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EDUCATION

Ph.D., Biomedical Sciences (Anatomy & Neurobiology), Marshall Univ., WV	1995-2000
M.S., Biology, Villanova Univ., PA	1993-1995
B.S., Biology, College of William and Mary, VA	1988-1992
Neural Systems and Behavior Course, Woods Hole, MA	1998
East/West Marine Biology Program, Northeastern Univ., MA	1992-1993

CERTIFICATIONS

American College of Sports Medicine, Certified Personal Trainer	2008-
American College of Sports Medicine, Certified Exercise Physiologist	2010-
USA Cycling, Race Director Level C	2013-
USA Cycling, Certified Cycling Coach Level 3	2015-
Non-Invasive Brain Stimulation Methods Certification	2016
American Red Cross Basic Life Support	2021

ACADEMIC EXPERIENCE

Associate Director, Brain Health Research Institute, Kent State University	2021-
Full Professor (Tenured), School of Health Sciences, Kent State University	2020-
Neurological and Behavioral Outcomes Center Scholar, University Hospital Neurological Institute	2014-
Graduate Faculty (F4D), School of Biomedical Sciences, Neurosciences, Kent State University	2013-
Graduate Faculty (F4D), School of Biomedical Sciences, Physiology, Kent State University	2010-
Associate Professor (Tenured), School of Health Sciences, Kent State University	2014-2020
Assistant Professor, School of Health Sciences, Kent State University	2008-2014
Postdoctoral Research Fellow, Biomedical Engineering, Cleveland Clinic	2006-2008
Senior Research Associate, Biology, Case Western Reserve University	2005-2006
Research Associate, Biology, Case Western Reserve University	2004-2005
Postdoctoral Fellow, Biology, Case Western Reserve University	2001-2004

ADMINISTRATIVE EXPERIENCE

Undergraduate Coordinator, Exercise Science Program, Kent State University	2018-2020
Graduate Coordinator, Exercise Physiology Program, Kent State University	2017-2020

RELATED EXPERIENCE

Editor (Special Issue), IJERPH	2021
Owner and President, Stelleri Performance Training (sport coaching business)	2015-
Multisport Editor and Writer (pro bono), Ohio Sports and Fitness Magazine	2008-2011

RESEARCH GRANT REVIEW PANELS

European Science Foundation, Research Foundation Flanders	2021
KSU Brain Health Research Institute SEED Grant Review Panel	2021
VA RR&D SPiRE Review Panel (Rehabilitation Research & Development Service)	2019, 2020
NIH Review Panel, MOSS V50 (Musculoskeletal, Oral and Skin Sciences)	2019
NIH Review Panel, MRS (Musculoskeletal Rehabilitation Sciences)	2019
NIH Review Panel, RRD6 (Aging and Chronic Medical Conditions)	2019
Weston Brain Institute Grant Review Panel	2019
Health Research Board of Ireland, Grant Reviewer	2013-2015
Summa Health Systems, Scientific Review Committee	2012-2013

AWARDS

EHHS Outstanding Senior Researcher Award, Kent State University, 2020
Certificate of Recognition, Research and Sponsored Programs, Kent State University, 2018
Fellow of the American College of Sports Medicine (FACSM), 2018
EHHS Distinguished Faculty Researcher Nominee, School of Health Sciences, 2019, 2017, 2016
KSU Mid-Career Faculty Success Coaching Program Awardee, 2017
Faculty Recognition Award, University Teaching Council. Kent State University, 2016

PUBLICATIONS

Peer-reviewed articles- In review/revision

1. Kim, J.H., Lemke, Z., Kim, Y.U., **Ridgel, A.L.** (In review) Neurocognitive temporal training improves motor timing and coordination during the golf swing in Parkinson's disease. *Research Quarterly for Exercise and Sport*

Peer-reviewed articles- Published.

1. Noll, K., Dowdell, BT, **Ridgel, AL.** (2021). Mobility Improvements After a High-cadence Dynamic Cycling Intervention in an Individual with Motor Neuron Disease: A Case Study, *International Journal of Exercise Science*, 14(3): 791-801.
2. Harper, SA, Peters, F, Pollock, BS, Burns, K, McDaniel, J, **Ridgel, AL** (2021). Design of an eccentric recumbent ergometer to elicit delayed onset muscle soreness. *Research Directs in Strength and Performance*. 1(1).
3. Ryan, E.J., Ryan, E.J., Peacock, C.A., **Ridgel, A.L.** (2020) Interval, Active-Assisted Cycling Improves Motor Function but Does Not Alter Balance in Parkinson's Disease. *Journal of Exercise and Nutrition*. 3(4): 15
4. Kim, J.H. **Ridgel, A.L.** & Han, D.H. (2020) Effects of interactive metronome on the changes in arm angle and motor timing in the upper extremity during a golf putt, *International Journal of Performance Analysis in Sport*, 20:5, 818-829, DOI: [10.1080/24748668.2020.1789427](https://doi.org/10.1080/24748668.2020.1789427)

5. Kim, J.H. and **Ridgel, A.L.** (2019). Effects of interactive metronome and golf swing mechanics training on technique and motor timing in professional and amateur golfers. *International Journal of Sports Science & Coaching*. 14 (6), 786-797
6. Pollock, B.S., Peacock, C.J, Ryan, E.J, Spitznagel, M, **Ridgel, AL** (2019). [A multifaceted exercise intervention did not alter cognitive function and cerebral perfusion in patients with Parkinson's disease](#). *Science and Sports*, <https://doi.org/10.1016/j.scispo.2019.05.008>
7. Harper, SA, Dowdell, BT, Kim, J-H, Pollock, BS, **Ridgel, AL** (2019). [Non-motor symptoms after high cadence cycling in Parkinson's disease](#). *International Journal of Environmental Research and Public Health*. Jun 14;16(12). pii: E2104. doi: 10.3390/ijerph16122104.
8. **Ridgel, A.L.** and Ault, D. (2019). [High-cadence cycling promotes progressive improvement in bradykinesia, rigidity and mobility in individuals with mild-moderate Parkinson's disease](#). *Parkinson's disease*, Mar 3:4076862. doi:10.1155/2019/4076862.
9. Fantini, A.P, Glickman, E.L., **Ridgel, A.L.** (2019) [The Effects of Açai \(*Euterpe Oleracea Mart*\) on Delayed Onset Muscle Soreness in Collegiate Male Athletes and Non-Athletes](#). *Journal of Exercise and Nutrition* 2(1). Open Access
10. Pollock, B.S., Petersen, J, Calvo, D, Gerhart, H, Burns, K, McDaniel, J, Spitznagel, M. **Ridgel, AL.** (2018) [The effects of a 7-day water aerobics exercise intervention on the cerebral hyperemic response to a cognitive task in individuals with Multiple Sclerosis](#). *Journal of Exercise and Nutrition* 1(3). Open Access
11. Chapman, KR, Anderson, BA, Calvo, D, Pollock, B.S., Petersen, J, Gerhart, H, **Ridgel, AL**, Spitznagel, M. (2018). [Lower Aerobic Endurance Linked to History of Depression in Multiple Sclerosis: Preliminary Observations](#). *Journal of Neuroscience Nursing* 50(3):167-170
12. Sajatovic, M., **Ridgel, A.L.**, Walter, E.M., Tatsuoka, C, Colón-Zimmermann, C., Ramsey, R.K., Welter, E., Gunzler, S.A., Whitney, C., Walter, B.L. (2017) [A randomized trial of individual versus group-format exercise and self-management in individuals with Parkinson's disease and comorbid depression](#). *Patient Preference and Adherence*. 11:965-973
13. Peacock CA, Sanders GJ, Wilson KA, Fickes-Ryan EJ, Corbett DB, **Ridgel, AL** (2016) [Effects of an Exercise Intervention on Body Composition in Older Adult Males Diagnosed with Parkinson's disease: A Brief Report](#). *Journal of Physiotherapy & Physical Rehabilitation* 1:102.
14. Mohammadi-Abdar, H., **Ridgel A**, Phillips, R, Walter, B., Discenzo F, Loparo K. (2016) [Test and Validation of a Smart Exercise Bike for Motor Rehabilitation in Individuals with Parkinson's disease](#). *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. 24(11):1254-1264
15. Alberts JL, Phillips M, Lowe MJ, Frankemolle A, Thota A, Beall EB, Feldman M, Ahmed A, **Ridgel AL.** (2016) [Cortical and motor responses to acute forced exercise in Parkinson's disease](#). *Parkinsonism and Related Disorders* 24:56-62
16. **Ridgel, A.L.**, Walter, B.L., Tatsuoka, C, Walter, E.M., Colón-Zimmermann, K., Welter, E., Sajatovic, M (2016) [Enhanced Exercise Therapy in Parkinson's disease: A comparative effectiveness trial](#). *Journal of Science and Medicine in Sport*. 19(1):12-17
17. Mohammadi-Abdar, H., **Ridgel A**, Discenzo F, Loparo K. (2016) [Design and Development of a Smart Exercise Bike for Motor Rehabilitation in Individuals with Parkinson's disease](#). *IEEE/ASME Transactions on Mechatronics*. 21(3):1650-1658
18. **Ridgel, A.L.**, Phillips, R, Walter, BL, Discenzo, F.M., Loparo, K.A. (2015) [Dynamic high-cadence cycling improves motor symptoms in Parkinson's disease](#). *Frontiers in Neurology*. Sep 2;6:194.

19. Kim, C.-H., Ryan, E. J., Seo, Y., Peacock, C., Gunstad, J., Muller, M. D., **Ridgel, A.L.** Glickman, E. L. (2015). [Low Intensity Exercise Does Not impact Cognitive Function during Exposure to Normobaric Hypoxia](#). *Physiology & Behavior*. 151: 24–28
20. Hadley AJ, Krival KR, **Ridgel AL**, Hahn EC, Tyler DJ. (2015). [Neural Network Pattern Recognition of Lingual-Palatal Pressure for Automated Detection of Swallow](#). *Dysphagia*. 30(2):176-87
21. Mohammadi-Abdar, H., **Ridgel A**, Discenzo F, Loparo K. (2014). [Modeling and Simulation of Power Sharing and Interaction between Riders on a Tandem Bicycle](#). *53rd IEEE Conference on Decision and Control*, Los Angeles, California, USA. 6813-6817.
22. Peacock, C.A., Sanders, G.J., Wilson, K.A., Fickes-Ryan, E.J., Corbett, D.B., **Ridgel, A.L.** (2014). [Introducing a multifaceted exercise intervention particular to older adults diagnosed with Parkinson's disease: A preliminary study](#). *Aging and Clinical Experimental Research*. 26(4):403-9.
23. **Ridgel, A.L.**, Narducci, E., Corbett, D.B (2013). [Effects of repeated bouts of segmental vibration therapy on balance in Parkinson's disease](#). *International Journal of Physical Medicine & Rehabilitation*. 1:104
24. Corbett, D.B, Peer, K.S., **Ridgel, A.L.** (2013). [Biomechanical muscle stimulation and active-assisted cycling improves active range of motion in individuals with Parkinson's disease](#), *Neurorehabilitation*. 33(2):313-22.
25. **Ridgel, A.L.**, Abdar, H.M., Alberts, J.L., Discenzo, F.M., Loparo, K.A. (2013). [Variability in cadence during forced and voluntary cycling predicts motor improvement in individuals with Parkinson's disease](#). *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 1(3): 481 - 489
26. **Ridgel, A.L.**, Peacock, C.A., Fickes, E.J. Kim, C-H. (2012) [Active-assisted cycling improves tremor and bradykinesia in Parkinson's disease](#). *Archives of Physical Medicine and Rehabilitation*. 93(11): 2049-2054.
27. **Ridgel, A.L.**, Muller, M.D., Kim, C-H, Fickes, E.J., Mera T.O. (2011) [Acute effects of passive leg cycling on upper extremity tremor and bradykinesia in Parkinson's disease](#). *The Physician and Sportsmedicine* 39(3). 83-93.
28. **Ridgel, A.L.**, Kim, C-H, Fickes, E.J., Muller, M.D. & Alberts, J.L. (2011) [Changes in executive function after acute bouts of passive cycling in Parkinson's patients](#). *Journal of Aging and Physical Activity*. 19:87-98.
29. **Ridgel, A.L.**, Thota, A., Vitek, J.L. and J.L. Alberts. (2009). [Forced, not voluntary, exercise improves motor function in Parkinson's disease patients](#). *Neurorehabilitation and Neural Repair*. 23(6), 600-608.
30. Rosenstein, L., **Ridgel, A. L.**, Thota, A., Samame, B., & Alberts, J. L. (2008). [Effects of combined robotic therapy and repetitive-task practice on upper-extremity function in a patient with chronic stroke](#). *Am J Occup Ther*, 62(1), 28-35.
31. Ritzmann, R. E., **Ridgel, A. L.**, & Pollack, A. J. (2008). Multi-unit recording of antennal mechano-sensitive units in the central complex of the cockroach, *Blaberus discoidalis*. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol*, 194(4), 341-360.
32. **Ridgel, A. L.**, Alexander, B. E., & Ritzmann, R. E. (2007). Descending control of turning behavior in the cockroach, *Blaberus discoidalis*. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol*, 193(4), 385-402.

33. **Ridgel, A. L.,** & Ritzmann, R. E. (2005). Effects of neck and circumoesophageal connective lesions on posture and locomotion in the cockroach. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol*, 191(6), 559-573.
34. Ritzmann, R. E., Pollack, A. J., Archinal, J., **Ridgel, A. L.,** & Quinn, R. D. (2005). Descending control of body attitude in the cockroach *Blaberus discoidalis* and its role in incline climbing. *J Comp Physiol A Neuroethol Sens Neural Behav Physiol*, 191(3), 253-264.
35. **Ridgel, A. L.,** & Ritzmann, R. E. (2005). Insights into age-related locomotor declines from studies of insects. *Ageing Res Rev*, 4(1), 23-39.
36. **Ridgel, A. L.,** Ritzmann, R. E., & Schaefer, P. L. (2003). Effects of aging on behavior and leg kinematics during locomotion in two species of cockroach. *J Exp Biol*, 206(Pt 24), 4453-4465.
37. **Ridgel, A. L.,** Frazier, S.F., & Zill, S. N. (2003). Post-embryonic development of cuticular caps of campaniform sensilla of the cockroach leg: potential implications in scaling force detection. *Arthropod Struct Dev*, 32(2-3), 167-173.
38. **Ridgel, A. L.,** Frazier, S. F., & Zill, S. N. (2001). Dynamic responses of tibial campaniform sensilla studied by substrate displacement in freely moving cockroaches. *J Comp Physiol [A]*, 187(5), 405-420.
39. **Ridgel, A. L.,** Frazier, S. F., DiCaprio, R. A., & Zill, S. N. (2000). Encoding of forces by cockroach tibial campaniform sensilla: implications in dynamic control of posture and locomotion. *J Comp Physiol [A]*, 186(4), 359-374.
40. **Ridgel, A. L.,** Frazier, S. F., DiCaprio, R. A., & Zill, S. N. (1999). Active signaling of leg loading and unloading in the cockroach. *J Neurophysiol*, 81(3), 1432-1437.
41. Zill, S. N., **Ridgel, A. L.,** DiCaprio, R. A., & Frazier, S. F. (1999). Load signalling by cockroach trochanteral campaniform sensilla. *Brain Res*, 822(1-2), 271-275.
42. **Wonsettler, A.L.*** and J.F. Webb. (1997). Morphology and development of the multiple lateral line canals on the trunk of two species of Hexagrammos (Scorpaeniformes: Hexagrammidae). *Journal of Morphology* 233:195-214. *- Maiden name

Book Chapters- Invited

1. **Ridgel, A.L** and B. Pollock. Parkinson's disease. *In: Clinical Exercise Physiology. 5th edition.* Eds: Ehrman, JK, Gordon, PM, Visch, PS, Keteyian, SJ. (In press) Champaign, IL, Human Kinetics.
2. **Ridgel, A.L** and B. Pollock. Parkinson's disease. *In: Clinical Exercise Physiology. 4th edition.* Eds: Ehrman, JK, Gordon, PM, Visch, PS, Keteyian, SJ. (2019) Champaign, IL, Human Kinetics. ISBN-13: 978-1492546450
3. **Ridgel, A.L.,** Phillips, R, Walter, BL, Discenzo, F.M., Loparo, K.A. Dynamic high-cadence cycling improves motor symptoms in Parkinson's disease. Pp. 54-61. *In: Sound, Music and Movement in Parkinson's Disease.* Bienkiewicz, M. M. N., Craig, C., eds. (2016). Lausanne: Frontiers Media (e-book). doi: 10.3389/978-2-88945-079-4

Patents and Technology Transfer

1. **Ridgel,** Loparo, Discenzo, Abdar, "[Bike System for Use in Rehabilitation of a Patient](#)", US 10,058,736, 08/28/18
2. **Ridgel,** Loparo, Discenzo, Abdar, "[Bike System for Use in Rehabilitation of a Patient](#)", US 9,802,081, 10/31/17

Popular press articles

1. Ridgel, Angela. August/September 2011. "Don't Kick Up Your Feet." Ohio Sports and Fitness Magazine
2. Ridgel, Angela. June/July 2011. "Going the Full Distance". Ohio Sports and Fitness Magazine
3. Ridgel, Angela. April/May 2011. "One bike, Two bike, Road bike, Du bike." Ohio Sports and Fitness Magazine
4. Ridgel, Angela. Feb/March 2011. "Don't resist resistance." Ohio Sports and Fitness Magazine
5. Ridgel, Angela. Dec/Jan 2011. "Fight the cold." Ohio Sports and Fitness Magazine
6. Ridgel, Angela. June/July 2010. "Nuts and bolts of pre-race tapers." Ohio Sports and Fitness Magazine
7. Ridgel, Angela. May 2010. "The who's who of multisport teams." Ohio Sports and Fitness Magazine
8. Ridgel, Angela. April 2010. "Head in the right direction: road race." Ohio Sports and Fitness Magazine
9. Ridgel, Angela. March 2010. "Hit the trails and help your race." Ohio Sports and Fitness Magazine
10. Ridgel, Angela. February 2010. "It's a girl thing: women's only triathlon" Ohio Sports and Fitness Magazine
11. Ridgel, Angela. January 2010. "Chose a coach" Ohio Sports and Fitness Magazine
12. Ridgel, Angela. October/November 2009. "Winterize your gear" Ohio Sports and Fitness Magazine
13. Ridgel, Angela. September 2009. "Ironing out a victory" Ohio Sports and Fitness Magazine
14. Ridgel, Angela. August 2009. "Up for the challenge? Tri XTERRA" Ohio Sports and Fitness Magazine
15. Ridgel, Angela. July 2009. "The Triple-T: A race of endurance" Ohio Sports and Fitness Magazine
16. Ridgel, Angela. June 2009. "Duathlons: On the rise for athletes" Ohio Sports and Fitness Magazine
17. Ridgel, Angela. May 2009. "Mental training for endurance sports" Ohio Sports and Fitness Magazine
18. Ridgel, Angela. April 2009. "Recovery: An essential component for improvement" Ohio Sports and Fitness Magazine
19. Ridgel, Angela. March 2009. "Performance testing" Ohio Sports and Fitness Magazine
20. Ridgel, Angela. February 2009. "Periodization and training logs" Ohio Sports and Fitness Magazine
21. Ridgel, Angela. October/November 2008. "Avoid the late season blues" Ohio Sports and Fitness Magazine
22. Ridgel, Angela. September 2008. "The Era of Women-Specific Designed Bikes" Ohio Sports and Fitness Magazine

23. Ridgel, Angela. July 2008. "Tips for open water swimming" Ohio Sports and Fitness Magazine
24. Ridgel, Angela. June 2008. "Fueling for success in multisport" Ohio Sports and Fitness Magazine

Written Press about Research

Kent Wired, [KSU professors' research shows ballroom dance is beneficial for people living with Parkinson's](#), 7/18/19

Record Courier, [Kent Researchers Examine Ballroom Dance Effects on Parkinson's](#), 6/16/19

Brain and Life, [Smart Ways to Cycle Safely](#), Aug/Sept 2018

Record Courier, [KSU Summit: Doing the best for our brains](#), 3/21/18

Kent State Magazine, [Optimal Aging](#), 2/23/18

Kent State University Website, [Kent State University Professor Receives Patent for New Cycle to Help Parkinson's Sufferers](#), 12/18/17

Record Courier, ['KSU research helps Parkinson patients'](#), 7/5/2016

Research for Life magazine, Kent State University, Featured in ['Adding life to years and years to life'](#), 2013, pg. 20-23

Afro.com, quoted in ['Exercise class gives hope to Parkinson's patients'](#), 6/13/2012

Crain's Cleveland, Featured in ['Bright Spots'](#), 5/10/2012

Record Courier, "KSU Professor leading two projects to aid Parkinson's patients", 3/4/12

The Saturday Evening Post, ["Parkinson's Research Update"](#), 6/27/09

Akron Beacon Journal, ["Parkinson's study: A Revolutionary Idea"](#), 6/15/09

The Plain Dealer, 4/21/09

Canton Repository, 4/10/09

Kent State Magazine, Cover article, ["Cycling for a cure"](#), Summer 2009

Kent Daily Stater, ["Pedaling away Parkinson's"](#), 9/30/2008

TV/Video/Radio

[Academic Minute](#), NPR, 4/2021

Becoming Elli Podcast, Expert Guest, 10/2019

It's All About Health & Fitness Radio Podcast, Expert Guest, 8/2014

WKSU Feature, Measuring progress in Parkinson's research, 11/2013

KSU Video Feature, 3/2012

Youngstown's WMFJ (NBC affiliate), Health Report, 4/2009

WRTV Evening News, Indianapolis, 4/2009

MSNBC Nightly News, 'Pedaling away Parkinson's', 9/2008

PRESENTATIONS

Professional Meetings- Presenting author

1. **Ridgel, AL**, Gates, P., Melczak, R., Optimization of the SMART dynamic bike to improve motor function in Parkinson's disease. Society for Neuroscience Meeting, Abstract submitted for Nov 2021 Annual Conference (Virtual)

2. **Ridgel, AL**, Gates, P., Melczak, R., Optimization of the SMART dynamic bike to improve motor function in Parkinson's disease. American College of Sports Medicine Meeting, June 2021 (Virtual)
3. **Ridgel, A.L.**, Garbin, A.J., Chung, Y-C, Axelrod, J., Yassa, S., Fisher, B.E. Effects of cycling cadence variability on motor function and cortical inhibition in Parkinson's disease. Society for Neuroscience Meeting- Oct 2019
4. **Ridgel, AL**, Kim, J-H, Gates, P., Melczak, R., Discenzo, F, Busch, M, Meggitt, J. Optimizing Dance Interventions to Improve Motor Function in People with Parkinson's Disease and Older Adults, American College of Sports Medicine Meeting, May 2019
5. **Ridgel, A.L.**, Chung, Y-CY, Hershberg, J., Brown, C. Fisher, B.E. Does high-cadence cycling promote changes in inhibitory brain circuits in Parkinson's disease? Society for Neuroscience Meeting November 2018.
6. **Ridgel, AL**, Harper, SA, Dowdell, BT Pollock, B.S. The effects of high-cadence cycling on emotional recognition in individuals with Parkinson's disease, American College of Sports Medicine Meeting, May 2018
7. **Ridgel, AL**, Ault, DL. Dynamic Cycling Improves Motor Symptoms and Mobility In Individuals with PD. American College of Sports Medicine Meeting, June 2017
 - a. **Ridgel, A.L.**, Ault, D. Dynamic cycling improves motor symptoms and mobility in individuals with PD. Journal of Parkinson's disease 6(s1). 4rd World Parkinson Congress- October 2016. (same project as above)
8. **Ridgel, AL**, Walter, B., Mohammadi-Abdar, H, Discenzo, FM., Loparo, KA. Variability in functional improvements after dynamic cycling. American College of Sports Medicine Meeting- May 2015
9. **Ridgel, AL**, Phillips, RS, Wilson, KA, Walter, B., Discenzo, FM., Loparo, KA. Dynamic cycling improves motor symptoms in Parkinson's disease. Society for Neuroscience Meeting- November 2014
 - a. **Ridgel, AL**, Phillips, RS, Wilson, KA, Walter, B., Discenzo, FM., Loparo, KA. Development of an intelligent bicycle for rehabilitation in Parkinson's disease. 3rd World Parkinson Congress- October 2013. Selected as top 25% of submissions for Poster Tour. (same project as above)
10. **Ridgel, A. L.**, Fickes-Ryan, E. J., & Wilson, K. A. (2013). Effects of active-assisted cycling on motor function and balance in Parkinson's disease. Journal of the Neurological Sciences, 333, Supplement 1(0), e91.
11. **Ridgel, AL**. Wilson, KA, Phillips, RS, Walter, B., Bradykinesia and Reaching Motor Skills Are Improved after Dynamic Cycling in Parkinson's disease. American College of Sports Medicine Meeting- May 2013
12. **Ridgel, A.L.**, Fickes E. J., Peacock, C, Wilson, K , Williamson, M.L., Interval Active Assisted Cycling Improves Balance in Individuals with Parkinson's disease. American College of Sports Medicine Meeting- May 2012
13. **Ridgel A.L.**, Peacock C., Gunstad J., Glickman, E. Benefits of upper versus lower extremity cycling on cognitive function in individuals with Parkinson's disease. Society for Neuroscience Annual Meeting- Nov. 2011.

14. **Ridgel, AL.**, Peacock, C, Corbett, D., Sanders, G., Peer, K.S. 2011. Acute effects of local biomechanical muscle stimulation and active-assisted cycling on range of motion in Parkinson's disease. American College of Sports Medicine Meeting- May 2011
15. **Ridgel, A.L.**, C. Peacock, E.J. Fickes, C-H. Kim. 2010. Effects of active-assisted cycling on upper extremity motor and executive function in Parkinson's disease. Society for Neuroscience Meeting- November 2010
16. **Ridgel, A.L.**, Muller, M.D., Kim, C-H, Fickes, E.J., Wilson, K, Mera, T.O. Alberts, J.L. (2009) Effects of pedaling rate on upper extremity motor improvements during passive leg cycling in Parkinson's disease. Society for Neuroscience Meeting
17. **Ridgel, A.L.**, Vitek, J.L, Phillips, M. J., Lowe, M.L. Hutson, M, Alberts, J.L. (2009) Improved motor function and cortical activation in Parkinson's disease patients following acute forced-exercise. American College of Sports Medicine Annual Meeting
 - a. **Ridgel, A.L.** Vitek, J.L., Alberts, J.L. (2008). Forced-exercise improves motor function in human Parkinson's disease patients. American College of Sports Medicine Annual Meeting (same project as above)
 - b. **Ridgel, A.L.** Vitek, J.L., Alberts, J.L. (2007). Forced-exercise improves motor function in human Parkinson's disease patients. Society for Neuroscience Meeting (same project as above)
18. **Ridgel, A.L.** A.J. Pollack, M. Partusch, R.E. Ritzmann and K.C. Daly. (2005) Role of brain circuits during transitional locomotion in the cockroach. Society for Neuroscience Meeting
19. **Ridgel, A.L.**, R.E. Ritzmann and P.L. Schaefer. (2003) Effects of aging on behavior and leg kinematics in the cockroach. Society for Neuroscience Meeting
20. **Ridgel, A.L.**, B.E. Alexander, L. Mu, R.E. Ritzmann and N.J. Strausfeld. (2002) Roles of descending control in insect turning. Society for Neuroscience Meeting.
21. **Ridgel, A.L.**, S.F. Frazier and S.N. Zill. (2000). Effects of cockroach force receptors in freely moving animals: dynamic signals of leg loading during walking and climbing. Society for Neuroscience Meeting.
22. **Ridgel, A.L.**, S.F. Frazier and S.N. Zill. (1999). Sensory and motor activities during postural load compensatory reactions in the cockroach. Society for Neuroscience Meeting.
23. **Ridgel, A.**, R. DiCaprio, S. Frazier and S. Zill. (1998). Campaniform sensilla respond to decreases in tensions and increases in compression: a form of 'anticipatory' signaling in posture and locomotion. International Society for Neuroethology Meeting.
24. **Ridgel, A.L.**, S.F. Frazier, L.A. Quimby and S.N. Zill. (1997). Functional correlates of anatomy and development in a force-sensing array. Society for Neuroscience Meeting.
25. **Wonsettler, A.L.** * (1995). The development of the lateral line system in hexagrammid fishes. American Zoologist. 35(4): 107A.

*Maiden name

Professional Meetings- Student/Post-doc Mentoring

1. Gates, P., Melczak, R., Ridgel, AL. Optimization of high-cadence cycling parameters to improve motor function in people with Parkinson's disease (P118.03), Society for Neuroscience Global Connectome, Jan. 2021 (Virtual)

2. Lemke, Z., Gates, P., Kim, J-H; Discenzo, F, Ridgel, AL, Sample Entropy Analysis Of Dance Interventions In People With Parkinson's Disease And Older Adults American College of Sports Medicine Meeting, May 2020 (virtual)
3. Axelrod, J., Garbin, A.J., Chung, Y-C, Yassa, S., Ridgel, A.L., Fisher, B.E. Effects of cycling cadence variability on motor function and cortical inhibition in Parkinson's disease, Combined Sections Meeting (CSM), Feb. 2020
4. Narducci, E.A., Ridgel, A.L. Static Versus Dynamic Stretching on Fall Risk, Balance & Muscle Function in Older Adults, Combined Sections Meeting (CSM), Feb. 2020
5. Gates, P., Kim, J-H; Melczak, R., Meggitt, J., Discenzo, F, Ridgel, AL, Optimizing Dance Interventions To Improve Motor Function In People With Parkinson's Disease And Older Adults, Computational Biology Symposium, Dec. 2019
6. Kim, J-H., Ridgel, AL, Effects of motor timing training on the golf swing in individuals with Parkinson's disease. Society for Neuroscience Meeting, Oct. 2019
7. Gates, P., Kim, J-H; Melczak, R., Meggitt, J., Discenzo, F, Ridgel, AL, Optimizing Dance Interventions To Improve Motor Function In People With Parkinson's Disease And Older Adults, Society for Neuroscience Meeting, Oct. 2019
8. Gates, P., Kim, J-H; Melczak, R., Discenzo, F, Busch, M, Meggitt, J., Ridgel, AL, Optimizing Dance Interventions To Improve Motor Function In People With Parkinson's Disease And Older Adults, The Cleveland Brain Health Initiative Annual Retreat August 2019
9. Gates, P., Kim, J-H; Melczak, R., Discenzo, F, Busch, M, Meggitt, J. Ridgel, AL, Optimizing Dance Interventions To Improve Motor Function In People With Parkinson's Disease And Older Adults, 7th Annual Neuroscience Symposium at Kent State University, April 2019
10. Varner, A., Dowdell, BT, Harper, SA, Pollock, BS., Kim, J-H, Ridgel, AL. Does High-Cadence Cycling Improve Depression in Individuals With Parkinson's Disease?, 2019 Kent State Undergraduate Research Forum (won 1st place in Best Presentation competition).
11. Dowdell, BT, Harper, SA, Pollock, BS, Varner, A., Kim, J-H, Ridgel, AL. Does High-Cadence Cycling Improve Emotional Recognition in Individuals With Parkinson's Disease?, 2019 Kent State Graduate Research Forum (won 1st place in Best Presentation competition).
12. Dowdell, BT, Noll, K. Ridgel, AL. The efficacy of dynamic cycling in an individual with ALS: a case study., American College of Sports Medicine Meeting, May 2018
13. Dowdell, BT, Harper, SA, Pollock, BS, Varner, A., Kim, J-H, Ridgel, AL. Does High-Cadence Cycling Improve Emotional Recognition in Individuals With Parkinson's Disease?, American College of Sports Medicine Meeting, May 2019 (accepted)
14. Dowdell, BT, Harper, SA, Pollock, BS, Varner, A., Kim, J-H, Ridgel, AL. Does High-Cadence Cycling Improve Emotional Recognition in Individuals With Parkinson's Disease?, Mid-West American College of Sports Medicine Meeting, Nov. 2018
15. Varner, A., Dowdell, BT, Harper, SA, Pollock, BS., Kim, J-H, Ridgel, AL. Does High-Cadence Cycling Improve Depression in Individuals With Parkinson's Disease?, Mid-West American College of Sports Medicine Meeting, Nov. 2018
16. Dowdell, BT, Noll, K. Ridgel, AL. The efficacy of dynamic cycling in an individual with ALS: a case study., Midwest American College of Sports Medicine Meeting, November 2017
17. Harper, SA, AL Ridgel. Val66met Polymorphism's Influence On Depression Symptoms And Responses To Exercise In Individuals With Parkinson's Disease. American College of Sports Medicine Meeting, June 2017

18. Pollock, B.S., Petersen, J, Gerhart, H, McDaniel, J., Spitznagel, MB, Ridgel, AL. The Effects of Water Aerobics Exercise on Cerebral Perfusion in Multiple Sclerosis. American College of Sports Medicine Meeting, June 2017
19. Pollock, B.S., Petersen, J, Calvo, D, Gerhart, H, McDaniel, J, Spitznagel, M, Ridgel, AL. The effects of water aerobics exercise on cerebral perfusion in multiple sclerosis, Midwest American College of Sports Medicine Meeting, November 2016
20. Harper, SA and Ridgel, AL. Effects of Val66Met polymorphism on depression and responses to exercise in individuals with Parkinson's disease Midwest American College of Sports Medicine Meeting, November 2016
21. Pollock, BS, Burns, K. Boka, K. Ridgel, AL, McDaniel J. Vascular function in Parkinson's disease patients. Journal of Parkinson's disease 6(s1). 4rd World Parkinson Congress- October 2016.
22. Petersen, J, Calvo, D, Gerhart, H, Spitznagel, M, Ridgel, AL. Effects of brief aquatic exercise on cardiovascular fitness and cerebral oxygenation in Multiple Sclerosis. Society for Neuroscience Meeting- November 2015
23. Decker, M.N., Chinn, L., Jonas, J., Ridgel, A, Peer, K.S. Gender Differences and the Impact of Fatigue on the Star Excursion Balance Test. American College of Sports Medicine Meeting- May 2015
24. Phillips, RS, Ridgel, AL. Individuals with Parkinson's Disease Benefit From A Single Bout of Dynamic Cycling. American College of Sports Medicine Meeting- May 2014
25. Phillips, RS, Wilson, KA, Ridgel, AL. Bradykinesia and timed up and go are improved after dynamic cycling in Parkinson's disease, 3rd World Parkinson Congress- October 2013
26. Peacock, CA, Wilson, KA, Sanders, GJ, Corbett, DB, Fickes EJ, Glickman EL, Ridgel, AL. Parkinson's disease patients tolerate multifaceted exercise intervention while improving health-related physical fitness. American College of Sports Medicine Meeting- May 2013
27. Wilson, KA, Phillips, RS, Abdar, HM, Discenzo, FM., Loparo, KA, Ridgel, AL. Dynamic Cycling Promotes Upper Extremity Motor Improvements in Parkinson's disease. American College of Sports Medicine Meeting- May 2013
28. Phillips, RS, Wilson, KA, Ridgel, AL. Individuals with Parkinson's disease Show Improved Timed Up and Go and 6-min Walk Test Scores After Dynamic Cycling American College of Sports Medicine Meeting- May 2013
29. Pollock, BS, Burns, KJ, Ridgel, AL, McDaniel, J. Vascular Function in Parkinson's disease Patients. American College of Sports Medicine Meeting- May 2013
30. Burns KJ, Pollock, BS, Ridgel, AL, McDaniel, J. Hemodynamic and Vascular Responses To Handgrip Exercise In Parkinson's Disease. American College of Sports Medicine Meeting- May 2013
31. Peroutky, K, Pollock, BS, Burns KJ, McDaniel, J., Ridgel, AL. Validity of Handgrip Exercise to Study Vascular Function in Parkinson's disease. American College of Sports Medicine Meeting- May 2013
32. Peacock, C.; Corbett, D.; Sanders, G, Fickes E, Wilson K., Seo Y., Glickman E., Ridgel A. Exercise Intervention Improves Body Composition in Both the Elderly and Individuals with Parkinson's disease. American College of Sports Medicine Meeting- May 2012

33. Corbett, D.; Peacock, C.; Sanders, G; Glickman E.; Ridgel, A. Eight Week Exercise Intervention Improves Physical Fitness in Healthy Elderly and Those with Parkinson's disease. American College of Sports Medicine Meeting- May 2012
34. Wilson, K, Fickes, E. J., Peacock, C., Williamson, M.L., Ridgel, A.L. Interval Active Assisted Cycling Improves Motor Function in Individuals with Parkinson's disease. American College of Sports Medicine Meeting- May 2012
35. Knecht, K. M. Alosco, CA Peacock, DB Corbett, G Sanders, EJ Fickes, Y Seo, EL Glickman, J. Gunstad, AL Ridgel. Effects of exercise on memory and frontal processing in individuals with Parkinson's disease. American College of Sports Medicine Meeting- May 2012
36. Corbett, D., Peacock, C, Sanders, G, &. Ridgel, AL. 2011. Acute effects of biomechanical muscle stimulation and active-assisted cycling on mobility in Parkinson's disease. American College of Sports Medicine Meeting- May 2011
37. Kim, C-H, Muller, MD., Fickes, EJ., Alberts, JL., Ridgel, A.L. 2010. Acute Bouts of Passive Leg Cycling Can Improve Cognitive Function in Parkinson's Patients. American College of Sports Medicine Meeting- June 2010
38. Fickes, EJ., Kim, C-H, Muller, MD., Alberts, JL., Ridgel, A.L. 2010. The Effects of Passive Cycling on Tremor and Motor Function in Individuals with Parkinson's disease. American College of Sports Medicine Meeting- June 2010
39. Phillips, M.D., Ridgel, A.L., Koenig K., Beall E., Lowe M.J. and Alberts J. L. (2009) Comparison of Motor Function and Cortical Activation in Parkinson's Disease Patients Following Acute Forced-Exercise and Levodopa Therapy. International Society for Magnetic Resonance in Medicine Meeting
40. Alberts, J.L., Ridgel, A.L. Vitek, J.L. Lowe, M.J. and Phillips M.D. (2008). Improved motor function and cortical activation in Parkinson's disease patients following acute forced-exercise. Society for Neuroscience Meeting
41. Pollack, A.J., A.L. Ridgel, and R.E. Ritzmann. (2006) Multi-unit recording in cockroach brain associated with antennal mediated turning. Society for Neuroscience Meeting.
42. Mu, L., A.L. Ridgel, B.E. Alexander, R.E. Ritzmann. (2003) The role of brain neuropils during turning in the cockroach. Society for Neuroscience Meeting.
43. Pollack, A.J., R.E. Ritzmann, A.L. Ridgel, J. Archinal. (2003) Incline climbing behaviors in cockroach require intact connections from brain. Society for Neuroscience Meeting.
44. Zill, S., J. Noah, L. Quimby, A. Ridgel, D. Neff, S. Frazier and D. Harshbarger. (2001). Let it swing: signals of decreasing force and the cascade of events accompanying leg lifting in cockroaches. Society for Neuroscience Meeting.
45. Ritzmann, R.E, C.M. Rice, A.J. Pollack, K.E. Otto, A.L. Ridgel, D.A. Kingsley and R.D. Quinn. (2001). Roles of descending control in locomotion through complex terrain. International Society for Neuroethology Meeting.
46. Noah, J.A., A.L. Ridgel, S.F. Frazier and S.N. Zill. (2000). Load signalling and the rules of leg coordination in cockroaches. Society for Neuroscience Meeting.
47. DiCaprio, R.A., A.L. Ridgel and S.N. Zill. (1998). Modeling detection of changing forces in an insect leg: White noise analysis of cockroach tibial campaniform sensilla. International Society for Neuroethology Meeting.
48. DiCaprio, R.A., A.L. Ridgel, S.F. Frazier and S.N. Zill. (1997). Measuring forces in an insect leg. Society for Neuroscience Meeting.

49. Webb, J.F. and A.L. Wonsettler (Ridgel). (1996). Development of lateral line canals: Are neuromasts necessary? American Society for Ichthyology and Herpetology Meeting.

Invited Presentations

1. "Optimizing dance interventions to promote neuroplasticity" KSU Brain Health Research Initiative Seminar Speaker, 10/2019
2. "Is Exercise Medicine for the Brain?" University Hospital Neurology Grand Rounds, 2/2018
3. "[Exercise to rewire the brain](#)". Invited seminar speaker at KSU Alumni Association, 11/2017
4. "The Benefits of Exercise and Movement Training on Motor Function in Individuals with Parkinson's Disease". Invited seminar speaker at National Parkinson's Foundation Ohio, 10/2017
5. "The effects of dynamic cycling on motor function and cortical inhibition in Parkinson's disease". Invited seminar speaker at Re+Active Physical Therapy, 7/2017
6. "Exercise is Medicine for the Brain", Ohio State University Neurology Grand Rounds, 4/2017
7. "Can exercise promote rewiring of the injured brain?", KSU Research and Innovation Forum, 2/2017
8. "[Exercise is Medicine for the Brain](#)", Invited speaker at TEDx Kent, 2/2017
9. "An overview of exercise research in PD: just keep moving". Invited speaker at Take Control: A Symposium to Advance Research on Parkinson's disease", NEOMED, 5/2016
10. "The benefits of high-cadence cycling in individuals with Parkinson's disease", Invited speaker at InMotion Community Center, 5/2016
11. "Adaptive engineering for rehabilitation in Parkinson's disease". Invited speaker at meeting of Rockwell Society of Women Engineers, 2/2016
12. "Neurorehabilitation using high-cadence cycling in Parkinson's disease". Invited seminar speaker at Laboratory of Neuro Imaging, Keck School of Medicine of USC, 1/2016
13. "Neurorehabilitation using high-cadence cycling in Parkinson's disease". Invited seminar speaker at University of Southern California, Division of Biokinesiology and Physical Therapy, 1/2016
14. "Neuroplasticity in Parkinson's disease". Invited seminar speaker at Case Western Reserve University, Biology Department, 10/2015
15. Retraining the nervous system to reduce the risk of falls in Parkinson's disease. Kent State University Symposium on Aging, Kent State University, 2014
16. "Neuroplasticity in Parkinson's disease". Invited seminar speaker at Kent State University, Research Seminar Class, 2014
17. "Development of an intelligent bicycle for Parkinson's disease: The SMARTbike". Invited seminar speaker at Youngstown State University, 2013
18. "Development of an intelligent bicycle for Parkinson's disease: The SMARTbike". Invited seminar speaker at Arizona State University, 2013
19. "Development of an intelligent bicycle for Parkinson's disease: The SMARTbike". Guest Lecturer in Interdisciplinary Seminar in Gerontology, Kent State University, 2013
20. "Exercise is Medicine in Parkinson's disease". Keynote Speaker at Northeast Ohio Exercise Science Conference, 2012

21. "Dance and Movement Therapy in Parkinson's Disease". Keynote Speaker at University Hospital Parkinson's disease boot camp, 2011
22. "A circuitous path from insects to Parkinson's disease: How the brain controls movement". Keynote Speaker at Marshall University Biomedical Sciences Retreat, 2010
23. "Improved motor function and cortical activation in Parkinson's disease patients following forced-exercise", Dept. of Integrative Medical Sciences, Northeastern Ohio Universities Colleges of Medicine and Pharmacy, 2009
24. "Forced-exercise improves motor function in Parkinson's disease", Dept. of Health Sciences, Cleveland State University, 2008
25. "The control of legged locomotion in complex terrain", Dept. of Biology, John Carroll University, 2005
26. "Insect neuromechanical design for improved robotic mobility", Case Western Reserve University Freshman Orientation, 2004
27. "Role of descending control in legged locomotion", Dept. of Neuroscience, Oberlin College, 2004
28. "Role of descending control in leg movement during complex locomotor tasks" Dept. of Neurobiology, Northeastern Ohio Universities College of Medicine, 2002
29. "Effects of cockroach force receptors in freely moving animals: dynamic signals of leg loading during walking and climbing", Dept. of Biology, Pikeville College, 2001

GRANT/CONTRACT ACTIVITY

In Review

1. Remote dynamic cycling for the customized off-site rehab in Parkinson's disease., Co-Investigator; Principal Investigator- Aasef Shaikh (Cleveland VA Medical Center), VA Rehabilitation R&D Merit Review. Submitted June 2021.

External and Internal Grants Funded

2024-2021

1. Study in Parkinson Disease of Exercise Phase 3 Clinical Trial: SPARX3, Co-Investigator and Site PI, Principal Investigator- Daniel Corcos (Northwestern University), NIH 1U01NS113851-01, 4/2020-9/2024, \$1,263,465 (subcontract)

2020-2019

1. Study in Parkinson Disease of Exercise Phase 3 Clinical Trial: SPARX3, Co-Investigator and Site PI, Principal Investigator- Daniel Corcos (Northwestern University), NIH 1U01NS113851-01, 4/2020-9/2024, \$6000 (subcontract)
2. Can exercise alter regulation of gene expression and slow neurodegeneration in Parkinson's disease?, Co-PI with Helen Piontkivska, HCRI Seed Grant, 2020HCRI09, 8/2020-8/2022, \$25,000.
3. [Speed Manipulated Adaptive Rehabilitation Therapy \(SMART\) for Parkinson's disease](#), Principal Investigator, Co-Investigator, Kenneth Loparo, PhD (Case Western Reserve University); Davis Phinney Foundation, July 2018- July 2022 (1 of 2 grants funded out of 54 applications), \$49,999

4. Speed Manipulated Adaptive Rehabilitation Therapy (SMART) bike for Parkinson's disease, Principal Investigator, TeCK Fund, KSU/CSU Collaborative Fund, April 2018-Dec 2019, \$90,000

2018-2017

1. Optimizing dance interventions to improve motor function and mental well-being in people with Parkinson's disease and healthy older adults with Joan Meggitt (School of Theater and Dance), Brain Health Research Institute (BHRI) Pilot Program SEED Grant, 4/25/18, \$ 9,786
2. Adaptive therapy to optimize neurorehabilitation in Parkinson's disease, 2018 Mid-Career EHHS internal SEED Awards, 3/15/2018, \$5000
3. Effects of Brain Derived Neurotrophic Factor (BDNF) Val66Met polymorphism on cognitive and motor function in individuals with Parkinson's disease, KSU URC, Research Funds, 3/18, \$3250
4. The association between orthostatic hypotension and cognitive dysfunction in Parkinson's disease, KSU URC, Research Funds, 4/17, \$450

2015-2016

1. Adaptive Rehabilitation Device, Principal Investigator, Co-Investigator, Brandon Pollock, National Science Foundation, University of Akron, I-Corps Mini Grant, 05/01/2015 - 04/30/2016, \$2,500
2. Cognitive benefits of exercise in individuals with Parkinson's disease and Multiple Sclerosis. Kent State University Internal Postdoctoral Competition Co-PI (Spitznagel/Ridgel). June 2015-May 2016, \$40,000.
3. The effects of dynamic cycling on motor function in PD, KSU URC, Page Charges, 10/15, \$475

2013-2014

1. Development of an Intelligent Bicycle for Rehabilitation in Parkinson's Disease, Principal Investigator, Co-Investigator: Kenneth Loparo, PhD, Case Western Reserve University, National Institutes of Health, National Center for Medical Rehabilitation Research, NIH Exploratory Developmental Research Grant Program (R21), 1/7/2012-12/31/2014, \$381,176
2. Effects of localized vibration using the Swisswing on delayed onset muscle soreness (DOMS) and physiological measures of muscle damage following intense eccentric cycling exercise in runners, Principal Investigator, Private Contract, KSU Foundation Non-Endowed Fund, Jan. 31, 2013-Dec 31, 2013, \$17,500

2012-2011

1. Pilot Study of EXCEED (EnhancedEXerCisETHerapyfor Patients with PD), Co-Investigator, PIs: Benjamin Walter MD and Martha Sajatovic MD, Case Western Reserve University, Case Brain Health Collaborative/ Spitz Scholar Award, 2/2012-5/2013, no distribution

2. A Brief Water-Based Exercise Intervention to Enhance Cognition in Multiple Sclerosis, Co-Investigator (Co-PI- M.B. Spitznagel), Applied Psychology Center Research Development Grant, 01/1/11-12/31/12, \$7500
3. Effects of repeated bouts of biomechanical muscle stimulation on gait, balance and motor function in Parkinson's disease, Principal Investigator, Private Contract, KSU Foundation Non-Endowed Fund, April 2011-Aug. 2011, \$28,200

2010-2008

1. Benefits of aerobic exercise on cognitive function in older adults and individuals with Parkinson's disease, Principal Investigator, Co-Investigators: John Gunstad, Ellen Glickman, The Foundation for Aging Studies and Exercise Science, Private Foundation, 6/2010-6/2011, \$5000
2. The effects of biomechanical muscle stimulation and assisted cycling on gait, bradykinesia and reflex activity in Parkinson's disease, Principal Investigator, Private Contract, KSU Foundation Non-Endowed Fund, Jan 2010-Jan. 2011, \$44,000
3. Benefits of aerobic exercise on cognitive function in older adults and individuals with Parkinson's disease, EHHS Seed Internal Grant, 11/2010-11/2012, \$5,000.
4. Effects of pedaling rate on motor function in Parkinson's disease, Division of Research and Graduate Studies, Kent State University, Research Council Grant (2009), \$500
5. The effects of acute exercise rate on motor improvements in Parkinson's disease, University Research Council, Kent State University, Summer Research and Creative Activity Appointment (2009), \$6,500
6. The effects of acute exercise rate on motor improvements in Parkinson's disease, School of Exercise Leisure and Sport Grants, Kent State University, University Grant (2008), \$500

2002-2004

1. Neural control of walking in absence of higher centers, Principal Investigator, National Institutes of Health, National Research Service Award (NRSA F32-NS-43004), 9/2002-3/2004, \$65,278

Private Donations to Research Program through Foundation Office

1. \$1000- Mr. Les Barta, Kent State University Alumni, 2017
2. \$5000- Dr. and Mrs. David Rausch, 2013
3. \$1000- Mr. Jack Lowenthal, 2013
4. \$25,000- Leslie and Nikki Barta Parkinson's Disease and Aging Research Fund, 2012
5. \$1000- Mr. Jack Lowenthal, 2012
6. \$2000- Mr. Les Barta, Kent State University Alumni, 2011

External Grants- Not funded

1. AWARES: Agile Wearable Sensor-Actuator System for Rehabilitation, Exercise and Safety., Co-Investigator; Principal Investigator- Kenneth Loparo (Case Western Reserve University), NSF Smart Health and Biomedical Research in the Era of Artificial Intelligence and Advanced Data Science. Not Discussed, 7/2021

2. Remote dynamic cycling for the customized off-site rehab in Parkinson's disease., Co-Investigator; Principal Investigator- Aasef Shaikh (Cleveland VA Medical Center), VA Rehabilitation R&D. Impact Score: 172, Percentile: 11.2, 2021
3. Move to Music program to improve Mobility and Mood, Co-Investigator, PI, Deb Kegelmeyer, PhD (Ohio State University); Davis Phinney Foundation, 2020
4. Active Motion Guidance for Parkinson's Dance, Therapy and Movement Safety. Collaborator, PI, Kenneth Loparo, PhD (Case Western Reserve); Davis Phinney Foundation, 2020
5. Home-bound adaptive dynamic cycling for the customized remote rehab in Parkinson's disease., Co-Investigator, Principal Investigator- Asaef Shaikh (Cleveland VA Medical Center), VA Rehabilitation R&D- Impact Score: 217 Percentile: 26.3
6. EXercise + PEer mentor-led RemoTe Support (EXPERT) for individuals with Parkinson's Disease and Depression, Co-Principal Investigator with Martha Sajatovic, MD, Case Western Reserve University, National Institutes of Health, NIH, R01, 1/2020, Score 44, Percentile 31.
7. Speed Manipulated Adaptive Rehabilitation Therapy (SMART) for Parkinson's disease (PD), Co-I with Kenneth Loparo (PI, CWRU), Case-Coulter Translational Research Project, 2/20
8. Dynamic cycling for the rehabilitation therapy for Parkinson's Disease, Co-Investigator, Principal Investigator- Asaef Shaikh (Cleveland VA Medical Center), BLRD Merit Review Award for Validation of Studies of Importance to Veteran Health, 12/2019
9. Real-Time Cuing with a Wireless Sensor-Actuator System Promotes Enhanced Movement and Therapy for PD, Co-Investigator, Principal Investigator- Kenneth Loparo (Case Western Reserve University), Michael J. Fox Foundation, Applied Technologies as Treatments for Parkinson's, 12/2019
10. Dynamic cycling for the rehabilitation therapy for Parkinson's Disease, Co-Investigator, Principal Investigator- Asaef Shaikh (Cleveland VA Medical Center), VA Merit Grant, 12/2018, Impact score: 223, Percentile: 41.7
11. Dynamic model-optimized individualized rehabilitation paradigms for Parkinson's disease', Co-Investigator, Kenneth Loparo, PhD (Case Western Reserve University); Aasef Shaikh, MD (Cleveland VA Medical Center), NINDS Exploratory Clinical Trial (U01), July 2018
12. Move to Music program to improve Mobility and Mood, Co-Investigator, PI, Deb Kegelmeyer, PhD (Ohio State University); Davis Phinney Foundation, July 2018
13. Mechanistic underpinnings of adaptive cycling as a rehabilitative modality for Parkinson's disease (Co-I), Kenneth Loparo, PhD (Case Western Reserve University, PI); Aasef Shaikh, MD (Cleveland VA Medical Center, PI), Department of Defense- Parkinson's Focused Idea Award, January 2018
14. Investigation of Dynamic Cycling in MS, Co-Investigator; PI Doug Wadja, Cleveland State University, National MS Society, Pilot Grant Program, March 2018
15. Dynamic models and saccade adaptation to optimize and assess individualized rehabilitation paradigms for Parkinson's disease, Co-Investigator, Principal Investigators: Kenneth Loparo, PhD (Case Western Reserve University); Aasef Shaikh, MD (Cleveland VA

- Medical Center, Case Western Reserve University), NIH Biomarkers Discovery in Parkinsonism (U01) - PAR-16-112, December 2017
4. Impact of Speed Manipulated Adaptive Rehabilitation Therapy (SMART) on brain excitability in Parkinson's disease, Principal Investigator, Brain Research Foundation, August 2017
 5. Self-management in individuals with Parkinson's disease and depression, Co-Principal Investigator with Martha Sajatovic, MD, Case Western Reserve University, National Institutes of Health, NIA, R01, June 2017
 6. Adaptive Dynamic Cycling to Improve the Symptoms of Parkinson's Disease, Co-Investigator, Principal Investigator: Kenneth Loparo, PhD (Case Western Reserve University), Department of Defense- Parkinson's Focused Idea Award, April 2017, Score: 2.4 (1- highest merit, 5-lowest merit)
 7. Adaptive Dynamic Cycling for patients with Parkinson's Disease, with Co-Investigator Kenneth Loparo, PhD; Benjamin Walter, MD (Case Western Reserve University), Case Coulter Translational Research Partnership (CCTRP), March 2017
 8. Adaptive therapy to optimize neurorehabilitation in individuals with Parkinson's disease, Principal Investigator, Kenneth Loparo, PhD; Benjamin Walter, MD; Curtis Tatsouka (Case Western Reserve University), National Institutes of Health, NICHD R01, February 2017, Impact 45, Percentile: 30
 9. Self-management in individuals with Parkinson's disease and depression, Co-Principal Investigator with Martha Sajatovic, MD, Case Western Reserve University, National Institutes of Health, NIH, R01, October 2016, Impact 38, Percentile: 32
 10. Adaptive rehabilitation in individuals with Parkinson's disease, Principal Investigator, Co-Investigators, Kenneth Loparo, PhD (Case Western Reserve University); Benjamin Walter, MD (Case Western Reserve University), National Institutes of Health, NICHD, R01, June 2016, Score: 40, Percentile: 32
 11. Orthostatic hypotension and cognitive dysfunction in PD: How are they related?, Principal Investigator, Michael J Fox Foundation, Dec 2015
 12. Cognitive benefits of a brief exercise intervention in Multiple Sclerosis, Co-Principal Investigator with Mary Beth Spitznagel (Psychology), Department of Defense, Congressionally Directed Medical Research Programs, Multiple Sclerosis Research Program, Pilot Clinical Trial Award, Sept. 2015
 13. Improving engagement in exercise among individuals with Parkinson's disease and Depression (PD-Dep), Co-Principal Investigator with Martha Sajatovic (Case Western Reserve University), PCORI, Nov. 2015
 14. Adaptive rehabilitation in individuals with Parkinson's disease, Principal Investigator Co-Investigators: Kenneth Loparo, PhD (Case Western Reserve University); Benjamin Walter, MD (Case Western Reserve University), National Institutes of Health, NINDS, R01, June 2015
 15. Cognitive effects of a brief aquatic exercise intervention in multiple sclerosis, Co-Principal Investigator with Mary Beth Spitznagel (Psychology), National Institutes of Health, R21, June 2015
 16. Intelligent neuromotor therapy for Parkinson's disease, Principal Investigator, Davis Phinney Foundation, Research Grant, March 2015

19- Angela L. Ridgel, PhD

17. Effects of dynamic cycling on cognition and cerebrovascular function in AD, Co-Principal Investigator with M.B. Spitznagel, Psychology, Alzheimer's Association, Exploratory Clinical Trial (R01), March 2015
18. Adaptive sensory and motor rehabilitation in individuals with Parkinson's disease, Principal Investigator, Co-Investigators: Kenneth Loparo, PhD (Case Western Reserve University); Benjamin Walter, MD (Case Western Reserve University), National Institutes of Health, NINDS, R01- NS090068-A1, Score: 38, 24 percentile
19. Self-guided exercise plus PD-focused psychoeducation (SUCCEED), Co-Principal Investigator with Martha Sajatovic, MD, Case Western Reserve University, National Institutes of Health, NINDS, Exploratory Clinical Trial (R01)
20. Community based active-assisted exercise for the treatment of Parkinson's disease, Co-Investigator, Principal Investigator: Dustin Heldman, PhD, Great Lakes Neuro Technologies, Inc, Patient Centered Outcomes Research Institute (PCORI), Accelerating Patient-Centered Outcomes Research and Methodological Research

Internal grants- Not funded

1. Summer teaching grant to develop a scientific writing class at the graduate level for Health Sciences students. Co-Principal Investigator with Hayley Arnold, University Teaching Council, 2019
2. Blomberg Rhythmic Movement Training with Lisbeth Justice and Karen Giorgetti (School of Theater and Dance), Brain Health Research Institute (BHRI) Pilot Program SEED Grant, 2018
3. Corticomotor responses to high cadence cycling in Parkinson's disease, Principal Investigator, KSU University Research Council, Research Initiation Award, 2017
4. Summer teaching grant to "flip" Physiology of Exercise course, Co-Principal Investigator with J. Derek Kingsley, University Teaching Council, 2017
5. EXSC Biochemistry Laboratory Enhancement 2015, Co-Principal Investigator with J. Derek Kingsley, Kent State Foundation

TEACHING ACTIVITIES

Kent State University- Instructor of Record

Spring 2021: EXSC 45080/55080- Physiology of Exercise-WIC (29 students), EXSC 45096- Individual Investigation in Exercise Science (8 students), BMS 80199- Dissertation II (1 student), EXPH 83098-001- Research (2 student), EXPH 63199 Thesis II (1 student)

Fall 2020: EXSC 45080/55080- Physiology of Exercise-WIC (22 students), EXPH 75075/85075- Muscle Function and Exercise (14 students), EXSC 45096-010- Individual Investigation in Exercise Science (4 students), BMS 80199- Dissertation II (1 student), EXPH 83098-001- Research (1 student), EXPH 63098- Research (2 students)

Spring 2020: EXSC 45096-010- Individual Investigation in Exercise Science (4 students), BMS 80199- Dissertation II (1 student), BMS 80198- Research (1 student), EXPH 83098-001- Research (1 student)

20- Angela L. Ridgel, PhD

Fall 2019: EXSC 45080/55080- Physiology of Exercise-WIC (25 students), EXPH 60610/70610- Physiology of Aging (15 students), EXSC 45096-010- Individual Investigation in Exercise Science (6 students), BMS 80199- Dissertation II (1 student), BMS 80198- Research (1 student), EXPH 83098-001- Research (1 student)

Spring 2019: EXSC 45080/55080- Physiology of Exercise-WIC (43 students), EXSC 45096-010- Individual Investigation in Exercise Science (7 students), EXPH 63098-001- Research (3 students) BMS 80199- Dissertation II (1 student), BMS 80198- Research (1 student), EXPH 83098-001- Research (1 student), EXPH 63199-001- Thesis (1 student)

Fall 2018: EXSC 45080/55080- Physiology of Exercise-WIC (24 students), EXSC 45096-010- Individual Investigation in Exercise Science (5 students), EXPH 65086/75086- Neurobiology of Movement and Exercise (15 students), BMS 80199- Dissertation II (1 student), EXPH 83098-001- Research (1 student), EXSC 41000-001 Exercise Implementation (4 students)

Spring 2018: EXSC 45080/55080- Physiology of Exercise-WIC (40 students), EXSC 45096-010- Individual Investigation in Exercise Science (7 students), BMS 80199- Dissertation II (1 student), EXPH 83098-001- Research (1 student)

Fall 2017: EXPH 75075/85075- Muscle Function and Exercise (11 students), EXSC 45080/55080- Physiology of Exercise-WIC (25 students), EXSC 45096-010- Individual Investigation in Exercise Science (4 students), BMS 80199- Dissertation II (1 student), EXPH 83098-001- Research (1 student)

Summer 2017: EXSC 45096-010- Individual Investigation in Exercise Science (1 student), EXPH 63098-004- Research (2 student), BMS 80199- Dissertation II (1 student)

Spring 2017: EXPH 65084/75084- Cardiorespiratory Function (14 students), BMS 80199- Dissertation I (1 student), EXPH 83098-004- Research (2 students), EXSC 45096-010- Individual Investigation in Exercise Science (8 students), EXSC 45080/55080- Physiology of Exercise- WIC (36 students)

Fall 2016: EXPH 60610/70610- Physiology of Aging (15 students), EXSC 45080/55080- Physiology of Exercise- WIC (30 students), EXPH 83098-001- Research (1 student), EXPH 45096- Individual Investigation in Exercise Physiology (4 student), BMS 80199- Dissertation I (1 student)

Summer 2016: EXSC 45096-010- Individual Investigation in Exercise Science (3 students), BMS 80199- Dissertation I (1 student)

Spring 2016- Professional Improvement Leave (PIL)

Fall 2015: EXPH 75075/85075- Muscle Function and Exercise (14 students), EXSC 45080/55080- Physiology of Exercise-WIC (30 students), EXSC 45096-010- Individual Investigation in Exercise Science (7 students)

21- Angela L. Ridgel, PhD

Summer 2015: EXSC 45096-010- Individual Investigation in Exercise Science (3 students), EXPH 63098-001- Research (1 student)

Spring 2015: EXPH 65084/75084- Cardiorespiratory Function (9 students), EXPH 63098-001- Research (2 students), EXPH 83098-004- Research (4 students), EXSC 45096-010- Individual Investigation in Exercise Science (13 students), EXPH 65192/75192- Internship in Exercise Physiology (2 students), EXSC 45480- Internship Seminar in EXSC (39 students), EXSC 45492- Internship in Fitness and Cardiac Rehab (16 students)

Fall 2014: EXPH 60610/70610- Physiology of Aging (12 students), EXSC 45080/55080- Physiology of Exercise- WIC (24 students), EXPH 83098-001- Research (3 students), EXPH 63096- Individual Investigation in Exercise Physiology (1 student)

Summer 2014: EXSC 45096-010- Individual Investigation in Exercise Science (3 students), EXPH 83098-001- Research (5 students)

Spring 2014: EXPH 65086/75086- Neurobiology of Movement and Exercise (21 students), EXSC 45080/55080- Physiology of Exercise- WIC (38 students), EXSC 45096-010- Individual Investigation in Exercise Science (6 students)

Fall 2013: EXPH 75075/85075- Muscle Function and Exercise (16 students), EXSC 45080/55080- Physiology of Exercise (21 students), EXSC 45096-010- Individual Investigation in Exercise Science (3 students)

Summer 2013: BMS 80198-001- Research in Biomedical Sciences (1 student), EXSC 45096-010- Individual Investigation in Exercise Science (3 students), EXPH 63098-001- Research (2 students), EXPH 83098-001- Research (2 students)

Spring 2013: EXPH 65084/75084- Cardiorespiratory Function (17 students), EXPH 63299- Thesis II (1 student), EXPH 63098-001- Research (2 student), EXPH 83098-004- Research (2 student), EXSC 45096-010- Individual Investigation in Exercise Science (6 students)

Fall 2012: EXPH 60610/70610- Physiology of Aging (15 students), EXPH 63199- Thesis I (1 student), EXPH 63098-001- Research (1 student), EXPH 83098-004- Research (1 student), EXSC 45096-010- Individual Investigation in Exercise Science (5 students)

Summer 2012: EXSC 45096-010- Individual Investigation in Exercise Science (3 students), EXPH 83098-001- Research (2 student)

Spring 2012: EXPH 63195-002- Special Topics: Neurobiology of Movement and Exercise, EXSC 35022- Exercise Leadership, EXPH 63098-001- Research, EXPH 83098-004- Research, EXSC 45096-010- Individual Investigation in Exercise Science

22- Angela L. Ridgel, PhD

Fall 2011: EXPH 75075/85075- Muscle Function and Exercise, EXSC 35022- Exercise Leadership, EXPH 63098-001- Research, EXPH 83098-004- Research, EXSC 45096-010- Individual Investigation in Exercise Science

Summer 2011: EXSC 45096-010- Individual Investigation in Exercise Science (3 students), EXPH 63098-001- Research (1 student)

Spring 2011: EXSC 35022- Exercise Leadership, EXPH 65082/75082- Cardiorespiratory Function, EXSC 45096-010- Individual Investigation in Exercise Science (6 students), EXPH 73098/83098-001- Research (2 students)

Fall 2010: EXSC 35022- Exercise Leadership, EXPH 60610/70610- Physiology of Aging

Summer 2010: PEP 45096-011- Individuals Investigation in PE (3 students), EXSC 45096-010- Individual Investigation in Exercise Science (1 student), ELS 83098-001- Research (1 student)

Spring 2010: ELS 63195-002- Special Topics: Neurobiology of Movement and Exercise, PEP 35022- Exercise Leadership, ELS 83098-001- Research (2 students), EXSC 45096-002- Individual Investigation in Exercise Science (3 students)

Fall 2009: ELS 75075- Muscle Function and Exercise, PEP 35022- Exercise Leadership, ELS 63098-001- Research (1 student), ELS 83098-004- Research (1 student)

Summer 2009: ELS 45096-010- Individual Investigation in PE (1 student)

Spring 2009: PEP 35022- Exercise Leadership, ELS 65082/75082- Cardiorespiratory Function

Fall 2008: ELS 60610/70610- Physiology of Aging, PEP 25057- Anatomy and Physiology I – co-taught with M. Kalinski, ELS 83098-003- Research (1 student), ELS 83098-004- Research (1 student), ELS 63098- Research (1 student)

Kent State University- Guest Lecturer

Spring, 2021, Spring 2020, Spring 2019, Spring 2018, Spring 2017, Spring 2015

- BMS 6/70795 Systems Neuroscience I and II (Posture and Basal Ganglia)

Spring 2015, Spring 2013, Spring 2010

- GERO 61191, Interdisciplinary Seminar in Gerontology

Case Western Reserve University, Neurobiology of Behavior (Spring 2004, 2005)

Marshall University School of Medicine - Medical Neurosciences Lab (Fall 1998-2000)

Villanova University - Biology for Non-Majors Lab (Fall 1993-1995), Marine Biology for Non-Majors Lab (Spring 1993-1995)

SERVICE AND CITIZENSHIP

ACSM Mentoring Women to Fellowship

Sheara Williamson, PhD, University of Delaware

KSU Faculty Mentoring

Ali Barikroo, Assistant Professor, Speech Pathology

Bruna Mussoi, Assistant Professor, Speech Pathology

Research Scholar Mentoring

Jin Hyun Kim, Post-doc (international), 10/2017-5/2020

Brandon Pollock, Post-doc, 2015-2017

Graduate/Undergraduate Student Research Mentoring

PhD Dissertation- Primary Advisor

1. Peter Gates, Aug. 2021, Biomedical Science, Development of a mixed model to predict outcomes after dynamic cycling in people with Parkinson's disease.
2. Nhlalala Mavundza, May 2019, Biomedical Sciences, The effect of segmental vibration therapy on cognitive processing and balance in older adults.
3. Jay Jonas, Aug. 2018, Exercise Physiology, Acute effects of dynamic and static high cadence cycling on proprioception, motor function, fatigue and motivation in a Parkinson's disease population.
4. Elizabeth Narducci, Dec. 2017, Exercise Physiology, The Effects of Static Versus Dynamic Stretching on Fall Risk, Balance and Muscle Function in Older Adults: Is Stretching a Beneficial Intervention?
5. Sara Harper, Dec. 2016, Exercise Physiology, The influence of BDNF Val66Met polymorphism on cognition, depression, quality of life and motor symptoms in individuals with Parkinson's disease after dynamic cycling.
6. Dana Ault, June 2016, Exercise Physiology, The effects of dynamic cycling on motor function, gait, mobility and balance in individuals with Parkinson's disease
7. Jennifer Petersen, Dec 2015, Exercise Physiology, Effects of brief aquatic exercise on mobility and function in Multiple Sclerosis. Kent State University
8. Robert Phillips, May 2014, Exercise Physiology, Single trial effects of dynamic cycling: how long does it last? Kent State University
9. Emily Fickes, May 2012, Exercise Physiology, Effects of interval-active assisted cycling on balance in individuals with Parkinson's disease. Kent State University

PhD Dissertation- Co-Advisor with Dr. Jacob Barkley

1. Kristin Noll, Dissertation phase, Exercise Physiology, Effects of manual vagus nerve stimulation on CRPS inflammatory symptoms

PhD Dissertation- Co-Advisor with Dr. Ellen Glickman

1. Ana Fantini, Dec 2017, Exercise Physiology, The effects of Acai on delayed muscle soreness (DOMS) in collegiate athletes.
2. Corey Peacock, June 2012, Exercise Physiology, Executive Function and Physical Performance on flight control devices during exposure to normobaric hypoxia, Kent State University

3. Chul-Ho Kim, Aug 2011, Exercise Physiology. The Effects of Hypoxia and Exercise on Cerebral Oxygenation and Cognitive Function: Age Difference, Kent State University
4. Matthew Muller, Dec 2009, Exercise Physiology, The influence of interval vs. continuous exercise on thermoregulation, torso hemodynamics, and finger dexterity in the cold (5°C), Kent State University

PhD Dissertation- Co-Advisor with Derek Kingsley

1. Fredrick Peters, May 2016, Exercise Physiology, Analyzing the effects of localized vibration on delayed onset muscle soreness following intense eccentric cycling. Kent State University

PhD Dissertation- Committee Member

1. Tyler Singer, Completed Aug. 2020, Exercise Physiology, Kent State University
2. Bryan Dowdell, Completed May 2020, Exercise Physiology, Kent State University
3. Yong Suk Seo, Completed Dec. 2014, Exercise Physiology, Kent State University
4. Brandon Pollock, Completed Aug. 2015, Exercise Physiology, Kent State University
5. Yong Suk Seo, Completed Dec. 2014, Exercise Physiology, Kent State University
6. Andrew Carnes, Completed May 2014, Exercise Physiology, Kent State University
7. Michael Rebold, Completed Aug. 2014, Exercise Physiology, Kent State University
8. Megan Williamson, Completed May 2013, Exercise Physiology, Kent State University.
9. Gabe Sanders, Completed June 2012, Exercise Physiology, Kent State University
10. David Keane, Completed May 2012, Exercise Physiology, Kent State University
11. David Bellar, Completed May 2009, Exercise Physiology, Kent State University.

PhD Dissertation- Graduate Faculty Representative

1. Fatima Jaber, Completed March 2018, Biomedical Sciences
2. Scout Kelly, Completed April 2017, Psychological Sciences
3. Ashley Nemes, Completed June 2016, Biomedical Sciences
4. Phillip Iffland, Completed June 2015, Biomedical Sciences
5. Bernadette Mamone, Completed Summer 2013, Biomedical Sciences
6. Rachael Leahy, Completed Fall 2012, Biomedical Sciences
7. Leonie Smith, Completed Spring 2011, Heath Education

PhD Dissertation- Outside Member

1. Lydia Heemstra, Biomedical Sciences, Aug. 2021, Contextual induction of non-shivering thermogenesis and skeletal muscle futile calcium cycling in two rat models.
2. Amber Rochette, Psychology, August 2018, The Relationship between Symptoms of Polyneuropathy and Cognitive Function Pre- and Post-Bariatric Surgery
3. Dayana Calvo, December 2016, Psychology, The effects of a very brief aquatic exercise intervention on cardiovascular fitness and cognitive function in multiple sclerosis.
4. Lindsay Miller, Psychology, August 2014, The Longitudinal Effects of Cardiac Rehabilitation on Cognition in Older Adults with Heart Failure
5. Elizabeth Fettrow, May 2013, An analysis of the relationship between bullying others, perceived school connectedness, academic achievement, and selected demographics among female high school athletes

Master's Thesis- Primary Advisor

1. Zachary Lemke, Thesis II, Exercise Physiology,
2. Robert Melczak, May 2019, Exercise Physiology, Entropy measures at varying cadences and resistances during dynamic cycling.
3. Kayla Wilson, May 2013, Exercise Physiology, Interval active-assisted cycling improves motor function in Parkinson's disease.

Master's Thesis- Committee Member

1. Emily Erb, May 2020, Exercise Physiology, The physiological and cognitive effects of Fortnite.
2. Sara Harper, May 2014, Exercise Physiology, The influence of lateral foot displacement on cycling efficiency and maximal cycling power
3. Meredith Decker, May 2013, Athletic Training, The effects of initial hip abduction, strength and neuromuscular fatigue of the gluteus medius on the star excursion balance test in male and female healthy subjects
4. Samantha Uhas, May 2013, Exercise Physiology, Participating in physical activity after consuming meals of differing caloric content does not alter appetite four hours post activity
5. Kelly Wagner, May 2013, Exercise Physiology, Meals of differing caloric content do not alter physical activity behavior during a subsequent simulated recess period in children
6. Brandon Hentkowski, May 2013, Athletic Training, Comparison of barefoot and shod rehabilitation exercise for increasing balance and intrinsic foot strength for chronic ankle instability
7. Andrew Carnes, Exercise Physiology, The effect of peer influence on running speed, enjoyment, and perceived exertion in intercollegiate distance runners, Kent State University, Summer 2011
8. Stephanie Horvath, Nutrition, The Roles, Responsibilities and Perceptions of Registered Dietitians in Sports Nutrition, Kent State University, Spring 2011
9. Kristin Stull, Nutrition, Nutrition and Low Back Pain: A Nutrition Professionals Guide to Understanding and Preventing Low Back Pain. Kent State University, Spring 2011
10. Amanda Penko, Exercise Physiology, Energy expenditure and the reinforcing value of the Nintendo Wii versus traditional video game play and treadmill walking in children. Kent State University, Fall 2008

McNair Scholars Program- Mentor

1. AnnAleada Whitehead, 8/2018, 'The effects of ballroom dance on symptom severity in persons with Parkinson's disease'

Undergraduate Honors/Research

1. Melani Whitmyer, 2021, Mentor, Summer Undergraduate Research Experience (SURE), Kent State University.
2. Taylor Joseph, 2020, Mentor, Summer Undergraduate Research Experience (SURE), Kent State University.

3. Katy Lichtsinn, 2013, Outside expert examiner, Arizona State University, Program of Kinesiology, 'Forced exercise in individuals with Autism'.
4. Drew Albert, 2012, Outside expert examiner, Arizona State University, Program of Kinesiology 'Forced exercise in individuals with Down's Syndrome'.

Professional Boards/Committees

American College of Sports Medicine, EIM Older Adults Committee, 2021-2024
American College of Sports Medicine, Research Awards Committee, 2017-2023
American College of Sports Medicine, Midwest Chapter, Member, EIM Committee, 2014-2019
American College of Sports Medicine, Midwest Chapter, Symposium Moderator, 2017
American College of Sports Medicine, Midwest Chapter, Board of Directors, 2014-2017
American College of Sports Medicine, Midwest Chapter, EIM Committee, 2015-2017
American College of Sports Medicine, Midwest Chapter, Chair, Nominating Committee, 2014-2017
American College of Sports Medicine, Midwest Chapter, Presentation Judge, 2015, 2017
American College of Sports Medicine, Midwest Chapter Abstract Review Committee, 2013, 2014, 2017
Ohio Parkinson Foundation Northeast Region Board, Treasurer, 2015-2018
Ohio Parkinson Foundation Northeast Region Board, Board Member, 2013-2018
Ohio Parkinson's disease Foundation NE Region Symposium Planning committee, 2016-2018

University Committee Work- Research

Brain Health Research Institute (BHRI), Neuroscience Symposium Committee, Vice-Chair, 2021-
BHRI Executive Committee, 2018-
Institutional Review Board, member, 2010-
BHRI Research Interest Group Chair, Pain and Sensory Pathways, 2019-
BHRI Seminar Series Co-Organizer, 2019-2021
COVID-19 Research Continuity Task Force, 2020-2021
BHRI Neuroscience Symposium, Abstract Review Committee, 2020
KSU SURE Program, Student Presentation Awards Committee, 2020
KSU University Research Council, Faculty Senate Committee, 2017-2020
SOARS Committee for Brain Health Institute, 2017-2018
KSU Graduate Research Symposium, Presentation Judge, 4/2017
KSU Brain Health Institute Director Search Committee, 2016-2018
KSU Undergraduate Research Symposium Presentation Judge, 2015
KSU Aging Research Board Member, 2013-2015
KSU Aging Symposium, Poster Committee, 2014
Celebration of Scholarship Committee, member, 2009-2010

University Committee Work- Academic/Policy

KSU School of Health Sciences, NTT Ad Hoc Committee, 2020-
Kent State of Wellness (KSoW) Board, member, 2018-
KSoW Physical Activity Committee, member, 2018-
KSU Undergraduate Coordinators Committee, 2018-2020

KSU Graduate Coordinators Committee, 2017- 2020
Faculty Advisory Committee, member, 2009-2012; 2014-2015
College Advisory Committee, member, 2014-2015
Faculty Search Committee, Exercise Physiology, 2010-2019
Faculty Search Committee, SPA (outside member), 2014, 2016, 2017
EHHS Academic Complaint Committee, Chair, Spring 2014
University Scholarship Advisory Council, Faculty Senate, 2013-2016
EHHS Academic Advisor Search Committee, 2012
Educational Policy Council, College Curriculum Council Representative, 2011-2013
College Courses and Curriculum Committee, member, 2009-2013
PEB Steering Committee, member, 2009-2011
Health Sciences GA Orientation Steering Committee, Spring/Summer 2011
EHHS Dean's Faculty Recruitment Committee, member, 2008-2009

Program support

Graduate application reviewer, KSU Biomedical Sciences and Physiology, 2020-2021
Summer KSU Preview Program Representative, 7/2013, 7/2014
EHHS Student Awards Ceremony, presenter, 2014, 2013, 2012
Chair of planning committee for Northeast Ohio Exercise Science Conference, 2014
Member of planning committee for Northeast Ohio Exercise Science Conference, 2012, 2013
Departmental tours and potential student meetings, 2012-2014
KSU Open House Program Representative, 7/2011, 2/2012, 3/2012, 10/2012, 3/2013, 4/2014
American College of Sports Medicine Health Fitness Specialist Workshop Instructor, 12/2010
Assisted in undergraduate and graduate program changes in Exercise Physiology, 2009-2010
Speaker for The Exploratory Community Engaged in Learning (EXCEL) Program, 11/2009
Program Representative, KSU Tour Days, 10/2009; 11/2009
Program Representative, ACSM Midwest Meeting, 10/16/2009
Assisted Dr. Glickman with CAAHEP application for Exercise Specialist Program, 2009-2010

Professional

Journal Reviewer

Asian Journal of Exercise and Sports Science (AJESS), Journal of Intellectual Disability Research, Journal of Neurophysiology, Journal of Nervous System Disorders, Parkinsonism & Related Disorders, Medicine and Science in Sports and Exercise, Journal of NeuroEngineering and Rehabilitation, Journal of the Neurological Sciences, Medicine, Neuroscience & Biobehavioral Reviews, Neurorehabilitation and Neural Repair, Movement Disorders, International Journal of Physical Medicine & Rehabilitation, Clinical Interventions in Aging, International Journal of Aging and Human Development, Postgraduate Medicine, Neuroscience Letters, ACSM's Health & Fitness Journal, Journal of Applied Biomechanics, Biological Bulletin, Journal of Socialomics, Sensors, Physiotherapy Theory and Practice, Plos One, Physical Therapy Reviews, Human Movement Science, JAMA Neurology, Movement Disorders Clinical Practice, International Journal of Environmental Research and Public Health

Involvement in Professional Organizations

28- Angela L. Ridgel, PhD

Member, American College of Sports Medicine, 2006-present
Member, Society for Neuroscience, 1996-present
Member, Midwest Chapter of American College of Sports Medicine, 2008-present
Member, Movement Disorders Society, 2016-present
Member, American Society for Neurorehabilitation, 2011-present

Community Speaking Engagements

Parkinson's Exercise Program, Fitness Center, University Hospitals Avon Health Center, 6/2019
STEM Go Red for Girls, Expert Panel Speaker, 3/2019
Parkinson Education Program of Greater Cleveland, 12/2018
Parma Parkinson's Support Group, 11/2018
Ohio Parkinson Foundation NE Region, 2018 Symposium, Forum Moderator, 4/2018
Solon Parkinson's support group, 3/2018
Lake County Parkinson's support group, 11/2015
KSU Aging Symposium, Expert Panel Speaker, 11/2014
University Hospital Parkinson's disease Boot Camp, Expert Panel Speaker, 9/6/2014
Portage County Parkinson's Support Group, 8/19/2014
Erie County Parkinson's Support Group, 7/3/2014
University Hospital Parkinson's disease Boot Camp, Expert Panel Speaker, 9/8/2013
Solon Parkinson's disease support group, 4/15/2013
Lake Erie Wheelers (local cycling club), expert speaker on exercise physiology, 4/2013
Parma Parkinson's Support Group, 3/2013
University Hospital Parkinson's disease Boot Camp, Expert Panel Speaker, 10/13/2012
Portage County Parkinson's disease support group, 9/20/2011
Solon Parkinson's disease support group, 8/15/2011
13th Annual Parkinson Symposium, 4/16/2011
Solon Parkinson's disease support group, 6/21/2010
12th Annual Parkinson Symposium, 4/17/2010
Summit County Parkinson's Support Group, 3/1/2010
Parma Parkinson's Support Group, 1/2010
Portage County Parkinson's Support Group, 11/2009
Stark County Parkinson's Support Group, 9/2009
Parkinson Education Program of Greater Cleveland, 6/2009
11th Annual Parkinson Symposium, 4/19/2009

Volunteer activities

USAC Race Director, Ohio State Master's and Juniors Cycling Time Trial, Aug. 2019
USAC Race Director, Ohio State Master's and Juniors Cycling Time Trial, Aug. 2018
NE Ohio Representative, Ohio Cycling Association Board, 2018
Volunteer Coach, NEOcycle Cyclocross Clinic, Sept 2016
Volunteer Coach, NEOcycle Cyclocross Clinic, Sept 2015
Race Director, Gay Games Cleveland, Cycling Criterium, Aug. 2014
Race Director, Gay Games Cleveland, Cycling Time Trial, Aug. 2014
Race Director, Brooklyn Cyclocross Race p/b Snakebite Racing, Sept. 2013

29- Angela L. Ridgel, PhD

President, Snakebite Racing (a local competitive sports team), 2010-2012
Race Director, Brooklyn Cyclocross Race p/b Snakebite Racing, Sept. 2012
Race Director, Cascade Park Cyclocross Race p/b Snakebite Racing, Sept, 2012
Assistant Race Director, Brooklyn Cyclocross Race p/b Snakebite Racing, Oct, 2011
Safety Director, OHIO Masters Open Water Swim Race, July 2011
Secretary, Snakebite Racing (local competitive sports team), 2009-2010