

Christopher K. Rhea, PhD

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EDUCATION

Ph.D. in Kinesiology (Biomechanics specialization), Purdue University, West Lafayette, IN (2009)
M.S. in Movement Science (Biomechanics specialization), Barry University, Miami Shores, FL (2004)
B.S. in Physical Education, University of Central Missouri, Warrensburg, MO (2002)

PROFESSIONAL EXPERIENCE

Associate Professor (2016-Present), Associate Department Chair for Research (2018-2019), Assistant Professor (2011-2016)

University of North Carolina at Greensboro, Department of Kinesiology, Greensboro, NC

- Director of the Virtual Environment for Assessment and Rehabilitation Lab (VEAR Lab) and fostered an interdisciplinary research program rooted in biomechanics, motor behavior, and sensorimotor control
- Funded by the National Institutes of Health (NIH), Department of Defense (DoD), US Navy, Health Resources and Services Administration (HRSA), and the Women's Football Foundation to create solutions for problems in the areas of sport-related and military concussive and sub-concussive head trauma, falls in older adults, mobility issues in stroke survivors, and health literacy
- Developed smartphone and virtual reality technology to address these human health challenges
- Taught courses in the undergraduate and graduate curriculum

Director, Research and Instruction in STEM Education (RISE) Network (2019-present)

University of North Carolina at Greensboro, Greensboro, NC

- Led the RISE Network to address the goal of enhancing and expanding partnerships with faculty engaged in science, technology, engineering, and math (STEM) research and instruction at UNCG and in the local community
- Developed a network of interested partners to coordinate STEM education and research activities across campus
- Organized a speaker series that invited nationally recognized STEM leaders to campus to help synergize research and education efforts at UNCG

Research Scientist (2008-2010)

Department of Veterans Affairs, Providence VA Medical Center, Providence, RI

- Member of the Center for Restorative and Regenerative Medicine
- Created virtual reality solutions for physical rehabilitation

Visiting Scholar (2008-2010)

Brown University, Department of Cognitive and Linguistic Sciences, Providence, RI

- Postdoc member of the Virtual Environment Navigation Lab (VENLab)
- Developed virtual reality applications for gait rehabilitation

Biomechanics Instructor/Teaching Assistant (2004-2008)

Purdue University, Department of Health and Kinesiology, West Lafayette, IN

- Taught undergraduate biomechanics lectures and labs
- Developed new laboratory experiments

Research Assistant (2004-2008)

Purdue University Biomechanics Lab, Department of Health and Kinesiology, West Lafayette, IN

- Assisted research in the area of balance, posture, and mobility focusing on the interaction of the neural and mechanical systems

Motor Development Teaching Assistant (2005)

Purdue University, Department of Health and Kinesiology, West Lafayette, IN

- Taught lectures in motor development, assisted in the development of tests and study guides

Internship (2004)

Miami Project to Cure Paralysis, University of Miami, School of Medicine, Miami, FL

- Analyzed gait patterns of patients with a spinal cord injury

Graduate Student Instructor (2002-2004)

Barry University, Department of Sport and Exercise Science, Miami Shores, FL

- Taught classes in strength & conditioning and basketball

Undergraduate Teaching Assistant (2001)

University of Central Missouri, Department of Physical Education, Warrensburg, MO

- Assisted the undergraduate biomechanics professor
- Conducted study and test review sessions

REFERRED PUBLICATIONS (postdoc=*italics*, graduate student=underlined, undergraduate student=underlined/italics)

Published

1. Berry, N.T., Wideman, L., & **Rhea, C.K.** (in press). Variability and complexity of nonstationary function – A guide to post-exercise HRV. *Nonlinear Dynamics, Psychology, and Life Sciences*
2. Raisbeck, L.D., Diekfuss, J.D., & **Rhea, C.K.** (in press). An external focus improves single leg hop distance for those with chronic ankle instability. *Athletic Training & Sports Health Care* <https://doi.org/10.3928/19425864-20191106-01>
3. Haran, F.J., Handy, J.D., Servatius, R.J., **Rhea, C.K.**, & Tsao, J.W. (in press). Acute neurocognitive deficits in active duty service members following subconcussive blast exposure. *Applied Neuropsychology: Adult* <https://doi.org/10.1080/23279095.2019.1630627>
4. Glass, S.M., Cone, B.L., **Rhea, C.K.**, Duffy, D.M., & Ross, S.E. (2020). Sex-specific dependence of linear and nonlinear postural control metrics on anthropometrics during clinical balance tests in healthy young adults. *Journal of Sport Rehabilitation*, 29, 405-412. <https://doi.org/10.1123/jsr.2018-0197>
5. **Rhea, C.K.**, Schleich, K.N., Washington, L., Glass, S.M., Ross, S.E., Etnier, J.L., Wright, W.G., Goble, D.J., & Duffy, D.M. (2019). Neuromotor and neurocognitive performance in female American football players. *Athletic Training & Sports Health Care*, 11(5), 224-233. <https://doi.org/10.3928/19425864-20181101-01>
6. Felsberg, D.T., Maher, J.P., & **Rhea, C.K.** (2019). The state of behavior change techniques in virtual reality rehabilitation of neurologic populations: A systematic review. *Frontiers in*

Psychology: Movement Science and Sport Psychology, 10, 979.

<https://doi.org/10.3389/fpsyg.2019.00979>

7. **Rhea, C.K., Diekfuss, J.A.,** Fairbrother, J.T., & Raisbeck, L.D. (2019). Postural control entropy is increased when adopting an external focus of attention. *Motor Control*, 23(2), 230-242
<https://doi.org/10.1123/mc.2017-0089>
8. **Glass, S.M., Rhea, C.K.,** Schmitz, R.J., & Ross, S.E. (2019). Potential mediators of load-related changes in movement complexity in young, healthy adults. *Journal of Athletic Training*, 54(1), 70-80. <https://doi.org/10.4085/1062-6050-529-16>
9. **Glass, S.M.,** Schmitz, R.J., **Rhea, C.K.,** & Ross, S.E. (2019). Potential mediators of load-related decreases in movement quality in young, healthy adults. *Journal of Athletic Training*, 54(1), 81-89. <https://doi.org/10.4085/1062-6050-498-16>
10. **Wittstein, M.W.,** Starobin, J.M., Schmitz, R.J., Shultz, S.J., Haran, F.J., & **Rhea, C.K.** (2019). Cardiac and gait rhythms in healthy younger and older adults during treadmill walking tasks. *Aging Clinical and Experimental Research*, 31(3), 367-375. <https://doi.org/10.1007/s40520-018-0962-5>
11. **Diekfuss, J.A., Rhea, C.K.,** Schmitz, R.J., Grooms, D.R., Wilkins, R.W., Slutsky, A.B., & Raisbeck, L.D. (2019). The influence of attentional focus on balance control over seven days of training. *Journal of Motor Behavior*, 51(3), 281-292. <https://doi.org/10.1080/00222895.2018.1468312>
12. Yang, W., Foss, K.D., Thomas, S., Galloway, R., DiCesare, C., Dudley, J., Leach, J., Scheifele, P., Altaye, M., Talavage, T.M., **Rhea, C.K.,** & Myer, G.D. (2019). The impact of low-level blast exposure on brain function after a one-day tactile training and the ameliorating effect of a jugular vein compression neck collar device. *Journal of Neurotrauma*, 36, 721-734. <https://doi.org/10.1089/neu.2018.5737>
13. **LoJacono, C.T., MacPherson, R.P.,** Kuznetsov, N.A., Raisbeck, L.D., Ross, S.E., & **Rhea, C.K.** (2018). Obstacle crossing in a virtual environment transfers to a real environment. *Journal of Motor Learning and Development*, 6(2), 234-249. <https://doi.org/10.1123/jmld.2017-0019>
14. **Glass, S.M., Rhea, C.K.,** Wittstein, M.W., Ross, S.E., Florian, J.P., & Haran, F.J. (2018). Changes in posture following a single session of long-duration water immersion. *Journal of Applied Biomechanics*, 34(6), 435-441. <https://doi.org/10.1123/jab.2017-0181>
15. **Rhea, C.K., Felsberg, D.T.,** & Maher, J.P. (2018). Towards evidence-based smartphone apps to enhance human health: Adoption of behavior change techniques. *American Journal of Health Education*, 49(4), 210-213. <https://doi.org/10.1080/19325037.2018.1473177>
16. **Kuznetsov, N.A., Robins, R.K.,** Long, B., Jakiela, J.T., Haran, F.J., Ross, S.E., Wright, G.W., & **Rhea, C.K.** (2018). Validity and reliability of smartphone orientation measurement to quantify dynamic balance function. *Physiological Measurement*, 39(2), 02NT01 <https://doi.org/10.1088/1361-6579/aaa3c2>
17. **Berry, N.T.,** Wideman, L., **Rhea, C.K.,** Labban, J.D., Chon, K.H., Shykoff, B.E., Haran, F.J., & Florian, J.P. (2017). The effects of prolonged and repeated immersions on heart rate variability and complexity in military divers. *Undersea and Hyperbaric Medicine*, 44(6), 589-598. [10.22462/11.12.2017.10](https://doi.org/10.22462/11.12.2017.10)
18. **Glass, S.M.,** Schmitz, R.J., **Rhea, C.K.,** & Ross, S.E. (2017). Load-enhanced movement quality screening and tactical athleticism: An extension of evidence. *International Journal of Sports Physical Therapy*, 12(3), 408-416.
19. **Kuznetsov, N.A. & Rhea, C.K.** (2017). Power considerations for the application of detrended fluctuation analysis in gait variability studies. *PLOS ONE*, 12(3): e0174144
<https://doi.org/10.1371/journal.pone.0174144>

20. **Rhea, C.K.** & *Kuznetsov, N.A.* (2017). Using visual stimuli to enhance gait control. *Journal of Vestibular Research*, 27(1), 7-16. [10.3233/VES-170602](https://doi.org/10.3233/VES-170602)
21. Schleich, K.N., Duffy, D.M., & **Rhea, C.K.** (2017). Using balance testing to better understand sex differences after mild traumatic brain injury. *Journal of Nurse Life Care Planning*, 17(1), 20-25
22. **Rhea, C.K.**, *Kuznetsov, N.A.*, Ross, S.E., Long, B., Jakiela, J.T., Bailie, J.M., Yanagi, M.A., Haran, F.J., Wright, W.G., *Robins, R.K.*, Sargent, P.D., & Duckworth, J.L. (2017). Development of a portable tool for screening neuromotor sequelae from repetitive low-level blast exposure. *Military Medicine*, 182(3/4), 147-154. <https://doi.org/10.7205/MILMED-D-16-00140>
23. Cone, B.L., Goble, D.J., & **Rhea, C.K.** (2017). Relationship between changes in vestibular sensory reweighting & postural control complexity. *Experimental Brain Research*, 235, 547-554. [10.1007/s00221-016-4814-2](https://doi.org/10.1007/s00221-016-4814-2)
24. Stout, R.D., Wittstein, M.W., LoJacono, C.T., & **Rhea, C.K.** (2016). Gait dynamics when wearing a treadmill safety harness. *Gait & Posture*, 44, 100-102. <https://doi.org/10.1016/j.gaitpost.2015.11.012>
25. Taylor, J.B., Wang, H.S., Schmitz, R.J., **Rhea, C.K.**, Ross, S.E., & Shultz, S.J. (2015). Multiplanar knee laxity and perceived function during activities of daily living and sport. *Journal of Athletic Training*, 50(11), 1199-1206. <https://doi.org/10.4085/1062-6050-50.11.10>
26. Raisbeck, L.D., Regal, A., Diekfuss, J.A., **Rhea, C.K.**, & Ward, P. (2015). Influence of practice schedules and attentional focus on skill development and retention. *Human Movement Science*, 43, 100-106. <https://doi.org/10.1016/j.humov.2015.07.004>
27. **Rhea, C.K.**, Kiefer, A.W., Wright, W.G., Raisbeck, L., & Haran, F.J. (2015). Interpretation of postural control may change due to data processing techniques. *Gait & Posture*, 41(2), 731-735. <https://doi.org/10.1016/j.gaitpost.2015.01.008>
28. **Rhea, C.K.**, Kiefer, A.W., Haran, F.J., Glass, S.M., & Warren, W.H. (2014). A new measure of the CoP trajectory in postural sway: Dynamics of heading change. *Medical Engineering and Physics*, 36, 1473-1479. <https://doi.org/10.1016/j.medengphy.2014.07.021>
29. **Rhea, C.K.** & Wittstein, M.W. (2014). Characteristics of stride behavior during treadmill walking and stationary stepping. *Journal of Applied Biomechanics*, 30(4), 534-541. <https://doi.org/10.1123/jab.2013-0314>
30. **Rhea, C.K.**, Kiefer, A.W., Wittstein, M.W., Leonard, K.B., MacPherson, R.P., Wright, W.G., & Haran, F.J. (2014). Fractal gait patterns are retained after entrainment to a fractal stimulus. *PLOS ONE*, 9(9): e106755. <https://doi.org/10.1371/journal.pone.0106755>
31. Glass, S.M., Ross, S.E., Arnold, B.L., & **Rhea, C.K.** (2014). Center of pressure regularity with and without stochastic resonance stimulation in stable and unstable ankles. *Athletic Training and Sports Health Care*, 6(4), 170-178. <https://doi.org/10.3928/19425864-20140710-04>
32. **Rhea, C.K.**, Kiefer, A.W., D'Andrea, S.E., Warren, W.H., & Aaron, R.K. (2014). Entrainment to a real time fractal visual stimulus modulates fractal gait dynamics. *Human Movement Science*, 36, 20-34. <https://doi.org/10.1016/j.humov.2014.04.006>
33. Rio, K., **Rhea, C.K.**, & Warren, W.H. (2014). Follow the leader: Visual control of speed in pedestrian following. *Journal of Vision*, 14(2):4, 1-16. <https://doi.org/10.1167/14.2.4>
34. Grubaugh, J. & **Rhea, C.K.** (2014). Gait performance is not influenced by working memory when walking at a self-selected pace. *Experimental Brain Research*, 232(2), 515-525. [10.1007/s00221-013-3759-y](https://doi.org/10.1007/s00221-013-3759-y)

35. **Rhea, C.K.**, Wutzke, C.J., & Lewek, M.D. (2012). Gait dynamics following variable and constant speed training in individuals with chronic stroke. *Gait & Posture*, 36, 332-334. <https://doi.org/10.1016/j.gaitpost.2012.03.014>
36. **Rhea, C.K.** & Rietdyk, S. (2011). Influence of an unexpected perturbation on adaptive gait behavior. *Gait & Posture*, 34, 439-441. <https://doi.org/10.1016/j.gaitpost.2011.06.011>
37. Rietdyk, S & **Rhea, C.K.** (2011). The effect of the visual characteristics of obstacles on risk of tripping and gait parameters during locomotion. *Ophthalmic and Physiological Optics*, 31, 302-310. <https://doi.org/10.1111/j.1475-1313.2011.00837.x>
38. **Rhea, C.K.**, Silver, T.A., Hong, S.L., Ryu, J.H., Studenka, B.E., Hughes, C.M.L., & Haddad, J.M. (2011). Noise and complexity in human postural control: Interpreting the different estimations of entropy. *PLOS ONE*, 6(3): e17696. <https://doi.org/10.1371/journal.pone.0017696>
39. **Rhea, C.K.**, Haddad, J.M., & Rietdyk, S. (2010). Locomotor adaptation versus perceptual adaptation when stepping over an obstacle with a height illusion. *PLOS ONE*, 5(7): e11544. <https://doi.org/10.1371/journal.pone.0011544>
40. Chagdes, J., Rietdyk, S., Haddad, J.M., Zelaznik, H.Z., Raman, A, **Rhea, C.K.**, & Silver, T.A. (2009). Multiple time scales in postural dynamics associated with vision and a secondary task are revealed by wavelet analysis. *Experimental Brain Research*, 197, 297-310. [10.1007/s00221-009-1915-1](https://doi.org/10.1007/s00221-009-1915-1)
41. **Rhea, C.K.** & Rietdyk, S. (2007). Visual exteroceptive information provided during obstacle crossing did not modify the lower limb trajectory. *Neuroscience Letters*, 418, 60-65. <https://doi.org/10.1016/j.neulet.2007.02.063>
42. **Rhea, C.K.** & Wisdom, S. (2007). The M&M approach: using mental and mechanical strategies in your teaching and coaching. *Strategies: A Journal for Physical and Sport Educators*, 20(5), 14-18. [10.1080/08924562.2007.10590734](https://doi.org/10.1080/08924562.2007.10590734)
43. Rietdyk, S. & **Rhea, C.K.** (2006). Control of adaptive locomotion: Effect of visual obstruction and visual cues in the environment. *Experimental Brain Research*, 169, 272-280. [10.1007/s00221-005-0345-y](https://doi.org/10.1007/s00221-005-0345-y)
44. **Rhea, C.K.**, Ludwig, K., & Butcher-Mokha, G.M. (2006). The science of cup stacking: a review of how prior research “stacks up”. *IAHPERD Journal*, 35(2), 27-28.

BOOK CHAPTERS

1. **Rhea, C.K.**, Kuznetsov, N.A., Wright, W.G., Haran, F.J., Ross, S.E., & Duckworth, J.L. (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* (pp. 283-306). New York, NY: Springer
2. **Rhea, C.K.** & Kiefer, A.W. (2014). Patterned variability in gait behavior: How can it be measured and what does it mean? In L. Li and M. Holmes (Eds.), *Gait Biometrics: Basic Patterns, Role of Neurological Disorders and Effects of Physical Activity* (pp. 17-44). New York, NY: Nova Science Publishers.
3. Kiefer, A.W., **Rhea, C.K.** & Warren, W.H. (2013). Virtual reality based assessment and rehabilitation of functional mobility. In A Steinicke, F., Visell, Y., Campos, J., & Lécuyer, A. (Eds.), *Human Walking in Virtual Environments: Perception, Technology, and Applications* (pp. 333-350). New York, NY: Springer.

CONFERENCE PRESENTATIONS (postdoc=*italics*, graduate student=underlined, undergraduate student=underlined/italics)

1. Levin, I., Lewek, M.D., **Rhea, C.K.**, Faldowski, R., & Thorpe, D.E. Reactive balance responses to repeated surface perturbations during treadmill walking in adults with Cerebral Palsy and adults without disabilities. *American Academy for Cerebral Palsy and Developmental Medicine Annual Meeting*, New Orleans, LA, September 2020, national conference, podium.
2. **Rhea, C.K.**, Kuznetsov, N.A., Ross, S.E., Wright, W.G., Haran, F.J., Schneider, E.B., & Duckworth, J.L. A custom smartphone app to monitor neuromotor performance after repeated sub-concussive head trauma from blast exposure: An update on the I-TAB project. *Military Health System Research Symposium*, Kissimmee, FL, August 2020, national conference, poster (conference cancelled due to COVID-19).
3. McGuirt, J.T., Enahora, B., Mallard, L., Dyson, O.L., & **Rhea, C.K.** Development of a virtual reality avatar software program to prevent obesity in children from low-income communities. *Society for Nutrition Education and Behavior*, San Diego, CA, July 2020, national conference, podium.
4. **Rhea, C.K.**, Labban, J.D., Alosco, M.L., Stern, R.A., & Duffy, D.M. Sex differences in cognitive and neuropsychiatric functioning in former athletes. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
5. Raisbeck, L.D., Higgins, L.Q., Stout, R.D., Barclift, A.D., Palazzolo, J.M., Wilson, T.M., Labban, J.D., Fairbrother, J.T., & **Rhea, C.K.** The effects of using attentional focus cues during a balance intervention for fall risk. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
6. LoJacono, C.T., Raisbeck, L.D., & **Rhea, C.K.** Balance improvements after a single bout of virtual reality obstacle course training: Preliminary data. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
7. Stout, R.D., Higgins, L.Q., Barclift, A.D., Palazzolo, J.M., Wilson, T.M., Labban, J.D., Fairbrother, J.T., **Rhea, C.K.**, & Raisbeck, L.D. Is there a relationship between global strength and measures of balance control for older adults with an elevated fall risk? *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
8. Felsberg, D.T. & **Rhea, C.K.** Spontaneous interpersonal synchronization of gait: A systematic review. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
9. Palazzolo, J.M., Ross, S.E., & **Rhea, C.K.** Consistency of postural control characteristics of young adults across multiple testing administrations. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
10. Pierson, M.A., **Rhea, C.K.**, & Raisbeck, L.D. The impact of the OPTIMAL theory on transfer tasks. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
11. Meder, K.G. & **Rhea, C.K.** A systematic review of interventions to improve gait asymmetries. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
12. Wilson, T.M., Higgins, L.Q., Stout, R.D., Barclift, A.D., Palazzolo, J.M., Labban, J.D., Fairbrother, J.T., **Rhea, C.K.**, & Raisbeck, L.D. Perceived workload during a 12-week attentional focus balance training intervention in older adults with a history of falls: Preliminary data. *North*

- American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
13. Higgins, L.Q., Stout, R.D., Barclift, A.D., Palazzolo, J.M., Wilson, T.M., Labban, J.D., Fairbrother, J.T., **Rhea, C.K.**, & Raisbeck, L.D. Postural control during and following a 12-week attentional focus balance training intervention for older adults with fall risk. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
 14. Higgins, L.Q., Stout, R.D., Barclift, A.D., Palazzolo, J.M., Wilson, T.M., Labban, J.D., Fairbrother, J.T., **Rhea, C.K.**, & Raisbeck, L.D. Preliminary associations between heart rate variability and movement variability during balance training with attentional focus instructions. Preliminary Data. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
 15. Yamada, M., **Rhea, C.K.**, Lohse, K.R, Schmitz, R.J., & Raisbeck, L.D. Knowledge and attentional focus in a goal-directed task that varies in difficulty. *North American Society for the Psychology of Sport and Physical Activity*, Vancouver, Canada, June 2020, national conference, podium.
 16. Park-Braswell, K., Raisbeck, L.D., **Rhea, C.K.**, Shultz, S.J., Grooms, D.R., & Schmitz, R.J. Sex-specific brain activation during single leg movements. *National Athletic Trainers' Association Convention*, Atlanta, GA, June 2020, national conference, podium.
 17. Schmitz, R.J., Park-Braswell, K., Raisbeck, L.D., Grooms, D.R., Shultz, S.J., **Rhea, C.K.**, & Wilkins, R.W. Neural correlates of knee extension exercise and single leg hop following 8 weeks of attentional focused neuromuscular training. *National Athletic Trainers' Association Convention*, Atlanta, GA, June 2020, national conference, podium.
 18. Higgins, L.Q., Stout, R.D., Yamada, M., Felsberg, D.T., LoJacono, C.T., Cochran, S.M., Barclift, A.D., Palazzolo, J.M., Labban, J.M., Fairbrother, J.T., **Rhea, C.K.**, & Raisbeck, L.D. Mental workload during balance training in older adults with fall risk. *American College of Sports Medicine Annual Meeting*, San Francisco, CA, May 2020, national conference, poster.
 19. Pierson, M.A. & **Rhea, C.K.** Differences between the WNBA and NBA in salary may be a leading factor to high rates of injury. *AASP Diversity in Sport Regional Conference*, Greensboro, NC, April 2020, regional conference, podium (conference cancelled due to COVID-19).
 20. Pierson, M.A. & **Rhea, C.K.** The impact of monetary differences on injury rates in the WNBA versus NBA. *Social Justice through Sport and Exercise Psychology*, Knoxville, TN, March 2020, national conference, podium (conference cancelled due to COVID-19).
 21. Stout, R.D., Higgins, L.Q., Raisbeck, L.D., & **Rhea, C.K.** Grip strength measures in older adults: Are the norms still relevant to current populations and do they apply for quantifying fall risk? *Human Movement Science and Biomechanics Research Symposium*, Chapel Hill, NC, March 2020, regional conference (conference cancelled due to COVID-19).
 22. Yamada, M., Lohse, K.R., Schmitz, R.J., **Rhea, C.K.**, & Raisbeck, L.D. Do attentional foci affect subjective mental workload, perceived competence, and explicit knowledge? *Human Movement Science and Biomechanics Research Symposium*, Chapel Hill, NC, March 2020, regional conference (conference cancelled due to COVID-19).
 23. Pierson, M.A., **Rhea, C.K.**, & Raisbeck, L.D. Optimal theory and transfer application to lower extremity stationary task. *Human Movement Science and Biomechanics Research Symposium*, Chapel Hill, NC, March 2020, regional conference (conference cancelled due to COVID-19).
 24. LoJacono, C.T., Raisbeck, L.D., & **Rhea, C.K.** A dynamic virtual reality obstacle course may improve balance: Preliminary data. *Human Movement Science and Biomechanics Research Symposium*, Chapel Hill, NC, March 2020, regional conference (conference cancelled due to COVID-19).

25. Palazzolo, J.M., Ross, S.E., & **Rhea, C.K.** Reliability of postural control assessment measures: A smartphone application study. *Human Movement Science and Biomechanics Research Symposium*, Chapel Hill, NC, March 2020, regional conference (conference cancelled due to COVID-19).
26. Bechke, E.E., Berry, N.T., Kincaid, Z.A., Anderson, T., Goldfarb, A.H., **Rhea, C.K.**, & Wideman, L. Utility of serial short-time indices of HRV and cardiac dynamics throughout the day. *Southeast American College of Sports Medicine*, Jacksonville, FL, February 2020, regional conference, poster.
27. Raisbeck, L.D., Higgins, L.Q., Stout, R.D., Felsberg, D.T., Cochran, S.M., Palazzolo, J., Labban, J.D., Fairbrother, J.T., & **Rhea, C.K.** Fear of falling following a 12-week attentionally focused balance training intervention: Preliminary data. *International Society of Posture & Gait Research*, Edinburgh, Scotland, July 2019, international conference, poster.
28. LoJacono, C.T., Kress, M.J., & **Rhea, C.K.** Virtual reality training affects joint angle strategies which correlate with safer real-world obstacle crossing. *International Society of Posture & Gait Research*, Edinburgh, Scotland, July 2019, international conference, poster.
29. Palazzolo, J., Goble, D.J., Labban, J.D., Ross, S.E., Duffy, D.M., & **Rhea, C.K.** Differences in pre-season postural control based on sport type. *International Society of Posture & Gait Research*, Edinburgh, Scotland, July 2019, international conference, poster.
30. Felsberg, D.T., Higgins, L.Q., Stout, R.D., Yamada, M., Cochran, S.M., LoJacono, C.T., Barclift, A.D., Palazzolo, J.M., Labban, J.D., Fairbrother, J.T., **Rhea, C.K.**, & Raisbeck, L.D. Functional Gait Assessment (FGA) after a 12-week attentionally focused balance training intervention: Preliminary data. *International Society of Posture & Gait Research*, Edinburgh, Scotland, July 2019, international conference, poster.
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51. Kress, M.J., LoJacono, C.T., & **Rhea, C.K.** Changes in joint angles are correlated with changes in foot clearance after virtual reality obstacle crossing training. *Human Movement Science and Biomechanics Research Symposium*, Chapel Hill, NC, March 2019, regional conference, poster.
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 111. Cone, B.L., Babik, I., Wittstein, M.W., Michel, G., Kiefer, A.W., & **Rhea, C.K.** Dynamic pattern changes of the hip and ankle angles after a trip-training session. *North American Society for the Psychology of Sport and Physical Activity*, Montreal, Quebec, June 2016, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 38, S56]
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 114. Macpherson, R.P., Raisbeck, L.D., & **Rhea, C.K.** Synchronizing to a feedback enhanced fractal metronome. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, poster.
 115. LoJacono, C.T., Raisbeck, L.D., Ross, S.E., & **Rhea, C.K.** Correlation between virtual reality obstacle crossing performance and real environment obstacle foot clearance. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, podium.
 116. Kuznetsov, N.A. & **Rhea, C.K.** Characterizing correlations in short time series of gait using detrended fluctuation analysis: Power analysis for study design. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, poster.
 117. Hege, M.A., Cone, B.L., Wittstein, M.W., & **Rhea, C.K.** Trunk motion after an unexpected trip is related to subject characteristics. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, poster.

118. Guthmann, D.A., Wittstein, M.W., Cone, B.L., & **Rhea, C.K.** Relationship between subject characteristics and cardiocomotor coupling in younger and older adults. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, poster.
119. Frame, L.J., Raisbeck, L.D., Etnier, J.L., & **Rhea, C.K.** Effect of training to a fractal visual metronome for 7 days on the retention of a fractal gait pattern. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, poster.
120. Cone, B.L., Babik, I., Wittstein, M.W., Michel, G., Kiefer, A.W., & **Rhea, C.K.** Changes in lower extremity dynamics following repeated trips. *Human Movement Science & Biomechanics Research Symposium*, Chapel Hill, NC, February, 2016, regional conference, podium.
121. **Rhea, C.K.**, Ross, S.E., Schleich, K.N., Glass, S.M, Washington, L., *Kuznetsov, N.A.*, Etnier, J.L., Duffy, D.M. Neuromotor performance in female American football players is different than males in a pre-season balance test. *1st International Summit on Female Brain Injury*, Washington DC, February 2016, international conference, poster.
122. Duffy, D.M., Schleich, K.N., Glass, S.E., Washington, L., Etnier, J.L., Ross, S.E, & **Rhea, C.K.** Neurocognitive performance in female American football players differs from their male counterparts. *1st International Summit on Female Brain Injury*, Washington DC, February 2016, international conference, poster.
123. **Rhea, C.K.** Merging virtual reality and post-stroke gait rehabilitation. *American Congress of Rehabilitation Medicine*, Dallas, TX, October 2015, national conference, podium. In the “Home-based motor rehabilitation following stroke: What can be do when rehab is done?” symposium organized by Vasudevan, E. & Jax, S.
124. Washington, L.M., Duffy, D.M., **Rhea, C.K.**, & Etnier, J.L. Concussion and female athletes in collision sport: A pilot study. *Association for Applied Sport Psychology*, Indianapolis, IN, October 2015, national conference, poster.
125. Schleich, K.N., Washington, L.M., Ross, S.E., Etnier, J.L., Duffy, D.M., & **Rhea, C.K.** Are there sex differences in American football players during pre-season concussion testing? *International Conference of Undergraduate Research*, Greensboro, NC, October 2015, international conference, podium.
126. **Rhea, C.K.**, Haran, F.J., Ross, S.E., Yanagi, M.A., Bailie, J.M., Sargent, P.D., & Duckworth, J.L. Evaluation of neuromotor function following blast exposure. *Military Health System Research Symposium*, Fort Lauderdale, FL, August, 2015, national conference, poster.
127. **Rhea, C.K.** Using virtual reality stimuli to develop fractal gait characteristics. *International Society for Posture and Gait Research*, Seville, Spain, June, 2015, international conference, podium. In “The quest to apply VR technology to rehabilitation: Tribulations and treasures” symposium organized by Fung, J., & Keshner, E., podium.
128. Stout, R.D., Lewek, M.D., Ross, S.E., & **Rhea, C.K.** Functional and perceptual limitations in motor ability following a stroke. *International Society for Posture and Gait Research*, Seville, Spain, June, 2015, international conference, poster.
129. Cone, B.L., Babik, I., Wittstein, M.W., Michel, G.F., Kiefer, A.W., & **Rhea, C.K.** Recovery from an unexpected trip is related to gait dynamics. *International Society for Posture and Gait Research*, Seville, Spain, June, 2015, international conference, podium.
130. Wittstein, M.W. & **Rhea, C.K.** The effect of a gait synchronization task on dynamic characteristics of cardiac and gait rhythms. *International Society for Posture and Gait Research*, Seville, Spain, June, 2015, international conference, poster.

131. Cone, B.L., Kiefer, A.W., **Rhea, C.K.**, Quatman-Yates, K., & Riley, M.A. Postural control development through early adulthood. *North American Society for the Psychology of Sport and Physical Activity*, Portland, OR, June 2015, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 37, S74]
132. Stout, R.D., Lewek, M.D., Ross, S.E., & **Rhea, C.K.** Gait variability in stroke survivors and healthy older adults. *North American Society for the Psychology of Sport and Physical Activity*, Portland, OR, June 2015, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 37, S62]
133. MacPherson, R.P. & **Rhea, C.K.** Gait variability and gaze fixation while synchronizing with an avatar exhibiting fractal patterns. *North American Society for the Psychology of Sport and Physical Activity*, Portland, OR, June 2015, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 37, S52]
134. LoJacono C.T., Frame, L.J., & **Rhea, C.K.** Extended retention of gait patterns after training with a fractal visual stimulus. *North American Society for the Psychology of Sport and Physical Activity*, Portland, OR, June 2015, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 37, S83]
135. Diekfuss, J.A., **Rhea, C.K.**, Fairbrother, J.T., & Raisbeck, L.D. The effects of attentional focus instruction on postural sway. *North American Society for the Psychology of Sport and Physical Activity*, Portland, OR, June 2015, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 37, S21]
136. Fairbrother, J.T., von Lindern, A., Wade, E.R., Raisbeck, L.D., **Rhea, C.K.**, Nawalany, M., & Jefferson, S. Retention and transfer of balance control following training with external and internal attentional focus cues. *North American Society for the Psychology of Sport and Physical Activity*, Portland, OR, June 2015, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 37, S22]
137. Wittstein, M.A. & **Rhea, C.K.** Cardiac and locomotor patterns during synchronization with a visual metronome. *Human Movement Science Research Symposium*, Chapel Hill, NC, April, 2015, regional conference, podium.
138. Diekfuss, J.A., Stump, K.E., **Rhea, C.K.**, & Raisbeck, L.D. Attentional focus and balance: A study with young and old adults. *Human Movement Science Research Symposium*, Chapel Hill, NC, April, 2015, regional conference, poster.
139. MacPherson, R.P. & **Rhea, C.K.** Gait variability and gaze fixation while synchronizing with an avatar exhibiting fractal patterns. *Human Movement Science Research Symposium*, Chapel Hill, NC, April, 2015, regional conference, poster.
140. Stout, R.D., Lewek, M.D., Ross, S.E., & **Rhea, C.K.** Gait and balance limitations follow a stroke. *Human Movement Science Research Symposium*, Chapel Hill, NC, April, 2015, regional conference, podium.
141. Frame, L.J., LoJacono, C.T. & **Rhea, C.K.** Retaining fractal gait patterns after extended rest and training. *Human Movement Science Research Symposium*, Chapel Hill, NC, April, 2015, regional conference, poster.
142. Cone, B.L., Babik, I., Wittstein, M.W., Michel, G.F., Kiefer, A.W., & **Rhea, C.K.** Can complexity of gait dynamics affect immediate trip recovery? *Human Movement Science Research Symposium*, Chapel Hill, NC, April, 2015, regional conference, podium.

143. Shultz, S.J., Taylor, J.B., Wang, H.M., **Rhea, C.K.**, Ross, S.E., & Schmitz, R.J. Associations between multi-planar knee laxity and self-report perceptions of knee function. *ACL Research Retreat VII*, Greensboro, NC, March, 2015, international conference, podium.
144. Berry, N.T., Wideman, L., **Rhea, C.K.**, Labban, J., Chon, K.H., Shykoff, B.E., Haran, F.J., & Florian, J.P. Quantifying the effects of repeated long-duration dives on baseline heart rate variability measures. *Experimental Biology*, Boston, MA, March, 2015, international conference, poster.
145. Berry, N.T., Wideman, L., **Rhea, C.K.**, Labban, J., Chon, K.H., Shykoff, B.E., Haran, F.J., Florian, J.P. The effects of prolonged and repeated water immersion on heart rate variability and complexity in military divers. *Southeast American College of Sports Medicine*, Jacksonville, FL, February, 2015, regional conference, poster.
146. **Rhea, C.K.**, Ross, S.E., Wright, G.W., & Haran, F.J. TBI Assessment of readiness using a gait evaluation test (TARGET): Development of a portable mTBI screening evaluation. *International Meeting on mTBI Sensor Threshold Values*, McLean, VA, November, 2014, national conference, podium.
147. Glass, S.M., Wittstein, M.W., **Rhea, C.K.**, Ross, S.E., Haran, F.J., & Florian, J.P. Acute effects of a 6-hour dive on vestibular components of postural control. *Military Health System Research Symposium*, Fort Lauderdale, FL, August, 2014, national conference, poster.
148. Wittstein, M.W., Glass, S.M., **Rhea, C.K.**, Ross, S.E., Haran, F.J., & Florian, J.P. Two consecutive days of 6-hour dives influences balance control. *Military Health System Research Symposium*, Fort Lauderdale, FL, August, 2014, national conference, poster.
149. Haran, F.J., Wittstein, M.W., Glass, S.M., Shykoff, B.E., Ross, S.E., **Rhea, C.K.**, & Florian, J.P. Deleterious effects of repetitive diving on cognitive and neurophysiological functioning. *Office of Naval Research Undersea Medicine Review*, Raleigh, NC, July, 2014, national conference, poster.
150. **Rhea, C.K.**, Wittstein, M.W., & MacPherson, R.P. Synchronizing gait to an avatar exhibiting a fractal walking pattern. *North American Society for the Psychology of Sport and Physical Activity*, Minneapolis, MN, June 2014, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 36, S48]
151. Wittstein, M.W., Stout, R.D., & **Rhea, C.K.** Influence of a treadmill harness on gait dynamics. *North American Society for Psychology in Sport and Physical Activity*, Minneapolis, MN, June 2014, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 36, S54]
152. Smith, B.L., High, A.E., Long, B.L., Rider, P.M., & **Rhea, C.K.** Validation of smartphone app to record gait acceleration profiles. *North American Society for the Psychology of Sport and Physical Activity*, Minneapolis, MN, June 2014, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 36, S50]
153. Stout, R.D., Wittstein, M.W., & **Rhea, C.K.** Gait dynamics when visual constraints are imposed. *North American Society for the Psychology of Sport and Physical Activity*, Minneapolis, MN, June 2014, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 36, S52]
154. Wittstein, M.W., Day, T.L., Wang, H., Shultz, S.J., Schmitz, R.J., & **Rhea, C.K.** Relationship of multi-planar knee laxity and dynamic patterns in gait during treadmill walking. *7th World Congress of Biomechanics*, Boston, MA, July, 2014, national conference, poster.

155. High, A.E., Smith, B.L., Long, B.L., Rider, P.M., & Rhea, C.K. Acceleration profiles recorded with a smartphone and research grade accelerometer. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2014, regional conference, poster.
156. MacPherson, R.P., Wittstein, M.W., & Rhea, C.K. Matching gait to an avatar walking with a fractal walking pattern. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2014, regional conference, poster.
157. Wittstein, M.W., Day, T.J., Wang, H., Shultz, S.J., Schmitz, R.J., & Rhea, C.K. Multi-planar knee laxity and nonlinear gait dynamics. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2014, regional conference, poster.
158. Stout, R.D., Wittstein, M.W., & Rhea, C.K. Gait dynamics when visual constraints are imposed. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2014, regional conference, poster.
159. Long, B.L., Waxman, J.P., Taylor, J.B., Gosselin, D.J., & **Rhea, C.K.** Postural responses to upper limb movements in quiet standing. *American Society of Biomechanics*, Omaha, NE, September 2013, national conference, poster.
160. **Rhea, C.K.** Virtual reality solutions for physical therapy. *Triangle Biotech Research Symposium*, Research Triangle Park, NC, August, 2013, regional conference, poster.
161. **Rhea, C.K. & Wittstein, M.W.** Indexing locomotor control ability using a stepping in place task: Implications for mTBI. *Military Health System Research Symposium*, Fort Lauderdale, FL, August, 2013, national conference, poster.
162. Wittstein, M.W., & Rhea, C.K. Altering dynamic patterns in gait using visual and proprioceptive information. *International Conference on Virtual Rehabilitation*, Philadelphia, PA, August 2013, international conference, poster. [Paper published in *IEEE 2013 International Conference on Virtual Rehabilitation (ICVR)*, 182-183]
163. **Rhea, C.K., Wittstein, M.W., Kiefer, A.W., & Haran, F.J.** Retaining fractal gait patterns learned in virtual environments. *International Conference on Virtual Rehabilitation*, Philadelphia, PA, August 2013, international conference, podium. [Paper published in *IEEE 2013 International Conference on Virtual Rehabilitation (ICVR)*, 264-269]
164. **Rhea, C.K., Kiefer, A.W., & Leonard, K.B.** Using fractal stimuli to restore adaptive gait. *North American Society for Psychology in Sport and Physical Activity*, New Orleans, LA, June 2013, national conference, podium. In the “Nonlinear dynamics and motor control: Where have we been, where are we now and where are we going” symposium organized by Rhea, C.K. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 35, S12]
165. Wittstein, M.W. & Rhea, C.K. A comparison of long-range correlations in stride interval time series during treadmill walking and stationary stepping. *North American Society for the Psychology of Sport and Physical Activity*, New Orleans, LA, June 2013, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 35, S74]
166. Alcon, C.A., Wittstein, M.W., & Rhea, C.K. Emergence of long-range correlations in gait over short and long durations. *North American Society for the Psychology of Sport and Physical Activity*, New Orleans, LA, June 2013, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 35, S16]
167. Glass, S.M., **Rhea, C.K.**, Arnold B.L., & Ross, S.E. Noise-enhanced center of pressure complexity in individuals in chronic ankle instability. *National Athletic Trainers Association*, Las Vegas, NV, June 2013, national conference, poster.

168. Schmitz, R.J., Shultz, S.J., Wang, H.M. & **Rhea, C.K.** Frontal plane knee laxity is predictive of measures associated with medial knee loading during gait. *National Athletic Trainers Association*, Las Vegas, NV, June 2013, national conference, poster.
169. Wittstein, M.W. & **Rhea, C.K.** Long-range correlations in stride time intervals during treadmill walking and stationary stepping. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2013, regional conference, poster.
170. Alcon, C.A., Wittstein, M.W., & **Rhea, C.K.** Emergence of gait variability patterns in short and long time series. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2013, regional conference, poster.
171. Waxman, J.P., Taylor, J.B., Gosselin, D.J., Long, B.L., & **Rhea, C.K.** Effects of reduced base of support with rapid center of mass perturbations on center of pressure dynamics. *Human Movement Science Research Symposium*, Chapel Hill, NC, February 2013, regional conference, poster.
172. Wittstein, M.W., Kiefer, A.W., & **Rhea, C.K.** Long-range correlations in young, healthy gait: Trial-to-trial consistency and influence of sample frequency. *North American Society for the Psychology of Sport and Physical Activity*, Honolulu, HI, June 2012, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 34, S192]
173. **Rhea, C.K.**, Wutzke, C.J., & Lewek, M.D. Gait dynamics in individuals with chronic stroke following variable speed treadmill training. *North American Society for the Psychology of Sport and Physical Activity*, Honolulu, HI, June 2012, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 34, S126]
174. **Rhea, C.K.** & Haddad, J.M. Life-span changes in the integration of posture with other goal-directed behaviors-Symposium overview. *North American Society for the Psychology of Sport and Physical Activity*, Honolulu, HI, June 2012, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 34, S5]
175. Wittstein, M.W. & **Rhea, C.K.** Trial-to-trial consistency of long-range correlations in healthy gait. *Human Movement Science Research Symposium*, Chapel Hill, NC, February, 2012, regional conference, poster.
176. **Rhea, C.K.**, Kiefer, A.W., D'Andrea, S.E., Warren, W.H., & Aaron, R.K. A variable to describe the overall dynamic behavior of postural sway. *Progress in Motor Control VIII*, Cincinnati, OH, July 2011, international conference, poster.
177. **Rhea, C.K.**, De Asha, A.R., Johnson, L., & Buckley, J.G. Gait dynamics in trans-tibial amputees when using different prosthetic ankles. *Progress in Motor Control VIII*, Cincinnati, OH, July 2011, international conference, poster.
178. **Rhea, C.K.**, Kiefer, A.W., Warren, W.H., D'Andrea, S.E., & Aaron, R.K. Synchronizing to a "noisy" metronome induces corresponding shifts in fractal gait dynamics. *North American Society for the Psychology of Sport and Physical Activity*, Burlington, VT, June 2011, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 33, S102]
179. Kiefer, A.W., **Rhea, C.K.**, D'Andrea, S.E., Warren, W.H., & Aaron, R.K. $1/f$ noise signatures for component processes of quiet standing provide evidence for interaction-dominant dynamics. *North American Society for the Psychology of Sport and Physical Activity*, Burlington, VT, June 2011, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 33, S81]

180. **Rhea, C.K.**, Kiefer, A.W., D'Andrea, S.E., Warren, W.H., & Aaron, R.K. Dynamic structure of postural variability following an ACL injury. *Gait and Clinical Movement Analysis Society*, Bethesda, MD, April 2011, national conference, podium.
181. **Rhea, C.K.**, Kiefer, A.W., D'Andrea, S.E., Warren, W.H., & Aaron, R.K. Approximate entropy of stride-to stride intervals following ACL injury. *American Society for Biomechanics*, Providence, RI, August 2010, national conference, podium.
182. **Rhea, C.K.**, Gérin-Lajoie, M., Ciombor, D.McK., Warren, W.H., & Aaron, R.K. Recurrence quantification analysis of walking path trajectories in a functional mobility task with imposed constraints. *North American Society for the Psychology of Sport and Physical Activity*, Tucson, AZ, June, 2010, national conference, podium. In the "Recurrence Quantification Analysis: Application and Theory" symposium co-organized by Kiefer, A.W. & Rhea, C.K. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 32, S10]
183. Rio, K.W., **Rhea, C.K.**, & Warren, W.H. Follow the leader: Behavioral dynamics of following. *Vision Sciences Society*, Naples, FL, May 2010, international conference, poster.
184. **Rhea, C.K.**, Hutchison, J.J., Shalvoy, R.M., Aaron, R.K., & Warren, W.H. Using the affordance of gap-crossing to characterize functional mobility after lower limb injury. *International Conference on Perception and Action*, Minneapolis, MN, July, 2009, international conference, podium.
185. **Rhea, C.K.**, Cohen, J.A., & Warren, W.H. Follow the leader: Extending the locomotor dynamics model to crowd behavior. *International Conference on Perception and Action*, Minneapolis, MN, July, 2009, international conference, podium.
186. **Rhea, C.K.**, Haddad, J.M., & Rietdyk, S. Control of adaptive gait: Effect of experience and light level on action and perception. *North American Society for the Psychology of Sport and Physical Activity*, Austin, TX, June, 2009, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 31, S94]
187. **Rhea, C.K.**, Kiefer, A.W., Weast, J.A., Cumins-Sebree, S., Shockley, K., & Riley, M.A. Global vs. individual input parameter selection: Impacts on analyzing human postural time series. *Third International Symposium on Recurrence Plots*, Montreal, Quebec, August, 2009, international conference, poster.
188. **Rhea, C.K.**, Drifmeyer, J.E., & Rietdyk, S. Increased exposure to an obstacle crossing task decreased toe elevation at obstacle crossing, but not estimation of obstacle height. *North American Congress on Biomechanics*, Ann Arbor, MI, August, 2008, national conference, poster.
189. Silver, T., **Rhea, C.K.**, Studenka, B.E., Ryu, J.H., Hughes, C.M., and Haddad, J.M. The influence of noise and time series length on two common measures of entropy. *North American Congress on Biomechanics*, Ann Arbor, MI, August, 2008, national conference, poster.
190. **Rhea, C.K.** & Rietdyk, S. Decreased visual information regarding obstacle characteristics increased the rate of tripping in experienced and non-experienced groups. *Canadian Society for Psychomotor Learning and Sport Psychology*, Windsor, ON, November, 2007, national conference, podium.
191. **Rhea, C.K.** & Rietdyk, S. Height estimation of an obstacle is scaleable to toe elevation at obstacle crossing. *American Society of Biomechanics*, Palo Alto, CA, August, 2007, national conference, poster.
192. **Rhea, C.K.** & Rietdyk, S. Varying amounts of optic flow prior to gait initiation did not alter kinematics. *North American Society for the Psychology of Sport and Physical Activity*, San Diego, CA, June 2007, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 29, S120]

193. **Rhea, C.K.** & Rietdyk, S. Walking without tripping: is experience or visual information more important? *Sigma Xi*, Purdue University, West Lafayette, IN, February 2007, university conference, poster.
194. **Rhea, C.K.**, Kiefer A., Haddad, J., & Corcos, D. Grant money: where is it and how can I get some if it? *North American Society for the Psychology of Sport and Physical Activity*, San Diego, June 2007, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 29, S5]
195. Hammer, M.J., Kotowski, S.E., **Rhea, C.K.**, Zheng, Q., Davis, K.G., Rietdyk, S., & McGlothlin, J. Does a new bottle shell grip design lower the ergonomic stress on employees in the beverage delivery industry? *American Industrial Hygiene Conference and Expo*, Philadelphia, PA, June, 2007, national conference, poster.
196. **Rhea, C.K.** & Rietdyk, S. Do optical properties of obstacles affect the risk of tripping in construction workers? *University of Cincinnati Education and Research Center's 7th Annual Pilot Research Project Symposium*, Cincinnati, OH, October, 2006, regional conference, podium.
197. **Rhea, C.K.** & Rietdyk, S. Dynamic versus static vision prior to obstacle avoidance: Does optic flow affect foot placement and limb elevation? *Canadian Society for Biomechanics*, Waterloo, ON, August 2006, national conference, poster.
198. **Rhea, C.K.** & Rietdyk, S. Increased exteroceptive information did not alter lower limb kinematics during obstacle avoidance. *North American Society for the Psychology of Sport and Physical Activity*, Denver, CO, June 2006, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 28, S152]
199. Rietdyk, S., Zelaznik, H.N., & **Rhea, C.K.** Interaction of timing and postural control: Is there competition for cerebellar resources? *Canadian Society for Biomechanics*, Waterloo, ON, August 2006, national conference, poster.
200. **Rhea, C.K.**, Erwin, H., & Blankenship, B. Biomechanical knowledge of practicing physical education teachers, *American Alliance for Health, Physical Education, Recreation, and Dance*, Salt Lake City, UT, April, 2006, national conference, poster.
201. Rietdyk, S., **Rhea, C.K.**, & Ferguson, M. Tripping with the trail foot affected trail clearance but not lead clearance in subsequent trials. *Progress in Motor Control V*, Penn State University, PA, August 2005, international conference, poster.
202. **Rhea, C.K.** & Rietdyk, S. Gait adaptation: lead toe clearance continually decreased over multiple exposures with and without on-line visual information. *XXth Congress of the International Society of Biomechanics*, Cleveland, OH, August 2005, international conference, poster.
203. **Rhea, C.K.** & Rietdyk, S. Increased exposure to visual interference altered gait kinematics while avoiding an obstacle. *North American Society for the Psychology of Sport and Physical Activity*, St. Pete's Beach, FL, June 2005, national conference, poster. [Abstract published in *Journal of Sport and Exercise Psychology*, 27, S126-S127].
204. Rietdyk, S. & **Rhea, C.K.** Gait adaptations: Obstacle position cues modify foot placement and clearance. *North American Society for the Psychology of Sport and Physical Activity*, St. Pete's Beach, FL, June 2005, national conference, podium. [Abstract published in *Journal of Sport and Exercise Psychology Supplement*, 27, 126].
205. **Rhea, C.K.**, Erwin, H., & Helms, K. Bringing together the past: paths taken by past MOAHPERD future professional chairs. *Missouri Association for Health, Physical Education, Recreation, and Dance*, Lake Ozark, November, 2005, state conference, podium.

206. Erwin, H & **Rhea, C.K.** Is graduate school right for me? *Illinois Association for Health, Physical Education, Recreation, and Dance*, St. Charles, IL, November 2005, state conference, podium.
207. Erwin, H. & **Rhea, C.K.** Opportunity knocks!! Will you take it? *Indiana Association for Health, Physical Education, Recreation, and Dance*, Indianapolis, IN, November 2005, state conference, podium.
208. **Rhea, C.K.**, Cremades, J.G., & Opala, E. A comparative EMG analysis: abdominal crunches performed on a stable vs. unstable surface. *American Alliance for Health, Physical Education, Recreation, and Dance*, Chicago, IL, April 2005, national conference, poster. [Abstract published in *Research Quarterly for Exercise and Sport Supplement*, 76(1), A30]
209. **Rhea, C.K.** & Erwin, H. Investigating new ways to teach biomechanics to physical education majors. *Indiana Alliance for Health, Physical Education, Recreation, and Dance*, Indianapolis, IN, November 2005, state conference, podium.
210. **Rhea, C.K.** & Whiteman, M. Creating a philosophy statement: impacting you teaching/coaching before you start. *Indiana Association for Health, Physical Education, Recreation, and Dance*, Indianapolis, IN, November 2005, state conference, podium.
211. **Rhea, C.K.** Student professional development opportunities in HPERD. *Florida Association for Health, Physical Education, Recreation, and Dance*, Orlando, FL, October 2004, state conference, podium.
212. **Rhea, C.K.** Changing times in FAHPERD. *Florida Association for Health, Physical Education, Recreation, and Dance*, Orlando, FL, October 2004, state conference, podium.
213. **Rhea, C.K.**, Butcher-Mokha, M., & Ludwig, K. Influence of up-tempo music on arousal and selected biomechanics during a near maximum bench press. *American Alliance for Health, Physical Education, Recreation, and Dance*, New Orleans, LA, March 2004, national conference, podium. [Abstract published in *Research Quarterly for Exercise and Sport Supplement*, 75(1), A2]
214. **Rhea, C.K.** Research and cup stacking: the facts behind the cups. *Missouri Association for Health, Physical Education, Recreation, and Dance*, Lake Ozark, MO, November, 2004, state conference, podium.
215. **Rhea, C.K.** The research behind cup stacking: is it right for your program? *Indiana Association for Health, Physical Education, Recreation, and Dance*, Indianapolis, IN, October 2004, state conference, podium.
216. **Rhea, C.K.** The science of cup stacking. *Florida Association for Health, Physical Education, Recreation, and Dance*, Orlando, FL, October 2004, state conference, podium.
217. **Rhea, C.K.**, Butcher-Mokha, M., & Ludwig, K. Effects of exercise intensity on the biomechanics of treadmill running. *American Alliance for Health, Physical Education, Recreation, and Dance*, New Orleans, LA, March 2004, national conference, podium. [Abstract published in *Research Quarterly for Exercise and Sport Supplement*, 75(1), A2].
218. **Rhea, C.K.** & Anson, D. Teaching sports science in physical education class: how do I meet the national standards? Part 2. *Florida Association for Health, Physical Education, Recreation, and Dance*, Jacksonville, FL, October, 2003, state conference, podium.
219. **Rhea, C.K.** & Anson, D. Teaching sports science in physical education class: how do I meet the national standards? *Florida Association for Health, Physical Education, Recreation, and Dance Summer Institute*, Clermont, FL, June 2003, state conference, podium.
220. **Rhea, C.K.** Student leadership: the lessons we have learned. *American Alliance of Health, Physical Education, Recreation, and Dance*, San Diego, CA, March 2002, national conference, podium.

221. **Rhea, C.K.** A kinematic study of sprinting variables of a collegiate female athlete: a case study. *Central District American Alliance for Health, Physical Education, Recreation, and Dance*, Des Moines, IA, February, 2001, regional conference, poster.
222. **Rhea, C. K.** A biomechanical comparison of a Division-I female athlete with other collegiate sprinters and elite athletes: a case study. *Missouri Association for Health, Physical Education, Recreation, and Dance*, Lake Ozark, MO, November 2000, state conference, poster. [Abstract published in *Missouri Journal of Health, Physical Education, Recreation, and Dance*, 11, 72].
223. **Rhea, C.K. & Strohmeyer, H.S.** Including biomechanical principles in physical education settings. *Missouri Association for Health, Physical Education, Recreation, and Dance*, Lake Ozark, MO, November, 2001, state conference, podium.
224. **Rhea, C.K.** Fundraising in HPERD. Applications for all. *Missouri Association for Health, Physical Education, Recreation, and Dance*, Lake Ozark, MO, November 2000, state conference, podium.

RESEARCH GRANTS AND AWARDS

Funded - External

1. Department of Defense, Defense Health Agency (2020-2025) “Longitudinal assessment of neuromotor control after repeated sub-concussive head trauma from blast exposure”. Subcontract from parent project “Investigating Training Associated Blast Pathology (INVICTA)”. Role: Site PI, 5 years, \$958,937. Research team: Michael Roy (Uniformed Services University, Lead PI), Scott Ross (UNCG, Co-I).
2. Health Resources and Services Administration (HRSA), Maternal & Child Health Bureau (MCHB) Grand Challenge: Preventing Childhood Obesity (Phase 2). (2019-2020) “Designing and testing a community context driven evidence-based virtual avatar coaching approach to improve access to health promotion programs for low-income children and families”. Role: Co-I, 1 year, \$30,000. Research team: Jared McGuirt (UNCG, PI) and Omari Dyson (UNCG, Co-I).
3. Health Resources and Services Administration (HRSA), Maternal & Child Health Bureau (MCHB) Grand Challenge: Preventing Childhood Obesity (Phase 1). (2018-2019) “Designing and testing a community context driven evidence-based virtual avatar coaching approach to improve access to health promotion programs for low-income children and families”. Role: Co-I, 1 year, \$10,000. Research team: Jared McGuirt (UNCG, PI) and Omari Dyson (UNCG, Co-I).
4. National Institutes of Health, National Institute of General Medical Sciences (R25). (2018-2023) “The science of essential balance”. Role: Co-I, 5 years, \$1,246,118 (1R25GM129805-01) Research team: Ang Chen (UNCG, PI), Michael Hemphill (UNCG, Co-I), Allan Goldfarb (UNCG, Co-I), Judy Fowler (UNCG, Co-I), Lauren Halderman (UNCG, Co-I).
5. National Institutes of Health, National Institute on Aging (R15). (2017-2020) “Merging attentional focus and balance training to reduce fall risk in older adults”. Role: Co-I, 3 years, \$345,472 (1R15AG053866-01A1). Research team: Louisa Raisbeck (UNCG, PI), Jeff Labban (UNCG, Co-I).
6. Department of Defense, Congressionally Directed Medical Research Program (CDMRP), Clinical Rehabilitation Medicine Research Program (CRM RP) Neurosensory Research Award (2015-2020) “TBI Assessment of Readiness using a Gait Evaluation Test (TARGET): Development of a portable mTBI screening device”. Role: PI, 5 years, \$941,639 (W81XWH-15-1-0094). Research team: Geoffrey Wright (Temple University, Co-I), Jay Haran (US Navy, Co-I), Scott Ross (UNCG, Co-I).

7. US Navy (2016). "Balance assessment following combat mTBI". Role: UNCG PI, \$18,818 (HU0001-15-2-0024; subcontract 3137). Research team: Richard McCarron (US Navy, Primary PI), Peter Walker (US Navy, Co-I), Jay Haran (US Navy, Co-I), Scott Ross (UNCG, Co-I).
8. Women's Football Foundation. (2014-2016) "Diagnosis, evaluation, and return-to-play after concussion in women athletes playing full contact American football." Role: Co-PI, \$69,000. Research team: Donna Duffy (UNCG, Co-PI), Scott Ross (UNCG, Co-I), Jenny Etiner (UNCG, Co-I).
9. US Navy (2015). "Balance assessment following combat mTBI". Role: UNCG PI, \$104,182 (HU0001-08-1-0001; subcontract 2890). Research team: Richard McCarron (US Navy, Primary PI), Jacob Norris (US Navy, Co-I), Jay Haran (US Navy, Co-I), Scott Ross (UNCG, Co-I).
10. US Navy (2014). "Nonlinear dynamics analysis of biomechanical and physiological data from the Navy Experimental Diving Unit". Role: PI, \$100,000 (W91CRB-11-D-0001; subcontract P010202825). Research team: Jay Haran (US Navy, Primary PI).
11. National Institute for Occupational Safety and Health, University of Cincinnati Pilot Project Research Training Program. (2006) "Do Optical Properties of Obstacles Affect the Risk of Tripping in Construction Workers?" Role: Co-PI, \$4,970. Research team: Shirley Rietdyk (Purdue University, Co-PI).
12. National Institute for Occupational Safety and Health, University of Michigan Center for Occupational Health and Safety Engineering. (2005) "Risk Assessment of Tripping for Construction Workers: Application of Action-Perception Theory" Role: Co-PI, \$13,385. Research team: Shirley Rietdyk (Purdue University, Co-PI).
13. Indiana Association for Health, Physical Education, Recreation, and Dance. (2005) "Investigating New Ways to Teach Biomechanics to Physical Education Majors." Role: Co-PI, \$1,000. Research team: Shirley Rietdyk (Purdue University, Co-PI).

Funded - Internal

1. School of Health and Human Sciences Faculty Research Grant (2019-2020). "Developing a methodology for tracking the menstrual cycle with middle school and high school female athletes" Role: Co-PI, 1 year, \$8695, Research team: Donna Duffy (Co-PI), Laurie Wideman (Co-I).
2. University of North Carolina at Greensboro, Child and Family Research Network (CFRN) Summer Funding (2019). "Virtual avatar coaching to improve access to health promotion programs for low-income children and families" Role: Co-I, \$5,000, Research team: Jared McGuirt (UNCG, PI), Omari Dyson (UNCG, Co-I).
3. University of North Carolina at Greensboro, Giant Steps Research Development Grant. (2018-2019). "Tracking of head trauma in youth sports" Role: Co-PI, \$25,000. Research team: Donna Duffy (UNCG, Co-PI), Jennifer Etner (UNCG, Co-I), Laurie Wideman (UNCG, Co-I), Roger Mills-Koonce (UNCG, Co-I).
4. University of North Carolina Inter-institutional Planning Grant (IPG) Program. (2017-2018) "UNC System Collaboration to use Virtual Reality to address Human Health Challenges". Role: PI, 1 year, \$22,500. Research team: Jason Franz (UNC-CG, Co-PI)
5. University of North Carolina at Greensboro, Strategic Seed Grants – Research and Creative Activity. (2017-2018). "Neural correlates of effective motor transference following an

- attentionally focused neuromuscular intervention” Role: Co-I, \$15,000. Research team: Randy Schmitz (UNCG, Co-PI), Robin Wilkins (UNCG, Co-PI), Louisa Raisbeck (UNCG, Co-I).
6. University of North Carolina at Greensboro, School of Health and Human Sciences Research Excellence Grant. (2015-2016). “Concussion effects on neurocognitive and neuromotor performance in female football players” Role: Co-PI, \$10,000. Research team: Donna Duffy (UNCG, Co-PI).
 7. University of North Carolina at Greensboro, Office of Research and Economic Development, Regular Faculty Grant. (2015-2016). “Concussion effects on neurocognitive and neuromotor performance in female football players” Role: Co-PI, \$3,000. Research team: Donna Duffy (UNCG, Co-PI).
 8. University of North Carolina at Greensboro, School of HHS Graduate Research Assistant Award. (2014-2015). “Nonlinear dynamics analysis of biomechanical and physiological data from the Navy Experimental Diving Unit”. Role: PI, \$6,000
 9. University of North Carolina at Greensboro, Office of Research and Economic Development, New Faculty Summer Excellence Award. (2013). “Development of interactive walking avatars within a virtual environment” Role: PI, \$5,000
 10. University of North Carolina at Greensboro, School of HHS Office of Research, Special Faculty Research Equipment Award. (2012). “Integration of Visual 3D software with virtual reality”. Role: PI, \$12,000
 11. University of North Carolina at Greensboro, School of HHS Office of Research, Special Faculty Research Equipment Award. (2011). “Development of virtual reality software”. Role: PI, \$15,000
 12. University of North Carolina at Greensboro, School of HHS Office of Research, Special Faculty Research Equipment Award. (2011). “Relation between knee joint laxity and gait dynamics following an ACL injury”. Role: PI, \$14,810
 13. University of North Carolina at Greensboro, Office of Research and Economic Development, New Faculty Research Grant. (2011). “Virtual reality applications for gait rehabilitation” Role: PI, \$5,000
 14. University of North Carolina at Greensboro, Department of Kinesiology, Safrit Measurement Award. (2011). “Nonlinear metrics of locomotor variability that predict fall recovery”. Role: PI, \$3,000
 15. Purdue Graduate School Summer Research Grant. (2007). Two months funding during the summer to collect pilot dissertation data, Role: PI, \$2,400

Not funded

1. National Institutes of Health, National Institute for Neurological Disorders and Stroke (Parent R01, re-submission) (2020). “Behavior and Recovery After Head Impact and Neurotrauma (BRAIN): The Female BRAIN Project”. Role: PI, 5 years, \$3,761,867. Research team: Donna Duffy (UNCG, Co-I), Laurie Wideman (UNCG, Co-I), Jeff Labban (UNCG, Co-I), Katheryn Ackerman (Boston Childrens Hospital / Harvard University, Co-I), Michael Alosco (Boston University, Co-I).
2. National Institutes of Health, National Institute of Neurological Diseases and Stroke (R15). (2020) “Retired Female Athletes and Neurotrauma (rFAN)”. Role: Co-PI, 3 years, \$ \$447,153. Research team: Donna Duffy (Co-PI), Jeff Labban (UNCG, Co-I), Michael Alosco (Boston University, Co-I), and Bob Stern (Boston University, Co-I).

3. US Lacrosse, Center for Sport Science Research Grant Award, (2019) "Tracking Estrogen and Progesterone (TEP) in Female Lacrosse Players after a Concussion" Role: Co-I. 1 year, \$38,500. Research team: Donna Duffy (UNCG, PI), Kate Ackerman (Co-I, Boston Children's Hospital), Jennifer Yourkavitch (UNCG, Co-I), Laurie Wideman (UNCG, Co-I), Ellen Chetwynd (UNCG, Co-I).
4. Department of Defense, Congressionally Directed Medical Research Program (CDMRP), Accelerating Innovation in Military Medicine (2018) "A Primary Passive Screening Tool to Identify Neurological Dysfunction after Repeated Sub-concussive Head Trauma: The Gauging Ambulation In Training (GAIT Study)". Role: PI, 1.5 years, \$350,000 (W81XWH-18-DMRDP-AIMM). Research team: Scott Ross (UNCG, Co-I), Jeff Labban (UNCG, Co-I), Josh Duckworth (PI at USU), Rohan Banton (Co-I, US Army).
5. Department of Defense, Congressionally Directed Medical Research Program (CDMRP), Complex Traumatic Brain Injury Rehabilitation Research Clinical Research Award (2018) "Rehabilitation Evaluation of TBI Function prior to Return-to-full-duty (RETURN Study)". Role: PI, 3 years, \$2,000,000 (W81XWH-18-CTRR-CRA). Research team: Scott Ross (UNCG, Co-I), Jeff Labban (UNCG, Co-I), Jason Bailie (NHCP, Co-I), Geoff Wright (Temple University, Co-I), Jay Haran (NMRC, Co-I).
6. Department of Defense, Broad Agency Announcement, Medical Research and Material Command (2018) "Investigating Training Associated Blast Pathology (INVICTA)". Role: PI on sub-contract, 5 years, \$1,013,917 (W81XWH18SBAA1). Research team: Josh Duckworth (US Navy, PI), Scott Ross (UNCG, Co-I).
7. National Institutes of Health, National Institute for Neurological Disorders and Stroke (Parent R01, first submission) (2017). "Behavior and Recovery After Head Impact and Neurotrauma (BRAIN): The Female BRAIN Project". Role: PI, 5 years, \$3,667,773. Research team: Donna Duffy (UNCG, Co-I), Scott Ross (UNCG, Co-I), Jennifer Etnier (UNCG, Co-I), Laurie Wideman (UNCG, Co-I), Geoff Wright (Temple University, Co-I), Breanna Studenka (Utah State University, Co-I), Bob Stern (Boston University, consultant).
8. Department of Defense, Congressionally Directed Medical Research Program (CDMRP), Clinical Rehabilitation Medicine Research Program (CRM RP) Hearing and Balance Research Award (2017). "Measuring and tracking balance deficiencies after repeated blast-related sub-concussive head trauma in military personnel". Role: PI, 4 years, \$1,937,730 (W81XWH-17-DMRDP-CRM RP-HBRA). Research team: Josh Duckworth (US Navy, Co-I), Jay Haran (US Navy, Co-I), Scott Ross (UNCG, Co-I), Laurie Wideman (UNCG, Co-I), Ben Long (UNCG, Co-I), Jeffrey Labban (UNCG, Co-I).
9. National Institutes of Health, National Institute on Aging (Parent F31). (2016) "Examining the relationship between balance, gait dynamics, and trip recovery". Graduate student: Brian Cone (PI). Faculty mentor: Christopher K. Rhea and Thurmon E. Lockhart (Arizona State University). \$129,531
10. American Medical Society for Sports Medicine – American College of Sports Medicine, Clinical Research Grant (2016). "The impact of concussions on neuromotor and neurocognitive performance of women athletes playing full-contact American football." Role: Co-I, 2 years, \$20,000. Research team: Ken Barnes (UNCG, PI), Scott Ross (UNCG, Co-I), Donna Duffy (UNCG, Co-I).
11. University of North Carolina Research Opportunities Initiative (UNC ROI). (2016). "Quantifying the consequence of repetitive sub-concussive blast exposure in a military population ". Role: PI, 3 years, \$798,638

12. National Institutes of Health, National Institute on Aging (Parent R15, first submission). (2015) "Merging attentional focus and balance training to reduce fall risk in older adults". Role: Co-I, 3 years, \$422,520. Research team: Louisa Raisbeck (UNCG, PI), Jeff Labban (UNCG, Co-I).
13. University of North Carolina Research Opportunities Initiative (UNC ROI). (2014). "TBI Assessment of Readiness using a Gait Evaluation Test (TARGET): Development of a portable mTBI screening device". Role: PI, 2.5 years, \$309,165 (supplement to the DoD CDMRP NSRA awarded to Christopher K. Rhea)
14. Department of Defense, Defense Medical Research Development Program (DMRDP), Clinical and Rehabilitative Medicine Research Program (CRM RP), and Joint Program Committee 8 (JCP-8) Neuromusculoskeletal Injuries Research Award (W81XWH-14-DMRDP-CRM RP-NMSIRA) (2014) "Rehabilitation Engagement Visualized in Virtual Environments (REVIVE): Enhancing gait rehabilitation after lower-limb amputation". Role: PI, 2 years, \$964,396
15. Department of Defense, Defense Medical Research Development Program (DMRDP), Peer Reviewed Orthopaedic Research Program (PRORP) Clinical Trial Development Award (W81XWH-14-PRORP-CTDA) (2014) "Enhancing ankle rehabilitation to shorten return-to-duty time and reduce re-injuries": Role: Co-PI, 1.5 years, \$299,999
16. National Institutes of Health, Institute of Child Health and Human Development (Parent R21, first submission). (2014) "Fall behavior during gait across the lifespan". Role: PI, 2 years, \$394,618
17. National Athletic Trainers Association (NATA). (2013) "Athletic Training Clinical Outcomes for a Fall Prevention Intervention for Elderly Adults". Role: Co-PI, 2 years, \$251,684
18. National Institutes of Health, Institute of Child Health and Human Development (Parent R15, resubmission). (2013) "Enhancing functional mobility after ACL reconstruction". Role: PI, 3 years, \$430,500
19. Army Rapid Innovation Fund (RIF), Broad Agency Announcement (W911NF-13-R-0011). (2013) "TBI Assessment of Readiness using a Gait Evaluation Test (TARGET): Development of a portable mTBI screening device". Role: PI, 2 years, \$868,076
20. National Institutes of Health, Rehabilitation Institute of Chicago Engineering for Neurological Rehabilitation Pilot Project Grant (R24). (2012) "Gait dynamics training in individuals with chronic stroke". Role: Co-PI, 2 years, \$99,978
21. National Institutes of Health, Institute of Child Health and Human Development (Parent R15). (2012) "Enhancing functional mobility after ACL reconstruction". Role: PI, 3 years, \$430,500
22. The Royal Society, International Exchange Scheme (R1). (2012) "Do recent advances in prosthetic foot-ankle technology improve gait adaptability?" Role: Co-I, 1 years, \$5950
23. Navy Bureau of Medicine and Surgery, Wounded, Ill, and Injured (standing call). (2012) "Locomotor dysfunction following mild traumatic brain injury". Role: Co-PI, 1 year, \$118,854
24. DOD Defense Medical Research and Development Program, Applied Research and Advanced Technology Development Award, Topic Areas: Psychological Health, Polytrauma, and Operational Health (W81XWH-12-MOMJPC-ARATDA). (2011) "Locomotor dysfunction following mild traumatic brain injury". Role: PI, 1 year, \$161,693
25. National Institutes of Health, Institute of Child Health and Human Development (Parent R01). (2011) "Functional role of variability in locomotion". Role: PI, 5 years, \$1,800,000
26. Department of Veteran Affairs, Early Career Development Award. (2010). "Influencing gait variability dynamics using virtual reality" Role: PI, \$232,567

27. The Rhode Island Foundation. (2009). "Functional assessment of variability in the walking pattern: Implications for rehabilitation" Role: PI, \$8,592
28. National Institute for Occupational Safety and Health, University of Cincinnati Pilot Project Research Training Program. (2007) "The role of perception in increased frequency of tripping for construction workers" Role: Co-PI, \$5,658
29. American Society of Biomechanics. (2007) "Does gait initiation affect both perception and action during obstacle avoidance?" Role: Co-PI, \$2,500
30. American Society of Biomechanics. (2005) "Do the airline policies for flight attendants create a higher risk for tripping?" Role: Co-PI, \$864
31. North American Society for the Psychology of Sport and Physical Activity. (2005) "How does visual feedback affect toe clearance in obstacle crossing over repeated exposures?" Role: Co-PI, \$1,000

FACULTY SPONSORED STUDENT RESEARCH AWARDS

Funded

1. UNCG Graduate School Research Assistantship. (2020). "An investigation into dynamic sport specific testing using the MOCAS capture suit". Graduate student: Mackenzie Pierson. Faculty mentor: Christopher K. Rhea. \$1500
2. UNCG Graduate School Research Assistantship. (2020). "Altering gait asymmetry using virtual reality in healthy adults". Graduate student: Krista Meder. Faculty mentor: Christopher K. Rhea. \$1500
3. UNCG Graduate School Research Assistantship. (2020). "Does attentional focus influence a functional mobility task in virtual reality". Graduate student: Taniya Wilson. Faculty mentor: Christopher K. Rhea. \$1000
4. UNCG Graduate School Research Assistantship. (2019). "Effects of fractal sensory stimuli on the variability of a stepping-in-place task". Graduate student: Danielle Felsberg. Faculty mentor: Christopher K. Rhea. \$2000
5. UNCG Graduate School Research Assistantship. (2019). "Using a custom smartphone app to measure changes in dynamic balance after sub-concussive head trauma". Graduate student: John Palazzolo. Faculty mentor: Christopher K. Rhea. \$2000
6. UNCG School of Health and Human Sciences Marjorie W. Johnson Pre-Physical Therapy Research Program Fund. (2018-2019). "Motor learning and the transfer of functional gait and balance skills developed in a 6-week immersive virtual reality training program". Undergraduate student: Michael Kress. Faculty mentor: Christopher K. Rhea. \$1750
7. North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Graduate Student Research Grant (2018-2019). "Motor learning and transfer of functional gait and balance skills developed in a 6-week immersive virtual reality training program". Graduate student: Chanel LoJacono. Faculty mentor: Christopher K. Rhea. \$2000
8. UNCG School of Health and Human Sciences Marjorie W. Johnson Pre-Physical Therapy Research Program Fund. (2017-2018). "Examining the role of feedback on virtual reality obstacle crossing". Undergraduate student: Ashley Sanchez. Faculty mentor: Christopher K. Rhea. \$1600
9. UNCG Graduate School Research Assistantship. (2017). "Evaluation of the HTC Vive to enhance walking ability". Graduate student: Chanel LoJacono. Faculty mentor: Christopher K. Rhea. \$2000

10. UNCG Graduate School Research Assistantship. (2017). "Further understanding the relationship between walking patterns, adaptability, and stability of human locomotion". Graduate student: Brian Cone. Faculty mentor: Christopher K. Rhea. \$2000
11. UNCG Undergraduate Research, Scholarship, and Creativity Office (URSCO) Undergraduate Research and Creativity Award (URCA). (2017). "Integrating virtual reality into walking rehabilitation" Undergraduate student: Ashley Sanchez. Faculty mentor: Christopher K. Rhea. \$3000
12. UNCG School of Health and Human Sciences Graduate Research Assistant Award. (2016-2017). "Are there neuromotor and neurocognitive sex differences among American football players?". Graduate student: Kristen Schleich. Faculty mentor: Christopher K. Rhea and Donna Duffy. \$6000
13. UNCG Graduate School Summer Research Award. (2016). "Relationship between walking patterns and trip-response performance in older adults". Graduate student: Brian Cone. Faculty mentor: Christopher K. Rhea. \$2000
14. UNCG School of Health and Human Sciences Marjorie W. Johnson Pre-Physical Therapy Research Program Fund. (2015-2016). "A multimodal approach to understanding recovery from a trip during walking". Undergraduate student: Miranda Hege. Faculty mentor: Christopher K. Rhea. \$1750
15. UNCG Undergraduate Research, Scholarship, and Creativity Office (ORSCO) Undergraduate Research and Creativity Award (URCA). (2015). "Neurocognitive and neuromotor performance limitations post-concussion in women" Undergraduate student: Kristen Schleich. Faculty mentor: Christopher K. Rhea. \$3000
16. UNCG School of Health and Human Sciences Graduate Research Assistant Award. (2014-2015). "Nonlinear dynamics analysis of biomechanical and physiological data from the Navy Experiment Diving Unit". Graduate student: Ryan MacPherson. Faculty mentor: Christopher K. Rhea. \$6000
17. UNCG School of Health and Human Sciences Marjorie W. Johnson Pre-Physical Therapy Research Program Fund. (2014-2015). "Integrating the Oculus Rift and Omni treadmill to create a portable virtual rehabilitation tool". Undergraduate student: Will Early. Faculty mentor: Christopher K. Rhea. \$1500
18. UNCG School of Health and Human Sciences Marjorie W. Johnson Pre-Physical Therapy Research Program Fund. (2013-2014). "Validity and reliability of a smartphone app to record gait dynamics". Undergraduate student: Brittany Smith. Faculty mentor: Christopher K. Rhea. \$1200
19. UNCG Office of Undergraduate Research (OUR) Assistantship. (2013). "Emergence of gait patterns over short and long durations". Undergraduate student: Cory Alcon. Faculty mentor: Christopher K. Rhea. \$250
20. UNCG Kate Barrett Professional Development Award. (2013). "Merging a dynamics framework with robotic exoskeleton training for gait rehabilitation" Graduate student: Matt Wittstein. Faculty mentors: Christopher K. Rhea (UNCG) and Cara Lewis (Boston University). \$1700
21. UNCG Office of Undergraduate Research (OUR) Undergraduate Research and Creativity Award (URCA). (2013). "Development of interactive walking avatars within a virtual environment" Undergraduate student: Ryan MacPherson (computer science major). Faculty mentor: Christopher K. Rhea. \$3000

22. UNCG School of Health and Human Sciences Undergraduate Research Award. (2012). "Optimal trial length for collecting gait data" Undergraduate student: Cory Alcon. Faculty mentor: Christopher K. Rhea. \$600
23. International Society of Biomechanics (ISB) International Travel Grant Program. (2012). "Exploring the use of a dynamics framework for amputee gait rehabilitation" Graduate student: Alan De Asha. Faculty mentors: Christopher K. Rhea (UNCG) and John G. Buckley (Bradford University). \$2500

PATENTS

1. **Rhea, C.K.** (2018). Virtual reality training to enhance locomotor rehabilitation. *U.S. Patent No. 10,152,898*. Washington, DC: U.S. Patent and Trademark Office.

MEDIA REPORTS ON OUR RESEARCH

1. Date: February 2020
Event/Publication: Gate City Chatter
Type: Local podcast
Title: *Virtual Reality Innovations in the Heart of Greensboro with Chris Rhea*
Source #1: https://youtu.be/myJO_1omXvw
Source #2: <https://soundcloud.com/gcchatter/episode-47/s-FWEMw>
2. Date: January 2020
Event/Publication: FOX8
Type: Local news story
Title: *UNCG team using virtual reality to study – and improve – how humans walk*
Source: <https://myfox8.com/2020/01/23/uncg-team-using-virtual-reality-to-study-and-improve-how-humans-walk/>
3. Date: January 2020
Event/Publication: WFMY Channel 2
Type: Local news story
Title: Fans, medical experts react to Luke Kuechly's retirement announcement
Source: <https://www.wfmynews2.com/article/news/local/fans-medical-experts-react-to-luke-kuechlys-retirement-announcement-yo/83-5b17cfc7-726e-4b2c-80f6-e35a62adbed3>
4. Date: September 2019
Event/Publication: UNCG Research Magazine
Type: Print
Title: *Walk this way*
Source: <https://researchmagazine.uncg.edu/fall-2019/walk-this-way/>
5. Date: April 2018
Event/Publication: UNCG Now
Type: Website
Title: *UNCG researchers us virtual reality to address human health challenges*
Source: <https://newsandfeatures.uncg.edu/virtual-reality-address-human-health-challenges/>
6. Date: February 2018
Event/Publication: UNCG Now
Type: Website
Title: *UNCG partners with Well•Spring for NIH-funded balance study*

- Source: <https://newsandfeatures.uncg.edu/well-spring-balance-study/>
7. Date: February 2018
Event/Publication: New York Times
Type: Print
Title: *More girls are playing football. Is that progress?*
Source: <https://www.nytimes.com/2018/02/02/well/family/football-girls-concussions.html>
 8. Date: November 2017
Event/Publication: UNCG Research Magazine
Type: Print
Title: *Hitting his stride*
Source: <https://researchmagazine.uncg.edu/hitting-his-stride/>
 9. Date: April 2017
Event/Publication: TEDxGreensboro
Type: 20 minute presentation
Title: *Gaming to health care-virtual reality in physical rehabilitation*
Source: <https://www.youtube.com/watch?v=xq1eiI99dVQ>
 10. Date: September 2016
Event/Publication: UNCG Alumni Magazine
Type: Print
Title: *Detecting concussions in combat*
Source: http://ure.uncg.edu/magazine/2016_fall/pdf/2016UNCGFallAlumniMagazine-v2.pdf
 11. Date: January 2016
Event/Publication: UNCG Impact Stories
Type: Website
Title: *Virtual rehab*
Source: <http://research.uncg.edu/spotlight/virtual-rehab/>
 12. Date: December 2015
Event/Publication: UNCG Now
Type: Website
Title: *Switching fields*
Source: <https://newsandfeatures.uncg.edu/kristen-schleich-kinesiology-switching-fields/>
 13. Date: September 2015
Event/Publication: UNCG Research Magazine
Type: Print
Title: *Virtual reality – Not just for video games anymore*
Source: <http://research.uncg.edu/wp-content/uploads/2015/12/onlinefall2015.pdf>
 14. Date: May 2015
Event/Publication: UNCG Campus Weekly
Type: Website
Title: *Chris Rhea's research will let military check for concussions in the field, using smartphone*
Source: <http://ure.uncg.edu/prod/cweekly/2015/05/12/dr-chris-rhea-leads-team/>
 15. Date: January 2014
Event/Publication: UNCG Research and Instructions in STEM Education (RISE) Network
Type: Website
Title: *Virtual reality for physical therapy*

- Source: https://www.youtube.com/watch?v= 0omvHAOr_s
16. Date: January 2014
Event/Publication: Buckley Report on FOX 8 News
Type: Local news story
Title: *UNCG professor helps people walk properly*
Source: <http://myfox8.com/2014/01/13/uncg-professor-helps-people-walk-properly/>
 17. Date: December 2013
Event/Publication: UNCG Research Magazine
Type: Print
Title: *Virtual reality becomes reality*
Source: <http://research.uncg.edu/wp-content/uploads/2012/10/UNCGResearch2013.pdf>
 18. Date: April 2013
Event/Publication: Kinesiology Today from the American Kinesiology Association
Type: Print
Title: *Rehabilitation meets virtual reality*
Source:
http://www.americankinesiology.org/AcuCustom/Sitename/DAM/124/KT_Spring_2013_Vol-6_No-2.pdf

COURSES TAUGHT

University of North Carolina at Greensboro (2011-present)

KIN 376 – Biomechanics of Sport and Physical Activity

KIN 386 – Motor Learning and Development

KIN 611 – Research Methods in Kinesiology

KIN 643 – Mechanical Analysis of Motor Skills

KIN 702 – Research Seminar in Applied Neuromechanics

KIN 711 – Variability in Human Systems

KIN 715 – Professional Ethics in Health and Human Sciences

KIN 778 – Professional Seminar in Grant Writing

Purdue University (2004-2008)

HK 253 – Principles of Motor Development (served as TA)

HK 263 – Biomechanical Foundations of Motor Skills (served as TA)

Barry University (2002-2004)

SES 113 – Basketball

SES 170 – Strength Training

University of Central Missouri (1999-2002)

PE 2800 – Biomechanics (served at undergraduate TA)

INVITED PRESENTATIONS

1. Fall 2018
Kiwanis Club of Greensboro
The future of human health assessment and rehabilitation

2. Fall 2018
Future of Reality Summit, University of North Carolina School of the Arts, Winston-Salem, NC
Immersive Applications & Possibilities Across Industries (panelist)
3. Spring 2018
Health and Exercise Science Spring Seminar Series, Colorado State University
Leveraging technology to enhance human health
4. Fall 2017
Literary Club of Greensboro, Greensboro, NC
Virtual reality in medicine
5. Fall 2017
Northwest Missouri State University, Maryville, MO
Intersection of human health and technology: Where are we going?
6. Summer 2015
Triad Retirement Living Association, Greensboro, NC
The future of rehabilitation is here
7. Summer 2015
Crescent Rotary Club, Greensboro, NC
Enhancing physical therapy with advanced technology
8. Spring 2015
North Carolina Biotechnology Center, Research Triangle Park, NC
Advancing military health: The UNCG STAR project
9. Spring 2015
Science and Technology Committee, North Carolina Defense Business Association, Research Triangle Park, NC
Advancing military health using smartphones and virtual reality
10. Fall 2014
Center for Human Movement Variability, University of Nebraska at Omaha
Using technology to assess and enhance fractal patterns in motor performance
11. Spring 2014
Mathematical Biology Seminar, University of North Carolina at Greensboro
A dynamic system's approach to understanding fall recovery while walking
12. Fall 2013
Cognitive, Action, and Perception Seminar, University of Cincinnati
Using fractal stimuli to enhance rehabilitation
13. Fall 2013
Sports Medicine Research Division, Cincinnati Children's Hospital Medical Center
Enhancing functional mobility after ACL reconstruction using virtual reality
14. Fall 2013
Balance Assessment Workshop, National Intrepid Center of Excellence (NICoE), Bethesda, MD
Quantitative assessment of balance using nonlinear dynamics
15. Fall 2013
Naval Medical Research Center / Walter Reed Army Institute of Research, Silver Spring, MD

TBI Assessment of Readiness using a Gait Evaluation Test (TARGET): Development of return to duty criteria with a field-deployable device

16. Spring 2013
Department of Psychology, Armstrong Atlantic State University, Savannah, GA
Integrating virtual reality and physical therapy for gait rehabilitation
17. Fall 2011
Department of Physical Therapy, Elon University, Elon, NC
Advancements in rehabilitation science
18. Fall 2011
Optimum Warfighter Performance Workshop, David H. Murdock Research Institute, Kannapolis, NC
Recognition and rehabilitation of mild traumatic brain injury
19. Spring 2009
Cognitive, Action, and Perception Seminar, University of Cincinnati
Effect of experience and light level on the action-perception relationship in an obstacle avoidance task
20. Summer 2007
Department of Optometry, Bradford University, Bradford, UK
Insights into how the visual system contributes to successful locomotion
21. Spring 2007
Midwest Sport and Exercise Psychology Symposium, Purdue University
Biomechanics and sport psychology: What do they have to do with each other?
22. Fall 2006
Cognitive, Action, and Perception Seminar, University of Cincinnati
The role of visual information and experience during obstacle crossing
23. Spring 2004
Back Care for the Industrial Worker Training Seminar, Barry University
The biomechanics of lifting

PROFESSIONAL MEMBERSHIPS

International Society for Gait & Posture Research (ISPGR)

North American Society for Psychology in Sport and Physical Activity (NASPSPA)

COMMITTEE SERVICE

- | | |
|-----------|---|
| 2020-2021 | Diversity, Equity, and Inclusion Committee, UNCG Department of Kinesiology, Committee Member |
| 2019-2021 | North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Executive Committee, Communication Director |
| 2020 | Campus Scholarship Review Committee, UNCG Graduate School, Committee Member |
| 2020 | Ad Hoc Committee for Health Informatics and Sports Analytics concentration as part of the UNCG Masters in Informatics and Analytics (MSIA) degree, UNCG School of Health and Human Sciences, Committee Member |
| 2020 | Post Tenure Review Committee, UNCG Department of Kinesiology, Committee Member |

2020	Teaching Award Committee, UNCG School of Health and Human Sciences, Committee Member
2019	UNC System Inter-institutional Planning Grant (IPG) Review Committee (internal competition), UNCG Office of Sponsored Programs, Committee Member
2019	NSF Major Research Instrumentation (MRI) Review Committee (internal competition), UNCG Office of Sponsored Programs, Committee Member
2019	Research Advisory Committee, UNCG School of Health and Human Sciences, Committee Member
2018-Present	Graduate Studies Committee, UNCG Department of Kinesiology, Committee Member
2018-2019	UNCG Research and Instruction in STEM Education (RISE) Network, Advisory Board Member
2018-2019	Motor Control/Learning Program Committee, NASPSPA Conference Program Committee Member
2017-2019	External Relations Committee, International Society for Posture and Gait Research (ISPGR), Committee Member
2017	3 rd year Reappointment Committee, UNCG Department of Community and Therapeutic Recreation, Committee Member
2016-Present	UNCG Department of Kinesiology New Faculty Mentoring Program, Mentor
2016-2017	Tuition and Student Fee Committee, UNCG Division of Student Affairs, Member
2016-2017	50 th Anniversary Conference Planning Committee, North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Conference, Committee Member
2016-2017	Faculty Search Committee for Sport and Exercise Psychology (2 positions), UNCG Department of Kinesiology, Co-Chair
2016	Undergraduate Research, Scholarship, and Creativity Office, Undergraduate Research and Creativity Award (URCA), UNCG, Reviewer
2016	Faculty Search Committee, UNCG Department of Chemistry and Biochemistry, Committee Member
2015-2016	Budget Sounding Board, UNCG School of Health and Human Sciences, Committee Member
2014-2017	Undergraduate Studies Committee, UNCG Department of Kinesiology
2012-2015	Student Fee Committee, UNCG Division of Student Affairs, Member
2014-2015	Faculty Search Committee, UNCG Department of Community and Therapeutic Recreation, Committee Member
2014	Graduate School Dissertation Award Review Committee, UNCG Graduate School, Committee Member
2013-2014	Motor Control/Learning Program Committee, NASPSPA Conference Program Committee Member
2013-2014	Research Methods Working Group, UNCG School of Health and Human Sciences, Committee Member
2013	Program for the Advancement of Girls and Women in Sport and Physical Activity (PAGWSPA) Conference, Co-Chair

2013	Research Working Group, UNCG Department of Kinesiology, Committee Member
2012-2014	UNCG Office of Undergraduate Research, Department Liaison
2012-2013	Scholars Program Interview Panel, UNCG, Committee Member
2012	Faculty Search Committee for Motor Behavior, UNCG Department of Kinesiology, Committee Member
2012	Safrit Award Committee, UNCG Department of Kinesiology, Committee Member
2009-2010	Alumni Advisory Council, School of Health and Human Performance, Barry University, Committee Member
2007-2008	Graduate Student Government, Purdue University, Department Senator
2007-2008	Academic and Professional Development Committee, Purdue Graduate Student Government, Purdue University, Committee Member
2006-2008	University Resources Policy Committee, Purdue University, Committee Member
2004-2008	Health and Kinesiology Undergraduate Club, Purdue University, Advisor
2007	Graduate School Outstanding Graduate Faculty Mentor Award, Purdue University, Committee Member
2006-2007	North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Executive Committee, Student Representative
2007	3rd Annual HK-GSO 5K, Purdue University, Fundraising Chair
2006	Graduate Student Panel for Dean Search, Purdue University, Committee Member
2006	Department Head Search Committee, Department of Health and Kinesiology, Purdue University, Committee Member
2005-2006	Health and Kinesiology Graduate Student Organization, Purdue University, President
2005	PE Central Website, Contributing Editor
2005	AAHPERD Alliance Assembly, Student Delegate
2004-2005	AAHPERD Student Services Standing Committee, Committee Member
2004-2005	Health and Kinesiology Graduate Student Organization, Purdue University, Fundraising Chair
2004	Sport and Exercise Student Association, Barry University, Founder
2004	AAHPERD Alliance Assembly, Student Delegate
2003-2004	Florida AHPERD, Student Division President
2000-2001	Missouri AHPERD, Student Division President
2000-2001	Physical Fitness Club, University of Central Missouri, President
2000-2001	Technology Committee, University of Central Missouri, Committee Member
1999-2000	Physical Fitness Club, University of Central Missouri, Treasurer

GRANT REVIEW PANELS

2019	National Science Foundation (NSF), Perception, Action, and Cognition (PAC) program
2019	Spinal Cord Injury Research Program, Wings for Life
2019	Natural Sciences and Engineering Research Council of Canada (NSERC) Collaborative Research and Development Grant (CRD)

- 2017 American Association for the Advancement of Science (AAAS) Research Competitiveness Program, Nebraska's Established Program to Stimulate Competitive Research (EPSCoR) to enhance NSF CAREER Award Proposals
- 2017 Spinal Cord Injury Research Program, Wings for Life
- 2015 Alzheimer's and Related Diseases Research Award Fund (ARDRAF), Virginia Center of Aging, Virginia Commonwealth University
- 2015 Nazarbayev University Research Council (Astana, Kazakhstan), facilitated by Oak Ridge Associated Universities (ORAU)
- 2014 Alzheimer's and Related Diseases Research Award Fund (ARDRAF), Virginia Center of Aging, Virginia Commonwealth University
- 2013 National Science Foundation (NSF), Perception, Action, and Cognition (PAC) program
- 2013 Department of Defense (DoD) Medical Modeling and Simulation for Military Training and Education (Office of Naval Research BAA 12-013)

JOURNAL EDITOR

Computational and Mathematical Methods in Medicine (Guest Editor for Special Issue on Advances in Nonlinear Time-Series Analyses for the Prognosis, Treatment, and Modeling of Movement Disorders)

JOURNAL REVIEWER

Action, Perception, and Psychophysics
 American Journal of Men's Health
 American Journal of Physical Medicine & Rehabilitation
 Annals of Biomedical Engineering
 Applied Cognitive Psychology
 Attention, Perception, & Psychophysics
 Autism
 Autism Research
 Brain Research Bulletin
 Entropy
 Experimental Brain Research
 Frontiers in Movement Science and Sport Psychology
 Frontiers in Systems Neuroscience
 Frontiers in Human Neuroscience
 Gait & Posture
 Human Movement Science
 International Journal of Exercise Science
 International Journal of Athletic Therapy & Training
 Journal of Applied Biomechanics
 Journal of Biomechanics
 Journal of Biomedical Engineering
 Journal of Bioscience and Medicine

Journal of Experimental Psychology: Human Perception and Performance
Journal of Gerontology: Medical Sciences
Journal of Motor Learning and Development
Journal of NeuroEngineering and Rehabilitation
Journal of Neurological Sciences
Medical Engineering & Physics
Medicine and Science in Sports and Exercise
Motor Control
Minerals (Special Issue: Safety and Health in Mining)
Physiotherapy Theory and Practice
Public Library of Science (PLOS ONE)
Scientific Reports
Sports Medicine
WORK: A Journal of Prevention, Assessment, and Rehabilitation

CONFERENCE ABSTRACT REVIEWER

2019 International Conference on Virtual Rehabilitation (ICVR)
2019 North American Society for Psychology in Sport and Physical Activity (NASPSPA)
2017 International Conference on Virtual Rehabilitation (ICVR)
2015 International Conference on Virtual Rehabilitation (ICVR)
2014 North American Society for Psychology in Sport and Physical Activity (NASPSPA)

HONORS AND AWARDS

2015-2021 National Institutes of Health (NIH) Student Loan Repayment Program (LRP) recipient for Clinical Research, sponsored by the National Institute of Neurological Disorders and Stroke (NINDS)
2017 Jerry and Joan Morrison Tolley & Gail M. Hennis Graduate Teaching Award, School of Health and Human Sciences, University of North Carolina at Greensboro
2014 Selected for the 6th Annual UNC Faculty Boot Camp on “The Entrepreneurial Mindset- Maximizing Faculty Impact”, won 2nd place in the business pitch competition
2014 Nominated for the Research and Development Excellence Award at the Triad BioNight sponsored by the North Carolina Biotechnology Center
2013 Research Excellence Award for Junior Faculty, School of Health and Human Sciences, University of North Carolina at Greensboro
2012 Faculty Summer Scholarship Award from the Office of Research, School of Health and Human Sciences, University of North Carolina at Greensboro
2011 Faculty Summer Scholarship Award from the Office of Research, School of Health and Human Sciences, University of North Carolina at Greensboro
2008 Carol Wildule Award for Outstanding Graduate Scholar from the Purdue University Department of Health and Kinesiology
2008 Graduate Student Award for Outstanding Teaching from Purdue University

- 2007 Graduate Student Excellence Award from the Purdue Graduate Student Government
- 2007 Graduate Student Award for Outstanding Teaching from Purdue University
- 2007 Outstanding Engagement Award from the Purdue University Department of Health and Kinesiology
- 2006 A.A. Annarino Award for Outstanding Graduate Teaching Assistant from the Purdue University Department of Health and Kinesiology
- 2006 Ruth Abernathy Presidential Scholarship Award from the Midwest Alliance for Health, Physical Education, Recreation, and Dance
- 2004 Professional Service Award from the Florida Alliance for Health, Physical Education, Recreation, and Dance
- 2001 Whiteman Memorial Scholarship from the University of Central Missouri

STUDENTS MENTORED

Postdoc

1. Nikita Kuznetsov (2015-2017)
2. Rebecca Robins (2015-2017, primary mentor was G.W. Wright at Temple University)

PhD - Chair

1. Krista Meder (2019-present)
2. Mackenzie Pierson (2019-present)
Dissertation title: Implementing OPTIMAL Theory in Lower Extremity Tasks to Reduce Risk of Injury
3. John Palazzolo (2018-present)
4. Danielle Felsberg (2017-present)
5. Chanel LoJacono (2016-2020)
Dissertation title: Training Functional Mobility Using a Dynamic Virtual Reality Obstacle Course
6. Ruth Stout (2015-present)
Dissertation title: Examining Dynamic Balance Changes In Older Adults After Balance Training With Attentional Focus Cues
7. Brian Cone (2014-2018)
Dissertation title: An Investigation into the Relationship between Locomotor Dynamics and Adaptability
8. Mathew W. Wistein (2011-2016)
Dissertation title: Variability And Coupling Of Cardiac And Locomotor Rhythms During Treadmill Walking Tasks

PhD - Committee member or supporting role

1. Roshita Rathore (2020, external reader, Temple University)
Dissertation title: Effect of Age and Fall Status on the Scaling of the Postural Control Variables to a Scaled Gait Initiation Task
2. Tyler Whittier (2019-present, external committee member, Colorado State University)
3. Lauren Higgins (2018-present)
4. Yuki Sugimoto (2016-present)
5. Masa Yamada (2016-2020)
Dissertation title: Attention and Motor Learning of An Aiming Task
6. Nate Berry (2016-2018)

- Dissertation title:* Physiological Synchrony: A Systems Approach to Understanding the Hierarchical Regulation of Physiological Function through the Endocrine System
7. Ilana Leven (2015-2019, external committee member, UNC – Chapel Hill)
Dissertation title: Reactive Balance Responses During Ambulation in Adults with Cerebral Palsy
 8. Jed Diekfuss (2014-2017)
Dissertation title: The Influence of Attentional Focus on Neuroplasticity Following a Seven-Day Balance Training Intervention
 9. Justin Waxman (2014-2017)
Dissertation title: The Influence of Hamstring Musculo-articular Stiffness on Biomechanics Factors Indicative of Anterior Cruciate Ligament Loading
 10. Iryna Babik (2013-2014, Psychology PhD student, Kinesiology mentor)
 11. Steve Glass (2012-2015)
Dissertation title: Strength, Balance, and Range of Motion as Modifiers of the Effect of External Load-Bearing on Functional Movement Behaviors in the Military Recruitment Population
 12. Michele Pye (2012-2014)
Dissertation title: Comparison of Neuromuscular Control Strategies between Collegiate Female Dancers and Athletes
 13. Alan De Asha (2012, co-sponsor of international travel grant, Bradford University)

EdD - Committee member

1. Lynda Butler-Storsved (2018-2020)
Dissertation title: Approaching Adolescent Movement Quality in Physical Education

MS - Chair

1. Taniya Wilson (2019-present)
2. Jordan Stafford (2016-2018)
Thesis title: Effect of Fatigue on Postural Control
3. Kristen Schleich (2016-2017)^{6,a}
Thesis title: Postural Control Differences Among Collision, Contact, and Non-Contact Sport Female Athletes
4. Chanel LoJacono (2014-2016)^{7,1}
Thesis title: Virtual Obstacle Crossing and the Clinical Implications for Rehabilitation
5. Logan Frame (2014-2016)^m
Thesis title: Dosage Effect on Neuromuscular Retention of a Fractal Gait Pattern Using a Visual Stimulus
6. Ryan MacPherson (2014-2016)
Thesis title: Using Feedback Enhanced Visual Metronomes to Manipulate Gait Dynamics
7. Ruth Stout (2012-2014)¹
Thesis title: Gait and Balance Characteristics After a Non-Cerebellar Stroke
8. Jordan Grubaugh (2012-2013)^k
Thesis title: The Relationship Between Working Memory and Gait Performance

MS - Committee member

1. Amanda Barclift (2018-present)
Thesis title: The Effectiveness of Attentional Focus Instructions on Sprinting Performance
2. Sean Cochran (2017-2019)
Thesis title: Task Performance is Inversely Related to Spatial External Focus Target Removal

3. Danielle Funk (2017-2019)
Thesis title: Fans' Perception and Understanding of the National Football League (NFL), Concussions, and Chronic Traumatic Encephalopathy (CTE)
4. Heath Partington (2016-2017)
Thesis title: Individual Muscle Thickness of the Quadriceps and Hamstrings and Their Relationship with Knee Extension and Flexion Strength
5. Lauren Bennett (2015-2016)
Thesis title: Equal Workload Demands May Hinder the Ability of Focus of Attention to Impact Motor Learning
6. Eungwang Oh (2013-2014)
Thesis title: The Relationship of Team Cohesion to Individual Anxiety among Recreational Soccer Players
7. Mara Mohler (2012-2014)
Thesis title: The Ability of the FMS to Predict Knee Injury in Female Collegiate Athletes
8. Jenna Tolmaski (2012-2013)
Thesis title: The Relationship Between Coping and Sport Injury Anxiety Among College Athlete

Undergraduate

1. Shena Hutcherson (2018-2019, Lab RA)
2. Irene Yamalis (2018-2019, Lab RA)
3. Preston Ellington (2018-2019, Lab RA)
4. Chimeri Anazia (2018-2019, Lab RA)
5. Michael Kress (2018-2019, Lab RA)^{4,j}
6. John Essick (2018, Lab RA)
7. Brittany Wall (2018, Lab RA)
8. Dominic Foster (2017, Lab RA)
9. Austin Bare (2017, Lab RA)
10. Victoria (Tori) Blevins (2017-present, Lab RA)¹⁰
11. Katelyn Costner (2017-present, Lab RA)¹⁰
12. JD Manzo (2016-2018, Lab RA)^{8,n}
13. Jason Moody (2016-2018, Lab RA)
14. Ashley Sanchez (2016-2018, Lab RA)^{1,4,5,8,9,j}
15. Patrick Carder (2016-2017, computer programmer)
16. Shameka Sharpe (2016, Lab RA)
17. Sean Cochran (2015-2016, Lab RA, co-mentored with Louisa Raisbeck)^{f,o}
18. Morgan Luther (2015-2016, Lab RA, co-mentored with Louisa Raisbeck)
19. Samuel Joyce (2015-2016, Lab RA)
20. Courtney Smith (2015-2016, Lab RA)
21. Deborah Guthmann (2015-2016, Lab RA)^{1,j}
22. Miranda Hege (2015-2016, Lab RA)^{4,e}
23. Richard Brower (2015-2016, Lab RA)
24. Sabastian Gomez (2015, Lab RA)
25. Lauren Ritichie (2015, Lab RA)
26. Cameron Manis (2014-2016, computer programmer, Lab RA)
27. Kristen Schleich (2014-2015, Lab RA)^{5,f,a}
28. Gabrielle Richmond (2014-2015, Lab RA)ⁱ
29. Will Early (2013-2015, Lab RA)^{4,h}

30. Anthony Atashi (2013-2014, Lab RA)
31. Colin O'Connor (2013-2014, Lab RA)
32. Brittany Smith (2013-2014, Lab RA)^{1,4,d}
33. Amanda High (2013-2014, Lab RA)
34. Chelsea Martin (2013, Lab RA)
35. Taylor Day (2012-2014, Lab RA)
36. Ryan MacPherson (2012-2014, computer programmer, Lab RA)^{5,f}
37. Cory Alcon (2012-2013, Lab RA)^{2,3,e}
38. Jeff Labreque (2012-2013, Lab RA)^a
39. Taylor Harris (2012-2013, Lab RA)
40. Meredith Trecaso (2013, Lab RA)
41. Sam Rodriguez (2012-2013, Lab RA)^d
42. Patrick Porter (2011-2013, Lab RA)^{c, m}
43. Elizabeth Longmire (2012, Lab RA)
44. Kelsey Leonard (2011-2012, Senior Honor's Thesis)^{1,b}
45. Lindsey Davis (2011-2012, Lab RA)^a
46. Mathew Zeth Davidson (2011, Lab RA)

¹ UNCG Student Excellence Award from the Lloyd International Honors College

² Honorable Mention Award from the UNCG Undergraduate Research and Creativity Symposium

³ Winner of UNCG Office of Undergraduate Research (OUR) Assistantship

⁴ Awarded the UNCG Marjory W. Johnson Pre-Physical Therapy Research Program Award

⁵ Awarded UNCG Undergraduate Research and Creativity Award

⁶ American Kinesiology Association (AKA) Scholar Award

⁷ UNCG Graduate School Award for Innovative Use of Technology in a Thesis/Master's Production or Dissertation

⁸ 3rd place Award from the UNCG Undergraduate Research and Creativity Symposium

⁹ Spartan of Promise Award from the UNCG Alumni Association

¹⁰ Loretta M. Williams Undergraduate CWHW Research Fund

^a Attended PT school at Elon University

^b Attended PT school at East Carolina University

^c Attended MS in Clinical Exercise Physiology program at UNC Charlotte

^d Attended accelerated Nursing program at Duke University

^e Attended PT school at Winston-Salem State University

^f Attended MS in Applied Neuromechanics program at UNCG

^g Attended DO medical program at Campbell University

^h Attended PT school at Campbell University

ⁱ Attended MBA program at UNCG

^j Attended PT school at University of North Carolina at Chapel Hill

^k Attended PhD program in Biomechanics at the University of Nebraska at Omaha

^l Attended PhD program in Applied Neuromechanics program at UNCG

^m Attended PT school at Methodist University

ⁿ Attended PT school at Emory University

^o Attended PhD program in Motor Learning at New Mexico State University