, Haran FJ, Ross SE, Duckworth JL. (2018). Assessments for quantifying neuromotor functioning after repetitive blast exposure. In A. Srivastava and C. Cox (Eds.), *Pre-Clinical and Clinical Methods in Brain Trauma Research*. New York: Springer

**3. PEER REVIEWED ABSTRACTS AND PRESENTATIONS**

1. Appiah-Kubi KO, **Wright WG**. "Vestibular habituation and balance training protocol for sensory reweighting." Society for Neuroscience, Nov. 2017, Wash DC.
2. Thompson E, H. Riemann H, Fettrow T, Agada P, Weiss S, **Wright WG**, Jeka J. "Wearable technology to enhance mobility in Parkinson's disease." Society for Neuroscience, Wash DC.
3. Ojha HA, Fritz JM, Brandi JA, Wu J, Malitsky AL, Fleming KM, Beidleman R, Mobo B, Rhon D, Weiner M, **Wright WG**. "Direct access physical therapy portal of entry compared with physician portal of entry for Temple University employees with recent onset musculoskeletal conditions: A randomized controlled trial. [TEMPLE trial (Temple University Employees with Musculoskeletal conditions receive Physical therapy to treat Limitations Early)]." APTA Combined Sections Meeting, Feb 2018, New Orleans, LA.
4. Thompson E, H. Riemann H, Fettrow T, Weiss S, Agada P, **Wright WG**, Jeka J. "Gait, balance, and quality of life in a person with Parkinson's disease following home training for larger arm swing: a case report." APTA Combined Sections Meeting, Feb 2018, New Orleans, LA.
5. **Wright WG**, Handy JD, Ortiz A, Haran FJ, Doria MJ, Servatius RJ. "Lifetime Experience of Mild Traumatic Brain Injury Elicits Subtle Deficits in Postural Control in Healthy Active Duty Military and Veterans." MHSRS, Aug 2017, Orlando, FL.

6. Rhea CK, Kuznetsov NA, Robins RK, Jakiela JT, Long B, Ross SE, **Wright WG**, Haran FJ, Bailie JM, Yanagi MA, Duckworth JL. “Acute, Sub-acute, and Chronic Effects on Neuromotor Performance After Repeated Low-level Blast Exposure.” MHSRS, Aug 2017, Orlando, FL.
7. Handy JD, Ortiz A, **Wright WG**, Doria MJ, Servatius RJ. “Influence of Vulnerability and Risk Factors on Mental Health Symptoms in Coast Guard: Incidence and Interactions with Neurocognitive Performance.” MHSRS, Aug 2017, Orlando, FL.
8. \*Cheever K, McDevitt J, Tierney R, **Wright WG**. “Effects of Concussion Recovery Phase on Symptom Provocation using Vestibular and Assessments.” ACSM Annual Meeting, June 2017.
9. \*Almajid R, Keshner E, Vasudevan E, Alsharif D, **Wright WG**, Tucker CA. “Effect of visual dependence and task loads on the TUG sub-components in old and young adults.” ISPGR, June 2017. Ft. Lauderdale, FL.
10. Thompson E, H. Riemann H, Fettrow T, Weiss S, Clizbe D, Lee MK, Agada P, **Wright WG**, Jeka J. “Improved interlimb coordination in walking in people with Parkinson’s disease using an arm swing cuing device.” ISPGR, June 2017. Ft. Lauderdale, FL.
11. \*Robins RK, Teodoro G, **Wright WG** “Head and neck position sense using a memory-driven joint position matching study”. ISPGR, June 2017. Ft. Lauderdale, FL.
12. \*Appiah-Kubi K, **Wright WG**, “Effects of Vestibular Training on Postural Control among Healthy Adults”. ISPGR, June 2017. Ft. Lauderdale, FL.
13. \*Vanderlinde F, Robins RK, Ruiz M, Halvorson K, Mansell J, **Wright WG**, Tierney, RT. “Comparison of traditional eye movement exercises with a novel oculomotor training paradigm using a head-mounted virtual reality device”. ISPGR, June 2017. Ft. Lauderdale, FL.
14. \*Almajid R, Keshner E, Vasudevan E, **Wright WG**, Tucker CA. “Effect of visual dependence and task loads on the TUG sub-components in old and young adults.” ICVR, June 2017, Montreal, Canada. Presented by Wright WG.
15. \*Robins RK, Teodoro G, **Wright WG**. “Head and neck position sense using a memory-driven joint position matching study”. ICVR, June 2017, Montreal, Canada.
16. Kuznetsov NA, Robins RK, Jakiela JT, LoJacono CT, Ross SE, MacPherson RP, Long B, Haran, FJ, Wright WG, Rhea CK. “Convergent validity of metrics provided by a portable gait assessment protocol”. NASPSPA, San Diego, CA, June 2017.
17. \*Appiah-Kubi K, **Wright WG**, “Effects of Vestibular Training on Postural Control in Healthy Adults”, CPH Research Day, Temple University. April 2017.
18. \*Ruiz M, Halvorson K, Vanderline F, Robins B, Mansell J, **Wright WG**, Tierney RT. “The effect of Virtual Reality Oculomotor Training on Visual Performance”. College of Public Health Research Day, April 2017. Meritorious Poster Award!
19. \*Halvorson K, Ruiz M, Robins B, Vanderline F, Mansell J, **Wright WG**, Tierney RT. “Effect of clinic-based oculomotor training on oculomotor performance in a healthy population”. College of Public Health Research Day, April 2017.
20. \*Lee J, Cheever K, **Wright WG**, Tierney RT. “Normative data for BESS and SOT in collegiate population”. College of Public Health Research Day, April 2017. Poster presentation.
21. Thompson E, H. Riemann H, Fettrow T, Weiss S, Clizbe D, Lee MK, Agada P, **Wright WG**, Jeka J. “Improved interlimb coordination in walking in people with Parkinson’s disease using an arm swing cuing device.” APTA Combined Sections Meeting, San Antonio, TX, Feb 2017.
22. **Wright WG**, Tierney RT, McDevitt JK. “Visual-vestibular processing deficits in subacute mild traumatic brain injury”. Society for Neuroscience, San Diego, CA. Nov 2016.
23. **Wright WG**, Haran FJ, Tierney R, McDevitt J. “Assessing subacute mild traumatic brain injury with a portable field-deployable virtual reality balance device”, MHSRS, Aug 2016, Orlando.
24. Kuznetsov NA, Robins RK, Ross SE, **Wright WG**, Haran FJ, Jakiela JT, Bailie JM, Yanagi MA, Long B, Duckworth JL, Rhea CK. “Neuromotor testing post-mTBI: Reliability of movement metrics from a smartphone application”, MHSRS, Aug 2016, Orlando, FL.

25. Rhea CK, Kuznetsov NA, Bailie JM, Yanagi MA, Long B, Haran FJ, Ross SE, **Wright WG**, Robins RK, Jakiela JT, Sargent PD, Duckworth JL. "Concussion history influences neuromotor performance after exposure to repetitive low-level blast exposure". American Society of Biomechanics, Raleigh, NC, August 2016.
26. \*McDevitt JM, Appiah-Kubi K, Tierney RT, **Wright WG**. "Vestibular and Oculomotor Assessments May Increase Accuracy of Subacute Concussion Assessment", NATA, Baltimore, MD, June 2016.
27. **Wright WG**, McDevitt J, Tierney R, Appiah-Kubi K. "Using a novel postural assessment device to detect balance deficits following mild traumatic brain injury". NASPSPA, Montreal, Canada, June 2016.
28. \*Appiah-Kubi K, **Wright WG**, "Effects of Vestibular Training on Postural Control in Healthy Adults", CPH Research Day, Temple University. April 2016.
29. Thompson E, Agada P, **Wright WG**, Jeka J. Encouraging large-amplitude movements outside of P.T.: pilot research with a new vibratory-feedback device to retrain gait in people with Parkinson's disease. APTA Combined Sections Meeting, Anaheim, CA, Feb 2016.
30. Ojha HA, Fleming KM, Malitsky AL, **Wright WG**. Start Up and Provision of Direct Access PT for Work Comp Injuries. APTA Combined Sections Meeting, Anaheim, CA, Feb 2016.
31. \*Dumont A, \*Appiah-Kubi K, \*Dumont M, **Wright WG**, "Feasibility of Affordable Custom-Designed Device with Immersive Virtual Environment for Postural Assessment", Brain Preparedness Research Day, Nov 2015, Temple University.
32. \*Appiah-Kubi K, **Wright WG**, "Effects of Vestibular habituation during Weight Shifting Training on postural control processing in Healthy Adults", Brain Preparedness Research Day, Nov 2015, Temple University.
33. **Wright WG**, McDevitt J, Tierney R, Haran FJ, Appiah-Kubi K. A novel use of commercially available technology to assess balance impairment in mild traumatic brain injury. Society for Neuroscience, Oct 2015, Chicago, IL.
34. **Wright WG**, McDevitt J, Appiah-Kubi K, "Using commercial technology to create a portable VR balance device: Assessing mTBI", ISPGR, July 2015, Seville, Spain.
35. **Wright WG**, McDevitt J, Appiah-Kubi K, "Using commercial technology to create a portable VR balance device: Assessing mTBI", ICVR, June 2015, Valencia, Spain.
36. \*Dumont A, \*Appiah-Kubi K, \*Dumont M, **Wright WG**, "Feasibility of Affordable Custom-Designed Device with Immersive Virtual Environment for Postural Assessment". CPH Research Day, Temple University. April 2015. *Meritorious Poster Award*
37. \*Appiah-Kubi K, \*McDevitt J, **Wright WG**, "A Portable Virtual Reality Balance Device to Assess Mild Traumatic Brain Injury Symptoms: A Pilot Validation Study". *CPH Research Day*, Temple University. April 2015.
38. \*Dumont A, \*Appiah-Kubi K, \*Dumont M, **Wright WG**, "Feasibility of Affordable Custom-Designed Device with Immersive Virtual Environment for Postural Assessment". Society for Neuroscience, Washington, DC. Nov 2014.
39. **Wright WG**, \*Rolheiser T. "Subcortical activity during tonic neuromuscular behavior in healthy and PD populations: An fMRI study." ISPGR. Vancouver, BC, Canada. Jun 2014.
40. \*Braverman ML, **Wright WG**. "Supraspinal influence on tonic neuromuscular processing in postural musculature in healthy, aging, and PD populations". Society for Neuroscience, San Diego, CA. Nov 2013.
41. **Wright WG**. "Using Virtual Reality to induce cross-axis adaptation of posture." IEEE ICVR 2013, Philadelphia, PA. Aug 2013.
42. **Wright WG**. "Using Virtual Reality to induce cross-modal adaptation of whole-body postural control." Joint ISPGR and Gait & Mental Function Congress, Akita, Japan. June 2013.

43. \*Braverman ML, **Wright WG**. “The Influence of Attention to the Inactive Limb on Muscle After Contraction in the Deltoid and Tibialis Anterior”. CHPSW Research Day, Temple University, April 2013.
44. **Wright WG**. Visual effects on upper extremity motor control show nonlinear dynamics. Society for Neuroscience, New Orleans, LA. Oct 2012.
45. **Wright WG**, Buddharaju R, Rolheiser T. Adaptation during postural lean aftereffects differs in young, healthy elderly and Parkinson's Disease. Joint ISPGR and Gait & Mental Function Congress, Trondheim Norway. June 2012.
46. **Wright WG**, Agah M, Darvish K, Keshner EA. Head stabilization shows multisensory dependence on spatiotemporal characteristics of visual and inertial passive stimulation, IEEE ICVR 2011, Zurich, Switzerland.
47. **Wright WG**, Buddharaju R. Differential postural adaptation during lean aftereffects in Parkinson's Disease, healthy elderly and young adults. Society for Neuroscience, Washington, DC. Nov 2011.
48. \*Agah M, Darvish K, **Wright WG**, Keshner EA. Dependency of spatiotemporal characteristics of head stabilization on visual and inertial stimulation. American Society of Biomechanics International Conference, Long Beach, CA. August 2011.
49. **Wright, WG**, Buddharaju R., Postural lean after-effects in elderly and young adults and the influence of surface stability. Society for Neuroscience, San Diego, CA. Oct 2010.
50. \*Daniels, A., Buddharaju, R., **Wright, WG**. Postural lean after-effects occur regardless of body orientation during the post-adaptation period. Student presentation. Neuroscience Research Expo, Temple University, April 2010.
51. \*Haran, F.J., Tierney, R.T., **Wright, WG**, Keshner, E.A., Sitler, M.R. Alterations in Postural Control Following an Acute Bout of Soccer Heading. 61<sup>st</sup> NATA Annual Meeting Abstract. May 2010.
52. \*Buddharaju, R., **Wright, WG**. Postural lean after-effects in elderly and young adults and the influence of surface stability. CHPSW Research Day, Temple University. April 2010.
53. **Wright WG**. Understanding Approximate Entropy analyses of postural data during variable support surface conditions. Society for Neuroscience, Chicago, IL. Nov 2009.
54. **Wright, WG**, Ivanenko YP, Gurfinkel VS. Foot anatomy specialization for postural sensation and control, ISPGR. July 2009.
55. **Wright WG**, Gurfinkel VS, King L, Cordo PJ, Horak FB. Axial kinesthesia impaired in Parkinson's disease. Society for Neuroscience, Washington, DC. Nov 2008.
56. Franzen E, Gurfinkel VS, **Wright WG**, Cordo PJ, Horak FB. Hand haptic touch modifies postural hip tone. Society for Neuroscience, Washington, DC. Nov 2008.
57. Barton, JE, Gurses S, **Wright WG**, Hain TC, Keshner EA. Control mechanisms for human head stabilization in healthy adults and adults with cerebellar disorders. Society for Neuroscience, Washington, DC. Nov 2008.
58. **Wright WG**, Gurfinkel VS, King L, Horak F (2007). Parkinson's disease shows perceptuomotor asymmetry unrelated to motor symptoms during a straight-ahead pointing task. Society for Neuroscience, San Diego, CA. Nov 2007.
59. **Wright WG**, Gurfinkel VS, Horak F. Parkinson's disease shows perceptuomotor asymmetry unrelated to motor symptoms. Progress in Motor Control IV. Sao Paulo, Brasil. Aug 2007.
60. **Wright WG**, Gurfinkel VS, King L, Cordo PJ, Horak F. Axial hypertonicity in Parkinson's disease: Direct measurements of trunk and hip torque. ISPGR Abstract. Burlington, VT. July 2007.
61. **Wright WG**, Gurfinkel VS, Horak F, Cordo PJ. Kinesthetic representation of trunk orientation drives non-veridical perception and action. Neural Control of Movement Abstract, A13. April 2006.



62. **Wright WG**, Horak F. Perception of verticality during dynamic postural tasks. *Gait and Posture* 21(Supp.1) S57, June 2005.
63. **Wright WG**, Horak F. Perception of verticality during dynamic postural tasks in healthy and vestibular loss subjects. Society for Neuroscience, 168.19. San Diego, CA. Nov 2005.
64. **Wright WG**, Schneider E, Glasauer S. Compensatory motor responses to visual-vestibular stimulation. Society for Neuroscience, 177.16. Washington, DC. Oct 2004.
65. **Wright WG**, Schneider E, Glasauer S. Haptically indicating gravitational vertical during dynamic stimulation shows visual, vestibular, and contextual dependence. Society for Neuroscience, 267.22. New Orleans, LA. Nov 2003.
66. **Wright WG**, DiZio P, Bortolami S, Lackner JR. Self-motion perception during vertical visual and actual inertial stimulation: Modulated weights of visual and non-visual inputs are inertially relative. International Brain Research Organization Neuroscience Abstract, 2256. Prague, Czech Republic. Aug 2003.
67. **Wright WG**, Bryant DJ. Spatial Frameworks: Differential accessibility of bodily dimensions and effects of lateralization. Proceedings of the American Psychological Assoc. Abstract. San Francisco, CA. July 1996.

\* - denotes student or post-doc

### **III. INVITED LECTURES/SEMINARS**

- |            |   |
|------------|---|
| April 2018 | Concussion and Its Effects: A Focus on Vision and Vestibular Disturbances, Upstate Medical University. “Clinical applications of virtual reality to assess balance and oculomotor function after traumatic brain injury.”                             |
| Jan 2018   | Philadelphia College of Osteopathic Medicine. “Clinical applications of virtual reality to assess balance and oculomotor function after traumatic brain injury”   |
| April 2017 | Innovation Showcase, Temple University, Office of Research. “VR Balance Assessment Device using accessible technology.”   |
| Mar 2017   | Keynote Speaker at Advanced Technology Academic Research Center (ATARC) Federal IT Summit, Washington, D.C. “Using mobile technology to create novel clinical assessment devices: A portable, field-deployable virtual reality posturography device.” |
| June 2015  | Concussion Summit, Temple University. “A Portable Virtual Reality Balance Device to Assess Mild Traumatic Brain Injury Symptoms: A Pilot Validation Study”. Presented by post-doc (McDevitt J) since I was presenting at another conference           |
| April 2015 | Motor Behavior Research Network, UNC-Greensboro. “Validating an affordable and portable Virtual Reality balance device for assessing mTBI symptoms and recovery”.   |
| Oct 2014   | Moss Rehabilitation Research Institute, Elkins Park, PA. “Using virtual reality to investigate balance and assess mTBI symptoms for clinical applications: Preliminary results.”  |
| Feb 2014   | Department of Physical Therapy, Ithaca College, Ithaca, NY. “Using multisensory integration to understand postural control: Applications to patient populations”.   |
| Dec 2013   | The Action Club, Department of Kinesiology, Penn State University, State College, PA “What does tonic neuromuscular processing tell us about postural control in healthy, aging, and PD populations”.   |
| Nov 2013   | Department of Rehabilitation Science, George Mason University, Fairfax, VA. “Neural mechanisms underlying postural control: how aging and neuropathology deepen our understanding”.   |

- June 2013 Joint ISPGR and Gait & Mental Function (GMF) Congress. Akita, Japan. *Advanced Technologies to Enhance Sensorimotor Integration in Postural Control*. “Using Virtual Reality to induce cross-modal adaptation of whole-body postural control.”
- April 2013 CHPSW Grant Winner Oral Presentations, Temple University. “Using EMG, fMRI, and DTI to understand the role of tonic neuromuscular processing in aging and PD.”
- June 2012 Joint ISPGR and GMF Congress, Trondheim Norway. “Adaptation during postural lean aftereffects differs in young, healthy elderly and Parkinson's Disease”.
- Sep 2011 6<sup>th</sup> International Posture Symposium – Smolenice, Slovakia. Title: “Foot anatomy specialization for postural sensation and control”.
- June 2011 IEEE Virtual Rehabilitation International Conference, Zurich, Switzerland. “Head stabilization shows multisensory dependence on spatiotemporal characteristics of visual and inertial passive stimulation”.
- Aug 2010 VA PADRECC, Philadelphia, PA, “Tonic neuromuscular control in PD: Postural, fMRI, and Rehab Studies.”
- Aug 2009 IEEE Engineering in Medicine and Biology Society, Minneapolis, MN, “Linear vection in virtual environments can be strengthened by discordant inertial input”.
- July 2009 IEEE Virtual Rehabilitation International Conference, Haifa, Israel, “Manual motor control during ‘virtual’ self-motion: Implications for VR rehabilitation”.
- June 2009 ISPGR XIX Satellite Pre-Conference, Pavia, Italy, “Tonic postural lean after-effects influenced by support surface dynamics.”
- April 2009 Neuroscience Speaker Series, Temple University, Philadelphia, PA, “Tonic Neuromuscular Activity in Parkinson’s Disease Affects Perception & Motor Control”.
- Sep 2008 5<sup>th</sup> International Posture Symposium – Smolenice, Slovakia. Unable to attend due to Temple Fall semester obligations.
- Jun 2008 NSF Science of Learning Center, Research in Spatial Cognition Lab, Temple/UPenn, Philadelphia, PA, “How tonic muscle activity influences spatial perception and motor control”.
- April 2008 Johns Hopkins University, Dept. of Neurology and Otolaryngology, Baltimore, MD. “How trunk and surface representations influence postural and motor control”.
- Jan 2007 Moss Rehabilitation Research Institute, Philadelphia, PA. “How internal representations influence motor and postural control and can guide rehabilitation”.
- Dec 2006 Temple University, Physical Therapy Department, Philadelphia, PA. “How internal representations influence motor and postural control and can guide rehabilitation”.
- June 2006 4<sup>th</sup> International Posture Symposium – Mini-Symposium on Cortical Control of Posture, Smolenice, Slovakia. Title: “Interactions of posture and perception during subjective postural vertical and subjective straight-ahead tasks”.
- May 2006 Neural Control of Movement - Symposium on Proprioception in Parkinson’s Disease, Key Biscayne, FL. Title: “Parkinson’s disease affects kinesthetic perception during postural tasks”.
- Sep 2005 Pacific University, Physical Therapy Program, Beaverton, OR. Title: “Sensory-motor integration in postural control”.
- June 2005 Bernstein Center for Computational Neuroscience, Munich, Germany. Title: “Perception of verticality during dynamic postural tasks in healthy and vestibular loss subjects”.
- May 2005 Neurological Sciences Institute, OHSU, Portland, OR. Title: “Multisensory integration during exposure to inertial motion and immersive visual environments”.
- Jan 2003 University Zurich Hospital, Okulomotoriktreffen, Zurich, Switzerland. Title: “Visually-induced compensatory motor responses evident during haptic-task”.
- Nov 2002 Marie-Curie Graduate College, Venice, Italy. Title: “Direct versus inferential visual and self-motion perception”.

- Sep 2002 Man-vehicle Laboratory, MIT, Cambridge, MA. Title: “Self-motion perception during vertical linear oscillation in virtual visual environments”.
- May 2002 Ludwig-Maximilians-University, Center for Sensorimotor Research, Munich, Germany. Title: “Perception of self-motion during exposure to vertical linear oscillation and VE”.

## **IV. GRANT ACTIVITY**

### ***1. RESEARCH PROPOSALS FUNDED***

- 2017-2019 PI: **Wright WG**, PA Cure. “Using MRI to study the neural effects of subconcussion”. Total Award: \$100,000.
- 2016-2019 Co-I: **Wright WG**, PI: Masucci M, DoD Army Research Labs. “Advanced Ballistics Technology: Material Development, Characterization and Computational Modeling”. Total Award: \$3,750,043.
- 2015-2019 Site-PI: **Wright WG**, PI: Rhea C, DoD Defense Health Program. “TBI Assessment of Readiness Using a Gait Evaluation Test (TARGET): Development of a Portable mTBI Screening Device”. Total Award: \$917,500.
- 2015-2018 Collaborator: **Wright WG**, PI: Chein J, NSF. “MRI: Acquisition of a 3-Tesla Magnetic Resonance Imaging (MRI) Scanner for Human Brain Imaging”. Total Award: \$2,700,000.
- 2016-2017 Collaborator: **Wright WG**, PI: Tierney R. NCAA-DoD. Title: “Concussion Assessment, Research and Education (CARE) Consortium study”. Funded. 0% funded effort. Co-mentoring 2 RA's who are training and sharing my lab space and equipment because of overlapping research objectives with VETS and TARGET grants. Total award: \$150,000.
- 2015-2016 Co-I: **Wright WG**, PI: Heidi Ojha, CPH Research Seed Grant Award. Title: “Direct access physical therapy portal of entry compared with physician portal of entry for Temple University employees with recent onset musculoskeletal conditions: A randomized controlled trial”. Total award: \$25,000.
- 2014-2016 PI: **Wright WG**, Co-PI: Servatius R, DoD Congressionally Directed Medical Research Program (CDMRP), Title: Cognitive and Non-cognitive assessments in mTBI and PTSD. Total Award: \$250,000.
- 2013-2016 PI: **Wright WG**, DoD Army Rapid Innovation Fund, Title: Virtual Environment TBI Screen (VETS): A field-deployable diagnostic screening system. Total Award: \$1,178,000.
- 2013 PI: **Wright WG**, NSF-HCC, Title: Student Incentives for Interdisciplinary Training ICVR2013. Total award: \$20,386.
- 2012-2013 PI: Keshner EA (Co-organizer: Wright WG), NIH-R13. Title: Combined Cognitive Neuroscience/ICVR Conferences. Total award: \$33,450.

- 2012-2013 PI: **Wright WG**, CHPSW Research Seed Grant Award. Title: Using EMG, fMRI, and DTI to understand the role of tonic neuromuscular processing in aging and Parkinson's disease. Total award: \$50,000.
- 2009-2010 PI: **Wright WG**, VA Pilot Project Grant, VAMC-PADCECC, Title: "Impaired tonic postural processing in PD and virtual reality sensorimotor training", Total award: \$10,000.
- 2009-2010 PI: **Wright WG**, Faculty Senate Seed Grant, Temple University, Title: "Virtual environment head-mounted display for research in sensorimotor adaptation of postural coordination during linear acceleration", Total award: \$7000.
- 2008-09 Co-PI: **Wright WG**, Darvish K, Keshner E, Provost Interdisciplinary Seed Grant, Temple University, Title: "Development of a laboratory to control multimodal orientation in space", Total award: \$50,000
- 2006 NIH fMRI Training Award, Psychology Department, University of Michigan, Total award: \$5,000
- 2005-07 NIH #NS45553, Post-Doctoral Fellowship, Neurological Sciences Institute, Oregon Health Sciences University (OHSU), Portland, OR. Annual direct: \$50,000
- 2004-05 Post-Doctoral Research Fellowship, Otolaryngology Department, OHSU, Portland, OR NIH #1 T32 DC005945, Annual direct: \$45,000
- 2002-04 Post-Doctoral Fellowship, Munich, Germany, 2002-2004, DAAD (German Academic Exchange Service), Total award: \$25,000

## ***2. PENDING RESEARCH SUPPORT OR PROPOSALS UNDER REVISION***

PI: **Wright WG**, DoD-CDMRP, Title: "Assessment Across Time of Vestibular Processing Deficits in mTBI Using a Novel, Portable Virtual Reality-Based System". Under Review.

Site-PI: **Wright WG**, PI: Rhea C, NIH R01. "Behavior and Recovery After head Impact and Neurotrauma (BRAIN): The Female BRAIN Project". Under Review.

PI: **Wright WG**. National Council of Entrepreneurial Tech Transfer (NCET2) Program. Title: "System and Method for Assessment and Rehabilitation of Balance Impairment Using Virtual Reality". Under Review.

PI: **Wright WG**. Oculus Research Grant. "Sensorimotor calibration in a Virtual Environment (VE): mapping real to virtual visuo-vestibular-proprioceptive representations in a physical environment (PE)". Not funded.

PI: **Wright WG**, DoD-CDMRP, Title: “Using a novel, portable virtual-reality based system to assess and rehabilitate individuals with mTBI with and without PTSD”. Scored but not funded.

Co-I: **Wright WG**, PI: Servatius R, DoD-CDMRP, Title: “Characterizing Cerebellar Involvement in TBI, PTSD, and Depression”. Scored but not funded.

PI: **Wright WG**. University City Science Center QED Program. Title: “Using advanced virtual reality technology to assess, track and rehabilitate balance deficits following traumatic brain injury.” Not funded.

Collaborator: **Wright WG**, PI: Christine Marx. DoD-CDMRP. Title: " Accelerating Return to Duty and Ameliorating Pain Symptoms following Complex TBI: Investigation of Neurosteroids as Therapeutic Interventions". Step-1 accepted.

Co-I: **Wright WG**, PI: Jeka J. NIH-R21. Title: “Improving Mobility in Individuals with PD through Wearable Technology.” Under revision. Proposed 10% effort.

Co-I: **Wright WG**, PI: Jeka J. NIH-R01. Title: “Characterizing and Improving Mobility in Individuals with PD through Wearable Technology.” Under revision. Proposed 10% effort.

Co-I: **Wright WG**, PI: Ojha H. APTA Catalyst Grant for Health Policy and Administration Title: “Direct access physical therapy portal of entry compared with physician portal of entry for Temple University employees with recent onset musculoskeletal conditions.”

Co-I: **Wright WG**, PI: Ojha H. Magistro Foundation, Title: “Direct access physical therapy portal of entry compared with physician portal of entry for Temple University employees with recent onset musculoskeletal conditions.”

## **V. CURRENT PROFESSIONAL AND SCIENTIFIC MEMBERSHIPS**

2007-present Philadelphia Chapter of the Society for Neuroscience, Councilor (since 2014)  
2007-present International Society for Virtual Rehabilitation, Treasurer (since 2018)  
2005-present International Society for Gait and Posture Research, Executive Board (since 2017)  
2003-present Society for Neuroscience  
2006-2008 Society for Neural Control of Movement

## **VI. SERVICE ACTIVITIES**

### **1. University Service**

2008-2009 Seminar Speaker Search Committee for Temple Neuroscience Program, **Member**  
2010 College of Engineering's 4th annual poster competition, Judge  
2016-2019 University Research and Creative Awards Committee

### **2. College Service**

2008-2012 Task force for establishing CHPSW Health Ecology Doctoral Program

2009-2011 Collegial Assembly, Research, Study Leaves and Awards Committee, **Member**  
 2013-2015 Collegial Assembly, Research, Study Leaves and Awards Committee, **Co-chair/Chair**  
 2013 CHPSW Research Day poster competition, **Judge**  
 2014 CHPSW Research Day, **Co-chair**  
 2014 CPH Workload Review Committee  
 2014 CPH Merit Review Committee  
 2015 CPH Research Day, **Chair**

### 3. Departmental Service: Physical Therapy, Temple CHP

2007-2013 Faculty Development Committee, **Chair**  
 2007-present PhD Department Curriculum Committee, **Member**  
 2007-2009 Faculty Search Committees, **Member**  
 2007-2010 Equipment and Technology Committee, **Chair** 2009-2010  
 2007-2009 Ph.D. Task Force, **Member**  
 Role: Committee redesigned and wrote new PhD program  
 2007 Faculty meeting secretary - Transcribed all meeting minutes  
 2008-present Academic Status Committee, **Member**  
 Role: recommendations to chair & DPT program director on academic student issues.  
 2008 Ethics task force, **Member**  
 Role: To develop the “Student Code of Academic Integrity and Professionalism”, which is an addendum to the departmental handbook aimed at the development of DPT students’ professional and clinical behavior.  
 2011-2013 Task force for developing articulations between college of engineering and PT dept for accelerated BS Engineering and Doctorate in PT (3+3 year program)  
 2014 Promotion and tenure review committee  
 2015 Faculty Search Committee  
 2015 Promotion and tenure review committee

### 4. Service to the community

2015 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2014 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2013 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2012 Brain Injury Association of Pennsylvania Event, Volunteer, Franklin Institute, Philadelphia, PA  
 2012 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2011 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2010 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2009 Brain Awareness Week Fair, Volunteer, Franklin Institute, Philadelphia, PA  
 2007 Intel Northwest Science Engineering Fair (ISEF), Judge Biology Category, Portland, OR  
 2006 Oregon Museum for Science and Industry (OMSI) Brain Awareness Fair, Presenter for OHSU Balance Disorders Lab, Portland, OR  
 2005 22<sup>nd</sup> Annual Intel Northwest Science Expo, Judge Behavioral & Social Sciences Category  
 2005 OMSI Brain Awareness Fair, Presenter for OHSU Balance Disorders Lab, Portland, OR  
 2004 Intel International Science and Engineering Fair (ISEF), Grand Awards Judge for Behavioral and Social Sciences, Portland, OR  
 2004 Intel ISEF, Presenter for OHSU Balance Disorders Laboratory booth, Portland, OR  
 2004 OMSI Brain Awareness Fair, Presenter for OHSU Balance Disorders Laboratory booth, Portland, OR

### 5. Service to the profession

***Invited Manuscript reviewer***

Archives of Gerontology and Geriatrics  
Aviation Space and Environmental Science  
Brain  
Brain and Cognition  
Brain Research Bulletin  
Clinical Neurophysiology  
Experimental Brain Research  
Frontiers in Neuroscience  
Gait and Posture  
Human Movement Science  
Journal of Neural Transmission  
Journal of Neurophysiology  
Journal of Vestibular Research  
Neuroscience Letters  
Neuropsychologia  
Perception  
PLOS one  
Presence  
Transactions on Neural Systems & Rehabilitation Engineering  
Vision Research

***Grant/Research/IRB reviewer:***

2007 Invited grant reviewer, American Heart Association  
2008 Invited grant reviewer for NOSR  
2013 Invited grant reviewer for NSERC  
2014 Invited grant reviewer for CDMRP  
2014 Invited grant reviewer for Clinical and Rehabilitative Medicine Research Program  
2014 Army Research Development Engineering Center (ARDEC) Scientific Reviewer  
2015 Invited grant reviewer for CRM RP

***Service to Professional Societies:***

2009 Abstract Reviewer, Philadelphia Chapter of Society for Neuroscience  
2009 Poster Judge, Philadelphia Chapter of Society for Neuroscience  
2009 Abstract and manuscript reviewer, Virtual Rehab Conference, Haifa, Israel  
2011 Scientific reviewer for international conferences, EMBC 2011  
2011 Scientific reviewer for international conference, ICVR 2011  
2011 Served on awards committee for international conference, ICVR 2011  
2011 Session chair for ICVR/ICORR/INRS 2011  
2011-2013 Conference Organizing Committee for ICVR 2013, Aug 2013 in Philadelphia, PA  
2012-2013 Co-Chair, Symposium organizer, "Postural and motor perspectives evolving", Feb 2013  
2013 Scientific reviewer for international conference, ICVR 2013  
2013 Student awards committee for international conference, ICVR 2013  
2013-present ICVR2015 Steering Committee  
2014 Scientific reviewer for international conference, ISPGR 2014  
2013-2015 Program Co-Chair for international conference, ICVR 2015  
2014-2015 Scientific content committee for international conference, ISPGR 2015  
2015-2017 Program Co-Chair for international conference, ICVR 2017

## VII. TEACHING

### A. Teaching Responsibilities at Temple University

#### **1. Doctorate of Physical Therapy (DPT), Graduate Level Courses**

- 2007/2009 Human Anatomy Lab (Fall semester). PHTH 8502/3. 98 hours of lab time/yr.  
Role: Primary lab instructor in 2009. Lab instructor in 2007. Students: 50/year.
- 2008-2012 Movement Science III. PHTH 8533. Fall (2008-2009) and Summer (2010-12) course.  
Assigned 1 of 3 CH. Role: **Co-course designer**. Lecturer and team lab instructor.  
Students: 48/yr. Lecture responsibility: Posture & Upper extremity motor control.
- 2010-present Movement Science II. PHTH 8523. Spring semester course. Assigned 1 of 3 CH.  
Role: Co-lecturer. Students: 48/yr. Lecture responsibility: Neuroplasticity and neural control.
- 2012-2013 Movement Science II. PHTH 8523 (*Re-Designed*). Role: **Co-course designer**, lecturer, and team lab instructor. Assigned 1 of 3 CH and 1CH for lab. Students: 48/yr.
- 2009-present Neuroscience. PHTH 8521/8114. Spring semester course. Assigned 2.5 of 3 CH. Role: **Course Director** (2011), Primary Lecturer and Lab leader. Students: 50/yr; Cross-listed course with PhD programs in Psychology, Kinesiology, Anatomy and Cell Biology, Pharmacology. Lecture responsibility: All fundamentals of neuroscience and neuroanatomy.
- 2009-2015 Critical Inquiry I. PHTH 8528, Assigned 3 CH. **Course Director/Sole Instructor** (as of 2011). Students: 48/yr. Lecture responsibility: Statistics and experimental design.
- 2010-2015 Critical Inquiry II. PHTH 8548, Assigned 1 CH. **Course Director/Sole Instructor** (as of 2012). Students: 48 DPT. Lecture responsibility: Research analysis and writing.
- 2011-present Clinical research elective PHTH 8559, Assigned 1.5 CH. **Course Director/Lab instructor**. Students: 5 DPT. Lab responsibilities: Experimental design.

#### **2. PhD level Courses**

- 2009-present Cognition and Motor Learning Human Movement Science PHTH 9621  
New Course for the PT PhD program  
Role: **Designer** and **course director** for PhD students
- 2012-2014 Neural Factors of Human Movement Science PHTH 9620  
New Course for the PT PhD program  
Role: **Co-designer** and instructor for PhD students
- 2009-2012 Neuroscience Journal Club. Role: Facilitator of journal club discussion. Students: 10 PhD students required for Neuroscience specialization (Multidisciplinary enrollment)

### B. Advisees at Temple University

#### **Graduate**

- 2008-present DPT students: Natasha Chevalier, Jeff Wooldridge, Rob Bardinas, Lydia Armacost, Mark Bailey, Greg Blosser, Jeff Buzin, Lucinda Christian, Nadia Wyrstra, Matt



Yankowitz, Casey Boberick, Kirsten Bickhart, Kathleen Berrigan, Jake Bezalel, Gabby Romano, Julia Swierzowski, Jess Sellers, Nicole White, Heather Weiss, Brooke Walters, Jenna Tosto, Francine Selois, Mia Sallavanti

- 2008-2009 PhD Student: FJ Haran, Department of Kinesiology, Temple University  
Role: Research co-advisor. Served on committees for Qualifications Exam, Proposal Defense and PhD dissertation defense. Successfully defended July 2009.  
Deputy Department Head - Biomedical Research and Operations Department, US Navy
- 2008-2010 PhD Student: Elizabeth Grace, Dept Physical Therapy, Temple University  
Role: PhD Advisor. Took hiatus to attend to family matters.
- 2008-2012 Master Student: Ji Chen, Department of Mechanical Engineering, Temple University  
Role: Co-advisor. Successful defense March 2010. Currently PhD student at The Catholic University of America, Biomedical Engineering program Fall 2012.
- 2009-2011 PhD Student: Ravi Buddharaju, Dept of Physical Therapy, Temple University  
Role: Co-mentor. Successfully completed masters.
- 2010-2012 PhD Student: Mobin Agah, Dept of Mechanical Engineering, Temple University  
Role: Co-mentor. Successfully defended PhD in 2015.
- 2010 PhD Student: Mohammad Shahidul Islam, Dept of Mechanical Engineering.  
Role: Co-mentor. Summer project.
- 2011-2013 Master Student: Marissa Braverman, Dept of Bioengineering, Temple  
Role: Mentor/Thesis Advisor. Management Engineer at Estee Lauder.
- 2012-2014 PhD Student: Cristine Agresta, MPT, Department of PT, Temple University  
Role: Served on committees for Qualifications Exam, Proposal Defense and PhD dissertation committee. Conducted PhD studies in MAP lab. Successfully defended PhD, March 2015. Post-doc at University of Michigan.
- 2014-2015 MD Student: Neilay Amin, Case Western Medical School.  
Role: Research advisor during two 4-month lab rotations in MAP lab.
- 2014-2016 MS Student: Alexander Dumont, Dept of Bioengineering, Temple  
Role: Mentor/Thesis Advisor. Completed his MS 2016.
- 2016 PhD Student: Jacqueline Phillips, PhD, Department of Kinesiology, Temple University  
Role: Served on PhD dissertation committee. Collected data in MAP lab. Successfully defended PhD, March 2016. NTT faculty at Temple University.
- 2014-present PhD Candidate: Kwadwo Appiah-Kubi, Dept of PT, Temple University  
Role: Mentor/Dissertation Advisor.
- 2015-present PhD Candidate: Kelly Cheever, MS, PhD, Dept of Kinesiology, Temple University  
Role: Dissertation committee/Co-advisor
- 2016-2018 Master Student: Marguerite Robinson, Neuroscience Program, Temple  
Role: Mentor/Project Advisor. Completed her MS 2018.
- 2017-present PhD Candidate: Jonathan Marchetto, MA, NMS Program, Temple University  
Role: Mentor/Dissertation Advisor.
- 2017-present PhD Candidate: Michelle Lerner, NMS Program, Temple University  
Role: Mentor/Dissertation Advisor.
- 2017-present Master Student: Mark Jankowski, Neuroscience Program, Temple  
Role: Mentor/Project Advisor.

### ***Post-Graduate***

- 2015-2017 Post-doc: Rebecca Robins, PhD. Currently data management specialist
- 2011-2012 Post-doctoral fellow: Tyler Rolheiser, PhD, Currently Research Scientist at Edmonton University, Canada
- 2012 Geriatric Specialization Residency: Tanya Mikhats, DPT
- 2014-2015 Post-doc: Jane McDevitt, PhD. Asst. Prof at East Stroudsburg University, PA.

2014-2015 Post-baccalaureate: Rand Williamson, B.S. Dept of Psychology, Temple University  
Role: Research assistant. Completed MS student, East Anglia University, Norwich, UK

***Undergraduate***

2010-present Undergraduate Neuroscience Student Advisor: Anitha Daniels, Gail Bordo, Aaron Jacobson, Jenna Yesner, Sean Vargas, Chris Haslam, Avin Mathew  
2012 Advisor to Bryan Porten-Willson on Senior Project in Research Methods Course (taught by Assistant Dean Douglas Baird, PhD, Temple University, CST)  
2013-2015 Maxim Dumont, Computer science, VETS s/w developer. Full time programmer at Comcast.

C. Teaching prior to beginning at Temple University

***Undergraduate level teaching***

1995-1996 Introduction to Psychology. Northeastern University. Role: Teaching Assistant (TA)  
1995-1996 Statistics. Northeastern University. Role: TA  
1995-1997 Cognitive Psychology. Northeastern University. Role: Lecturer and TA  
1997-1998 Introduction to Psychology. Brandeis University. Role: TA  
1998-1999 Statistics. Brandeis University. Role: TA  
1998-1999 Experimental Design. Brandeis University. Role: Lab instructor and TA  
1998-2000 Cognitive Psychology. Brandeis University. Role: Lecturer and TA  
1997-2001 Man in Space: Physiology and physics of human space travel. Brandeis University.  
Role: Lecturer and TA  
1998-2002 Visual Perception. Brandeis University. Role: TA