

# Andrew C. Parks



## Courses Taught:

KINE 292: Preventative Health & Wellness  
KINE 333: Motor Learning  
KINE 403: Neural Basis of Movement  
KINE 514: Quantitative Data Analysis in Kinesiology  
KINE 518: Recent Literature and Research in Kinesiology  
KINE 530: Psychophysiology of Sport  
KINE 537: Cognitive Kinesiology  
KINE 541: Exercise Psychology

## Educational Credentials:

Doctor of Philosophy	Michigan State University; East Lansing, MI (Cognitive & Motor Neuroscience, Specialization: Cognitive Science), 2017
Master of Science	Miami University; Oxford, OH (Exercise and Health Studies), 2012
Bachelor of Science	St. Ambrose University; Davenport, IA (Exercise Science)

## Teaching Experience:

Assistant Professor	Louisiana Tech University, 2019 – Present
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## Professional Experience:

Co-Director, Minds in Motion Lab	Louisiana Tech University, 2020 - Present
University Senate, Executive Committee	Louisiana Tech University, 2022 - Present
University Senate	Louisiana Tech University, 2022 - Present
Graduate & Undergraduate Academic Coordinator	Louisiana Tech University, 2019 - Present
Graduate Assistant Coordinator	Louisiana Tech University, 2021 - 2023
Topic Editor	Journal of Clinical Medicine, 2021 - Present
Post-Doctoral Research Fellow	University of Michigan; Ann Arbor, MI (Center on Physical Activity & Health in Pediatric Disabilities), 2017 – 2019

## Selected Publications:

Pontifex, M. B., **Parks, A. C.**, Delli Paoli, A. G., Schroder, H. S., & Moser, J. S. (2021). The effect of acute exercise for reducing cognitive alterations associated with individuals high in anxiety. *International Journal of Psychophysiology*, 167, 47-56. doi: <https://doi.org/10.1016/j.ijpsycho.2021.06.008>

Vasold, K., **Parks, A. C.**, Phelan, D. M. L., Pontifex, M. B., & Pivarnik, J. (2019). Reliability and validity of commercially available low-cost bioelectric impedance analysis. *International Journal of Sport Nutrition & Exercise Metabolism*, 29, 406-410. doi: <https://doi.org/10.1123/ijsnem.2018-0283>

Pontifex, M. B., McGowan, A. L., Chandler, M. C., Gwizdala, K. L., **Parks, A. C.**, Fenn, K., & Kamijo, K. (2019). A primer on investigating the after effects of acute bouts of physical activity on cognition. *Psychology of Sport and Exercise*, 40, 1-12. doi: <https://doi.org/10.1016/j.psychsport.2018.08.015>

- McGowan, A. L., Bretzin, A. C., Savage, J. L., Petit, K. M., **Parks, A. C.**, Covassin, T., & Pontifex, M. B. (2018). Preliminary evidence for differential trajectories of recovery for cognitive flexibility following sports-related concussion. *Neuropsychology, 32*, 564-574. doi: <http://dx.doi.org/10.1037/neu0000475>
- Kao, S-C., Westfall, D. R., **Parks, A. C.**, Pontifex, M. B., & Hillman, C. H. (2017). Muscular and aerobic fitness, working memory, and academic achievement in children. *Medicine and Science in Sports and Exercise, 49*, 500-508. doi: 10.1249/MSS.0000000000001132 (PMID: 27776002)
- Pontifex, M. B., Gwizdala, K. L., **Parks, A. C.**, Billinger, M., & Brunner, C. (2017). Variability of ICA decomposition may impact EEG signals when used to remove eyeblink artifacts. *Psychophysiology, 54*, 386-398. doi: 10.1111/psyp.12804 (PMID: 28026876)
- Pontifex, M. B., Gwizdala, K. L., **Parks, A. C.**, Pfeiffer, K. A., & Fenn, K. M. (2016). The association between physical activity during the day and long-term memory stability. *Scientific Reports, 6(38148)*, 1-9. doi: 10.1038/srep38148 (PMID: 27909312)
- Parks, A. C.**, Moore, R. D., Wu, C.-T., Broglio, S. P., Covassin, T., Hillman, C. H., & Pontifex, M. B. (2015). The association between a history of concussion and variability in behavioral and neuroelectric indices of cognition. *International Journal of Psychophysiology, 98*, 426-434. doi: 10.1016/j.ijpsycho.2015.08.006 (PMID: 26327621)
- Pontifex, M. B., **Parks, A. C.**, Henning, D.A., & Kamijo, K. (2015). Single bouts of exercise selectively sustain attentional processes. *Psychophysiology, 52*, 618-625. doi: 10.1111/psyp.12395 (PMID: 25523887)
- Pontifex, M. B., Fine, J. G., **Parks, A. C.**, daCruz, K. & Smith, A. L. (2014). The role of physical activity in reducing barriers to learning in children with developmental disorders. *Monographs of the Society for Research in Child Development, 79*, 93-118. doi: 10.1111/mono.12132 [Invited] (PMID: 25387417)
- Pontifex, M. B., **Parks, A. C.**, O'Neal, P. C., Egner, A. R., Warning, J. T., Pfeiffer, K. A., & Fenn, K. M. (2014). Poorer aerobic fitness relates to reduced integrity of multiple memory systems. *Cognitive, Affective, and Behavioral Neuroscience, 14*, 1132-1141. doi: 10.3758/s13415-014-0265-z (PMID: 24590393)

### **Selected Presentations**

- Staples, K. L., Ketcheson, L., & **Parks, A. C.** (2020). Understanding health disparities among 3- to 9-year-old children with Autism Spectrum Disorder. *Journal of Sport & Exercise Psychology, 42*, S24-S25.
- Parks, A. C.**, Staples, K. L., Qu, L., Marra, L. R., Wengrovius, C., & Ulrich, D. A. (2019). Influences of early motor development on language competency in early infancy. *Journal of Sport & Exercise Psychology, 41*, S18-S19.
- Ulrich, D. A., Staples, K. L., **Parks, A. C.**, Qu, L., Marra, L., & Wengrovius, C. (2019). Is there a relationship between self-generated physical activity and motor, cognitive, and language achievement at three months of age? *Journal of Sport & Exercise Psychology, 41*, S22-S23.
- Parks, A. C.**, Felzer-Kim, I., Hauck, J. L., Ingersoll, B. R., Smith, A. L., & Pontifex, M. B. (2018). The effect of an acute bout of physical activity on inhibitory control in individuals with autism spectrum disorder. *Journal of Sport & Exercise Psychology, 40*, S112.
- Parks, A. C.**, Delli Paoli, A. G., Schroder, H. S., Moser, J. S., & Pontifex, M. B. (2017). Acute physical activity modulations of attentional processes and error-monitoring in high- and low-anxious females. *Journal of Sport & Exercise Psychology, 39*, S299-S300.
- Parks, A. C.**, Berger, N. I., Lamkin, S. R., Pineault, L. J., Ingersoll, B. R., & Pontifex, M. B. (2015). Exercise induced maintenance of attentional processes in preadolescent children. *Psychophysiology, 52*, S45.
- Parks, A. C.**, Fleck, C. R., Lamkin, S. R., Fenn, K. M., Pfeiffer, K. A., & Pontifex, M. B. (2015). Differences in long-term memory consolidation as a function of heart rate intensity. *Journal of Sport & Exercise Psychology, 37*, S135.
- Parks, A. C.**, Phelan, D. M. L., Ravizza, S. M., & Pontifex, M. B. (2014). The association of adipose tissue to cognitive flexibility in healthy young adults. *Medicine & Science in Sports & Exercise, 46*, 217.

**Parks, A. C.,** Moore, R. D., Broglio, S. P., Covassin, T. M., Hillman, C. H., & Pontifex, M. B. (2014). Cognitive load induced variability in behavior and neurocognition in young adults with a history of concussion. *Journal of the International Neuropsychological Society, 20*, S44.

### **Grants:**

Davis Phinney Foundation, Research Grant, **Principal Investigator:** "Effects of a Longitudinal Physical Activity and Health Coaching Intervention on Behavioral, Psychosocial, and Cognitive Impairments in Parkinson's Disease." \$100,000 (Submitted)

Blue Cross Blue Shield Foundation Louisiana, New Horizon's Grant, **Principal Investigator:** "Development of Healthy Behaviors through Familial Relationships in Children with Autism Spectrum Disorder." \$25,000 (Not Funded).

Lagniappe Ladies, Strategic Development Grant, Mind in Motion Laboratory (**Co-Director & Funding Contact**): "Technology and research space developments for new laboratory environment," \$4,636.34 (Funded).

SFARI, Human Cognitive and Behavioral Science Grant, **Principal Investigator:** "Identifying unique neurophysiological signatures influencing memory encoding and learning in children with Autism Spectrum Disorder." \$685,123.32 (Not Funded)

NIH, Research Facilities Construction Grant (PAR-21-139), **Co-Principal Investigator** (L. Iasemidis, Program Director/Principal Investigator): "Expansion of Biomedical Research Facilities to Enhance BRAIN Initiative Collaborations in North Louisiana," \$6,050,000 (Not Funded).

Organization for Autism Research, Applied Research Competition, **Co-Investigator** (K. Staples, Principal Investigator): "Determining intervention targets to promote positive trajectories of health for children with ASD," \$30,000 (Funded, November 2018).

Healthy Weight Research Network, Pilot and Feasibility Project, **Co-Investigator** (K. Staples, Principal Investigator): "Determining intervention targets to promote physical activity and positive trajectories of health for children with ASD," \$25,000 (Not Funded)

Organization for Autism Research, Graduate Research Grant Competition, **Principal Investigator:** "Physical activity influences on inhibitory control in children with Autism Spectrum Disorder," \$1,998 (Not Funded)

### **Awards**

American Kinesiology Association Graduate Writing Award, 2016

### **Certifications:**

Autism Diagnostic Observation Schedule – 2<sup>nd</sup> Edition (Modules 1-4 & Toddler, Clinical Certification, 2017

First Aid/CPR/AED Certified (Adult, Child, & Infant), American Red Cross, 2007 – Present

Certified Personal Trainer, American College of Sports Medicine, 2011 – 2014

Certified Professional Rescuer, American Red Cross, 2010 – 2013

Certified Lifeguard, American Red Cross, 2010 – 2013

### **Professional Memberships:**

Society for Psychophysiological Research, 2013 – Present

North American Society for the Psychology of Sport and Physical Activity, 2015 – Present

American College of Sports Medicine, 2009 - 2014

Midwest Chapter American College of Sports Medicine, 2009 - 2014