

# Dr. Jacob Barkley, Ph.D

Assistant Professor  
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## Education

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<b>Ph.D., Exercise Science/Applied Physiology</b> State University of New York at Buffalo	<b>2007</b>
<b>M.S., Exercise Science/Applied Physiology</b> State University of New York at Buffalo	<b>2002</b>
<b>B.S., Physical Education/Exercise Physiology</b> State University of New York College at Brockport	<b>1998</b>

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## Higher Education Work Experience

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<b>Assistant Professor</b> Kent State University <i>Assistant Professor in the School of Exercise Leisure and Sport. Teaching, advising and doing research in the Exercise Science program.</i>	<b>08/2006 - present</b>
<b>Graduate Research Assistant</b> SUNY University at Buffalo <i>Served as a research assistant in the Division of Behavioral Medicine in the Department of Pediatrics.</i>	<b>08/2003 - 08/2006</b>
<b>Graduate Teaching Assistant</b> SUNY University at Buffalo <i>Served as a teaching assistant in the Department of Exercise and Nutrition Sciences.</i>	<b>08/1999 - 08/2003</b>

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## Other Professional Experience

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<b>Personal Trainer</b> K.C.'s Fitness, Buffalo NY	<b>11/2000 - 11/2004</b>
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**Wellness Center Coordinator**

Rich Products, Buffalo NY

08/1998 - 08/1999

**Research Assistant**Department of Physical Education and Sport  
Brockport State College

09/1997 - 05/1998

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**Publications**


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- Barkley, J.E., M. Rebold, A. Carnes, E. L. Glickman, and M. Kobak. The Validity of a Commercially-available, Low-cost Accelerometer During Treadmill Exercise (2014). *Medicine and Science in Sport and Exercise*, 46(5S) Supplement: 485-508. *61st Meeting of the American College of Sports Medicine, Orlando, FL.* 2014  
Publication: *Conference Proceedings, Refereed*
- Williamson, M.L., M. Rebold, A. Carnes, E. L. Glickman, and J.E. Barkley. The Validity of a Low-cost Accelerometer During Free-living Physical activity (2014). *Medicine and Science in Sport and Exercise*, 46(5S) Supplement: 383-388. *61st Meeting of the American College of Sports Medicine, Orlando, FL.* 2014  
Publication: *Conference Proceedings, Refereed*
- Carnes A.J., J.E. Barkley, E. Glickman. Gender Differences in the Effect of the Presence of an Unfamiliar Peer on Outdoor Exercise Intensity in Recreational Runners (2014). *Medicine and Science in Sport and Exercise*, 46(5S) Supplement: 461-466. *61st Meeting of the American College of Sports Medicine, Orlando, FL.* 2014  
Publication: *Conference Proceedings, Refereed*
- Siegmund, L.A., **J.E. Barkley**, D.M. Knapp, and K.S. Peer. (2014) The Acute Effects of Local Vibration with Swisswing® on Low Back Flexibility. *Athletic Training and Sports Health Care*. 6(1): 37-45 2014  
Publication: *Journal Articles, Refereed*
- Lepp, A., **J.E. Barkley**, and A. Karpinski. (2014) The Relationship between Cell Phone Use, Academic Performance, Anxiety, and Satisfaction with Life in College Students, *Computers and Human Behavior*. 31: 343-350. 2014  
Publication: *Journal Articles, Refereed*
- Barkley, J.E.**, S.J. Salvy, G.J. Sanders, S. Dey, K.P. Von Carlowitz, and M.L. Williamson. (2014) Peer Influence and Physical Activity Behavior in Young Children; an Experimental Study. *Journal of Physical Activity and Health* 11, 404-409. 2014  
Publication: *Journal Articles, Refereed*
- Uhas, S., R. Pohle-Krauzza, K. Wagner, and **J.E. Barkley**. (2014) Participating in physical activity after consuming meals of differing caloric content does not alter appetite four hours post activity *Journal of Nutritional Health & Food Engineering*. 1(4): 00020 2014  
Publication: *Journal Articles, Refereed*
- Sanders, G.J., M. Williamson, A.S. Santo, and **J.E. Barkley**. (2014) The effect of posture on energy expenditure and postural preference when playing active and non-active video games. *International Journal of Exercise Science*, 7(3) : 194-201 2014  
Publication: *Journal Articles, Refereed*

- Sigmund, L.A., J. Naylor, A.S. Santo, and **J.E. Barkley**. (2014) The effect of a peer on VO<sub>2</sub> and game choice in 6–10 year old children. *Frontiers Exercise in Physiology*. 5(202), 1-9. doi: 10.3389/fphys.2014.00202 2014  
Publication: *Journal Articles, Refereed*
- Sanders, G.J., C.A. Peacock, M.L. Williamson, K. Wilson, A. Carnes, **J.E. Barkley**. (2014) The effect of friendship groups on children's physical activity: An experimental study. *Journal of Behavioral Health*. 3(2): 95-100 2014  
Publication: *Journal Articles, Refereed*
- Rebold, M.J., G. Sanders, J.E. Barkley. The impact of cell phone use on a the intensity and liking of a bout of treadmill exercise. (2013) *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 372-389. *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN*. 2013  
Publication: *Conference Proceedings, Refereed*
- Williamson, M.L., A. Flynn, and J.E. Barkley. The differences in physical activity levels in preschool children during Free Play recess and Structured Play recess. (2013) *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 479-495. *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN* 2013  
Publication: *Conference Proceedings, Refereed*
- Wagner, K., R. Pohle-Krauza, S. Uhas, and J.E. Barkley. Meals of differing caloric content do not alter physical activity behavior during a subsequent simulated recess period in children. *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 479-495. *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN*. 2013  
Publication: *Conference Proceedings, Refereed*
- Uhas, S., R. Pohle-Krauza, K. Wagner, and J.E. Barkley. Participating in physical activity after consuming meals of differing caloric content does not alter appetite four hours post activity. *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 644-656. *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN*. 2013  
Publication: *Conference Proceedings, Refereed*
- Barkley, J.E., A. Lepp, G.J. Sanders and M. Rebold. College Students' Cell Phone Use and Cardiorespiratory Fitness: A Negative Relationship. *Medicine and Science in Sport and Exercise* 45(5S) Supplement: 117-126. *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN*. 2013  
Publication: *Conference Proceedings, Refereed*
- Sanders, G.J., C.A. Peacock, M.L. Williamson, K. Wilson, A. Carnes, J.E. Barkley. The Effect of Friends on Physical Activity Behavior in 6-10 Year Old Children. (2013) *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 479-495. *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN*. 2013  
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- Sigmund, L.A., J. Naylor, A.S. Santo, and J.E. Barkley, J.E. (2013). The Effect of Peer Influence on the Reinforcing Value of Physically Interactive Video Games in Children. *Medicine and Science in Sport and Exercise*, 45(5S) Supplement *60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN*. 2013  
Publication: *Conference Proceedings, Refereed*

- Carnes, A.J., E. Glickman, J.E. Barkley. The Effect of Peer Influence on Exercise Intensity and Enjoyment During outdoor Running in Collegiate Distance Runners. (2013) *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 117-126. 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN. 2013  
Publication: *Conference Proceedings, Refereed*
- Jarrett, M., S. Allen, J.E. Barkley, J.S. Dufek, P. Hafen, K. Moschella, J. Navalta, R. Rietjens, R. Tandy, and A.S. Santo. (2013) Interactive Video Gaming Maintains  $\dot{V}O_2$  and HR at Current Recommended Exercise Intensities for Cardiovascular Fitness. *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 153-158. 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN. 2013  
Publication: *Conference Proceedings, Refereed*
- Allen, S., J.E. Barkley, J.S. Dufek, P. Hafen, M. Jarrett, K. Moschella, J. Navalta, R. Rietjens, R. Tandy, and A.S. Santo. Physically Interactive Games Increase  $\dot{V}O_2$  Above Resting Metabolic Rate. *Medicine and Science in Sport and Exercise*, 45(5S) 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN. 2013  
Publication: *Conference Proceedings, Refereed*
- Barkley, J.E., and A. Lepp. Cellular telephone use is associated with greater sedentary behavior independent of leisure-time physical activity. (2013) *Applied Physiology, Nutrition, & Metabolism*, No. 38(S1). No. 38(S1). *Annual General Meeting of the Canadian Society of Exercise Physiology, Toronto, ON*. 2013  
Publication: *Conference Proceedings, Refereed*
- Barkley, J.E., S.J. Salvy, G.J. Sanders, S. Dey, K.P. Von Carlowitz, and M.L. Williamson (2013). Peer Influence and Physical Activity Behavior in Young Children; an Experimental Study *Journal of Physical Activity and Health*. Jan 28. [Epub ahead of print] 2013  
Publication: *Journal Articles, Refereed*
- Juvancic-Heltzel, J.A., E.L. Glickman and J.E. Barkley (2013). The Effect of Variety on Physical Activity: a Cross-Sectional Study *Journal of Strength and Conditioning Research*. 27(1):244-251 2013  
Publication: *Journal Articles, Refereed*
- Lepp, A., J.E. Barkley, G.J. Sanders, M. Rebold and P. Gates. (2013). College Students' Cell Phone Use and Cardiorespiratory Fitness: A Negative Relationship. *International Journal of Behavioral Nutrition and Physical Activity*. 10(1): 79, doi:10.1186/1479-5868-10-79. 2013  
Publication: *Journal Articles, Refereed*
- Rittenhouse, M.A., and J.E. Barkley. (2013). Self-reported peer victimization and objectively measured physical activity behavior in boys; a quasi-experimental study *Journal of Exercise Physiology online*. 16(3): 84-92 2013  
Publication: *Journal Articles, Refereed*
- Pollock, B.S., J.E. Barkley, N. Potenzini, R.M. DeSalvo, S.L. Buser, R. Otterstetter, J.A. Juvancic-Heltzel (2013). Validity of Borg Ratings of Perceived Exertion During Active Video Game Play. *International Journal of Exercise Science*. 6(2): 164-170. 2013  
Publication: *Journal Articles, Refereed*
- Ryan, E.J., Kim, C-H., Fickes, E.J., Williamson, M., Muller, M.D., Barkley, J.E., Gunstad, J., Glickman, E.L. (2013). Caffeine gum and cycling performance: A timing study. *Journal of Strength and Conditioning Research*. 27(1): 259-64. 2013  
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- Carnes, A.J., **J.E. Barkley**, M. Williamson, and G.J. Sanders. (2013) The Presence of a Familiar Peer Does Not Affect Intensity or Enjoyment during Treadmill Exercise in Male Distance Runners or Non-Runners *Journal of Athletic Enhancement*. 2:4, doi: 10.4172/2324-9080.1000119  
Publication: *Journal Articles, Refereed* 2013
- Barkley, J.E., and M.A. Rittenhouse. (2012). Self-reported peer victimization and objectively measured physical activity behavior in boys; a quasi-experimental study *Medicine and Science in Sport and Exercise* 44(5) Supplement: S349. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Carnes, A., and J.E. Barkley. (2012). The effect of peer influence on treadmill exercise in collegiate distance runners and non-runners. *Medicine and Science in Sport and Exercise*, 44(5) Supplement: S140. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Juvancic-Heltzel, J., G.J. Sanders, M.L. Williamson, J.N. Roemmich, D.M. Feda, and J.E. Barkley. (2012). Effect of level of autonomy on the amount of physical activity in young children. *Medicine and Science in Sport and Exercise*, 44(5) Supplement: S348. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Sanders, G.J., M. Williamson, A.S. Santo, and J.E. Barkley, J.E. (2012). The effect of posture on energy expenditure and postural preference when playing active and non-active video games *Medicine and Science in Sport and Exercise*, 44(5) Supplement: S347. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Williamson, M., Sanders, G.J., A. Carnes, A.S. Santo, E. Glickman and J.E. Barkley. (2012). The reinforcing value of a typically sedentary video game compared to the physiologically challenging video game in children *Medicine and Science in Sport and Exercise*, 44(5) Supplement: S2. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Muchicko, M.M., K. Brindley, K.J. Burns, and J.E. Barkley. (2012). Peer Victimization and Physical Activity Attitudes and Behavior in Transgendered and Non-Transgendered Individuals. *Medicine and Science in Sport and Exercise* 44(5) Supplement: S346. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Pollock, B.S., J.E. Barkley, N. Potenzini, R.M. DeSalvo, S.L. Buser, R. Otterstetter, J.A. Juvancic-Heltzel. (2012). Validity of Borg Ratings of Perceived Exertion During Active Video Game Play. *Medicine and Science in Sport and Exercise*, 44(5) Supplement: S460. *59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Publication: *Conference Proceedings, Refereed*
- Ryan, E.J., Kim, C-H., Muller, M.D., Bellar, D.M., Barkley, J.E., Bliss, M.V., Jankowski-Wilkinson, A., Russell, M., Macander, D., Otterstetter, R., Glickman, E.L. & G.H. Kamimori. (2012) [Low dose caffeine administered in chewing gum does not enhance cycling to exhaustion](#). *Journal of Strength and Conditioning Research*. Epub ahead of print 2012  
Publication: *Journal Articles, Refereed*

- Feda, D.M., M.J. Lambiase, J.E. Barkley, and J.N. Roemmich (2012). Effect of Increasing the Variety of Active Toys on Children's Active Play. *The Journal of Science and Medicine in Sport*. 15(4):334-40. 2012  
 Publication: *Journal Articles, Refereed*
- Barkley, J.E., S.J. Salvy, and J.N. Roemmich. (2012) The Effect of Simulated Ostracism on Physical Activity Behavior in Children. *Pediatrics*. doi:10.1542/peds.2011-0496. 2012  
 Publication: *Journal Articles, Refereed*
- Sanders, G.J., A.S. Santo, C.A. Peacock, K.P. Von Carlowitz, and J.E. Barkley Physiologic Responses, Liking and Motivation for Playing a Video Game on a Physically Interactive Versus a Traditional Gaming System. (2012)*The International Journal of Exercise Physiology*. 5(2): 160-169 2012  
 Publication: *Journal Articles, Refereed*
- Salvy, S.J., J.C. Bowker, L.A. Nitecki, M.A. Kluczynski, and J.E. Barkley. Influence of Peers and Friends on Overweight/Obese Youths' Physical Activity. (2012). *Exercise and Sport Sciences Reviews*. 40(3): 127-132. 2012  
 Publication: *Journal Articles, Refereed*
- Roemmich, J.N., C.L. Lobarinas, J.E. Barkley, T.M. White, R. Paluch, and L.H. Epstein. Use of an Open-loop System to Increase Physical Activity. (2012)*Pediatric Exercise Science*. 24(3):384-98. 2012  
 Publication: *Journal Articles, Refereed*
- Barkley, J.E. S.J. Salvy, G.J. Sanders, S. Dey, K.P. Von Carlowitz, and M.L. Williamson (2011). Peer influence and physical activity behavior in young children; a controlled study. *Medicine and Science in Sport and Exercise*, 43(5) Supplement: S224. *58<sup>th</sup> Meeting of the American College of Sports Medicine, Denver, CO*. 2011  
 Publication: *Conference Proceedings, Refereed*
- Penko, A.L., J.E. Barkley, and J.L. Alberts (2011). [Validity of the Borg RPE Scale for Parkinson's Patients](#). *Medicine and Science in Sport and Exercise*, 43(5) Supplement: S61. *58<sup>th</sup> Meeting of the American College of Sports Medicine, Denver, CO*. 2011  
 Publication: *Conference Proceedings, Refereed*
- Sanders, G.J., A.S. Santo, C.A. Peacock, K.P. Von Carlowitz, and J.E. Barkley, J.E. (2011). [Physiologic Responses, Liking and Motivation for Playing a Video Game on a Physically Interactive Versus a Traditional Gaming System](#). *Medicine and Science in Sport and Exercise*, 43(5) Supplement: S52. *58<sup>th</sup> Meeting of the American College of Sports Medicine, Denver, CO*. 2011  
 Publication: *Conference Proceedings, Refereed*
- Rittenhouse, M., S.J. Salvy and J.E. Barkley. (2011) [The Effect of Peer Influence on the Amount of Physical Activity Performed in 8-to 12-Year-Old-Boys](#) *Pediatric Exercise Science*. 23: 49-60.\* 2011  
 Publication: *Journal Articles, Refereed*
- Barkley, J.E., and J.N. Roemmich. (2011)[Validity of Pediatric RPE Scales When Different Exercise Intensities are Completed on Separate Days](#) *Journal of Exercise Science and Fitness*. 9(1): 52-57. 2011  
 Publication: *Journal Articles, Refereed*

- Barkley, J.E., J.N. Roemmich, E.J. Ryan, D. Bellar and M.V. Bliss. (2011) [Variety of Exercise Equipment and Physical Activity Participation in Children](#). *Journal of Sport Behavior*. 34(2): 137-149 2011  
Publication: *Journal Articles, Refereed*
- Bellar, D., G.H. Kamimori, J.E. Barkley, E.J. Ryan, M. Muller, and E.L. Glickman. (2011) The Effect of Low-Dose Caffeine Supplementation on Early Morning Performance in the Standing Shot Put Throw. *European Journal of Sports Science*. *iFirst article*DOI:10.1080/17461391.2010.536585 2011  
Publication: *Journal Articles, Refereed*
- Bellar, D., M. Muller, E.J. Ryan, M.V. Bliss, J.E. Barkley, and E.L. Glickman. (2011) The Effects of Combined Elastic and Free Weight Tension versus Free Weight Tension on One Repetition Maximum Strength in the Bench Press. *Journal of Strength and Conditioning Research*. 25(2): 459-463. 2011  
Publication: *Journal Articles, Refereed*
- Barkley, J.E. S.J. Salvy, and J.N. Roemmich (2010). [The Effect of Simulated Ostracism on Physical Activity Behavior in Children](#). *Obesity*, 18(2) Supplement: S115. *28<sup>th</sup> Annual Scientific Meeting of the Obesity Society, San Diego, CA* October 2010. 2010  
Publication: *Conference Proceedings, Refereed*
- Juvancic-Heltzel, J.A. and J.E. Barkley (2010). [Effect of Variety on the Amount of Physical Activity in Children, Young and Older Adults](#). *Medicine and Science in Sport and Exercise*, **42(5) Supplement: S559**. *57<sup>th</sup> Meeting of the American College of Sports Medicine, Baltimore, MD*. 2010  
Publication: *Conference Proceedings, Refereed*
- Penko, A., and J.E. Barkley. (2010) [Physiologic Responses and Motivation to Play a Physically Interactive Video Game Relative to a Sedentary Alternative in Children](#). *Annals of Behavioral Medicine*. 39(2):162-9. 2010  
Publication: *Journal Articles, Refereed*
- Malloy-McFall, J. J.E. Barkley, K. Lowry Gordon, N. Burzminski, and E.L. Glickman. (2010) [Effect of the DASH Diet on Pre- and Stage 1 Hypertensive Individuals in a Free-Living Environment](#). *Nutrition and Metabolic Insights*. 3:15-23. 2010  
Publication: *Journal Articles, Refereed*
- Barkley, J.E., and J.N. Roemmich (2009). [Validity of Two Pediatric RPE Scales for Bicycle Exercise Above and Below the Ventilatory Threshold](#). *Medicine and Science in Sport and Exercise*, 41(5) Supplement: S122-123. *56<sup>th</sup> Meeting of the American College of Sports Medicine, Seattle, WA*. 2009  
Publication: *Conference Proceedings, Refereed*
- Rittenhouse, M.A., and J.E. Barkley (2009). [The Effect of Peer Influence on the Amount of Physical Activity Performed in 8-12 Year Old Boys](#). *Medicine and Science in Sport and Exercise*, 41(5) Supplement: S92-93. *56<sup>th</sup> Meeting of the American College of Sports Medicine, Seattle, WA*. 2009  
Publication: *Conference Proceedings, Refereed*
- Penko, A., and J.E. Barkley (2009). [The Physiologic Effects and Reinforcing Value of Playing a Physically-interactive Video Game in Children](#). *Medicine and Science in Sport and Exercise*, 41(5) Supplement: S93. *56<sup>th</sup> Meeting of the American College of Sports Medicine, Seattle, WA*. 2009

Publication: *Conference Proceedings, Refereed*

Barkley, J.E., J.N. Roemmich and L.H. Epstein. (2009) Reinforcing Value of Interval and Continuous Physical Activity in Children. *Physiology and Behavior*, Aug (1-2):31-6. 2009

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Barkley, J.E., A. Penko. (2009) Physiologic Responses, Perceived Exertion and Hedonics of Playing a Physically Interactive Video Game Relative to a Sedentary Alternative and Treadmill Walking in Adults. *Journal of Exercise Physiology Online*. June 12(3): 12-23. 2009

Publication: *Journal Articles, Refereed*

Kamimori, G.H., E.J. Ryan, R. Otterstetter, J.E. Barkley, E.L. Glickman, and H.Q. Davis. (2009) Catecholamine Response to Hypoxia-Induced Acute Mountain Sickness. *Aviation, Space and Environmental Medicine* Apr;80(4):376-80. 2009

Publication: *Journal Articles, Refereed*

Peer, K.S., J.E. Barkley, D.M. Knapp. (2009) The Acute Effects of Local Vibration Therapy on Ankle Sprain and Hamstring Strain Injuries. *The Physician and Sportsmedicine*. 37(4):31-8. 2009

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Barkley, J.E., J.N. Roemmich, E.J. Ryan, D. Bellar, M.V. Bliss and M.A. (2008). [The Effect of Increasing the Variety of Exercise Equipment on the Physical Activity Level of Children.](#) *Medicine and Science in Sport and Exercise*, 40(5) Supplement: S320. 55<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2008

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Roemmich, J.N., J.E. Barkley, C.L. Lobarinas, J.H. Foster, T.M. White, and L.H. Epstein (2008). Association of Liking and Reinforcing Value with Children's Physical Activity. *Physiology & Behavior*. 18.93(4-5):1011-1018. 2008

Publication: *Journal Articles, Refereed*

Barkley, J.E., and J.N. Roemmich (2008). Validity of the CALER and OMNI-Bike Ratings of Perceived Exertion. *Medicine and Science in Sport and Exercise*. 40(4): 760-66. (D) 2008

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Roemmich, J.N., **Barkley, J.E.**, Lobarinas, C.L., Epstein, L.H., Foster, J.H., and White, T.M. (2007) [Liking and Reinforcing Value: Independent Predictors of Children's Physical Activity.](#) *Medicine and Science in Sport and Exercise*, 39(5) Supplement: S86. 54<sup>th</sup> Meeting of the American College of Sports Medicine, New Orleans, LA 2007

Publication: *Conference Proceedings, Refereed*

Barkley, J.E., J.N. Roemmich, and L.H. Epstein (2007). [Relationship Between A Computer Task To Assess The RRV Of Interval Versus Continuous Exercise And Free Choice Exercise.](#) *Medicine and Science in Sport and Exercise*, 39(5) Supplement: S85-S86. 54<sup>th</sup> Meeting of the American College of Sports Medicine, New Orleans, LA 2007

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Barkley, J.E., J.N. Roemmich, L.H. Epstein, and J. McNelis. (2006). [Reinforcing Value of Interval and Continuous Exercise Above and Below the Ventilatory Threshold.](#) *Medicine and Science in Sport and Exercise*, 38(5) Supplement: S22. 53<sup>rd</sup> Meeting of the American College of Sports Medicine, Denver, CO 2006

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- Roemmich, J.N., J.E. Barkley, L. D'Andrea, M. Nikova, A. D. Rogal, M.A. Carskadon and P.M. Suratt. (2006). Overweight Following Adenotonsillectomy in Children with Obstructive Sleep Disordered Breathing: Association with Decreases in Motor Activity and Hyperactivity. *Pediatrics*, 117(2):e200-8. 2006  
Publication: *Journal Articles, Refereed*
- Roemmich, J.N., J.E. Barkley, C. Kuo, L.H. Epstein, T.M. White, J.H. Foster, and R. Paluch. (2006). Validity of CERT and OMNI-walk/run Ratings of Perceived Exertion During Treadmill Exercise. *Medicine and Science in Sport and Exercise* 38(5):1014-9. 2006  
Publication: *Journal Articles, Refereed*
- Roemmich, J.N., J.E. Barkley, L. D'Andrea, M. Nikova, P. Rogal, M.A. Carskadon and P.M. Suratt. (2005). [Overweight Following Adenotonsillectomy in Children with Obstructive Sleep Disordered Breathing: Association with Decreases in Motor Activity and Hyperactivity](#) *Medicine and Science in Sport and Exercise*, 37(5) Supplement: S267-S268. 52<sup>nd</sup> Meeting of the American College of Sports Medicine, Nashville, TN 2005  
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- Barkley, J.E., J.N. Roemmich, C.Kuo, L.H. Epstein, T.M. White, J.H. Foster, and R. Paluch. (2005). [Validity of Omni and Cert RPE Scales in Children](#). *Medicine and Science in Sport and Exercise*, 37(5) Supplement: S6. 52<sup>nd</sup> Meeting of the American College of Sports Medicine, Nashville, TN 2005  
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- Barkley, J.E., J.N. Roemmich, C.Kuo, L.H. Epstein, L. Gopalan, and C. Gurgol. [Predictors of Self-Reported Physical Activity of Children](#). (2004). *Medicine and Science in Sport and Exercise*, 36(5) Supplement: S47. 51<sup>st</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2004  
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- Gosselin, L.E., J.E. Barkley, M.J. Spencer, K.M. McCormick, and G.A. Farkas. (2003) Ventilatory dysfunction in mdx mice: Impact of tumor necrosis factor-alpha deletion. *Muscle Nerve*, 28: 336-343. 2003  
Publication: *Journal Articles, Refereed*
- Barkley, J.E., M. Spencer, G.A. Farkas, K.M. McCormick, and L.E. Gosselin. (2002). [Impact of TNF-Alpha Elimination on Ventilation and Diaphragm Contractility in Dystrophic Mice](#). *Medicine and Science in Sport and Exercise*, 34(5) Supplement: S155. 49<sup>th</sup> Meeting of the American College of Sports Medicine, St. Louis, MO 2002  
Publication: *Conference Proceedings, Refereed*
- Barkley, J.E., J. Hartel, J. Granchelli, G.A. Farkas, and L.E. Gosselin. (2001). [Impact of Prednisone on Ventilation and Diaphragm Muscle Contractility in mdx Mice](#). *Medicine and Science in Sport and Exercise*, 33(5) Supplement: S58. 48<sup>th</sup> Meeting of the American College of Sports Medicine, Baltimore, MD 2001  
Publication: *Conference Proceedings, Refereed*

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## Presentations

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- Williamson, M.L., A. Flynn, and J.E. Barkley. The differences in physical activity levels in preschool children during Free Play recess and Structured Play recess. (2013)*Medicine and Science in Sport and Exercise*,45(5S) Supplement: 479-495. 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2013  
Type: National Refereed
- Wagner, K., R. Pohle-Krauza, S. Uhas, and J.E. Barkley. Meals of differing caloric content do not alter physical activity behavior during a subsequent simulated recess period in children60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2013  
Type: National Refereed
- Uhas, S., R. Pohle-Krauza, K. Wagner, and J.E. Barkley. Participating in physical activity after consuming meals of differing caloric content does not alter appetite four hours post activity60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2013  
Type: National Refereed
- Sigmund, L.A., J. Naylor, A.S. Santo, and J.E. Barkley, J.E. (2013). The Effect of Peer Influence on the Reinforcing Value of Physically Interactive Video Games in Children. 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2013  
Type: National Refereed
- Carnes, A.J., E. Glickman, J.E. Barkley.The Effect of Peer Influence on Exercise Intensity and Enjoyment During outdoor Running in Collegiate Distance Runners.(2013) 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN. 2013  
Type: National Refereed
- Jarrett, M., S. Allen, J.E. Barkley, J.S. Dufek, P. Hafen, K. Moschella, J. Navalta, R. Rietjens, R. Tandy, and A.S. Santo. (2013) Interactive Video Gaming Maintains  $\dot{V}O_2$  and HR at Current Recommended Exercise Intensities for Cardiovascular Fitness. 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN 2013  
Type: National Refereed
- Allen, S., J.E. Barkley, J.S. Dufek, P. Hafen, M. Jarrett, K. Moschella, J. Navalta, R. Rietjens, R. Tandy, and A.S. Santo. (2103)Physically Interactive Games Increase  $\dot{V}O_2$  Above Resting Metabolic Rate. 60<sup>th</sup> Meeting of the American College of Sports Medicine, Indianapolis, IN. 2013  
Type: National Refereed
- Barkley, J.E., and M.A. Rittenhouse. (2012). Self-reported peer victimization and objectively measured physical activity behavior in boys; a quasi-experimental study59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA. 2013  
Type: National Refereed
- Carnes, A., and J.E. Barkley. (2012). The effect of peer influence on treadmill exercise in collegiate distance runners and non-runners. 59<sup>th</sup> Meeting of the American College of Sports Medicine, San Francisco, CA. 2013  
Type: National Refereed
- Barkley, J.E., and A. Lepp.Cellular telephone use is associated with greater sedentary behavior independent of leisure-time physical activity. (2013)*Annual General Meeting of the Canadian Society of Exercise Physiology, Toronto, ON.* 2013  
Type: International Refereed

- Lepp, A. and J.E. Barkley (2013). College Student's Cell Phone Use Found to Be Negatively Associated with Leisure Time Physical Activity, Fitness, and Academic Performance. Invited symposium for the *Tourism, Recreation and Sport Management department*, the University of Florida. Gainesville, FL 2013  
Type: *Regional Invited*
- Barkley, J.E., A. Lepp, G.J. Sanders and M. Rebold (2013). College Students' Cell Phone Use and Cardiorespiratory Fitness: A Negative Relationship. Invited symposium at the *2nd Annual Northeast Ohio Exercise Science Conference*, University of Akron, Akron OH. 2013  
Type: *Regional Invited*
- Barkley, J.E., A. Lepp, G.J. Sanders and M. Rebold. College Students' Cell Phone Use and Cardiorespiratory Fitness: A Negative Relationship. *60th Meeting of the American College of Sports Medicine, Indianapolis, IN.* 2013  
Type: *National Refereed*
- Rebold, M.J., G. Sanders, J.E. Barkley. The impact of cell phone use on a the intensity and liking of a bout of treadmill exercise. (2013) *Medicine and Science in Sport and Exercise*, 45(5S) Supplement: 372-389. *60th Meeting of the American College of Sports Medicine, Indianapolis, IN* 2013  
Type: *National Refereed*
- Juvancic-Heltzel, J., G.J. Sanders, M.L. Williamson, J.N. Roemmich, D.M. Feda, and J.E. Barkley. (2012). Effect of level of autonomy on the amount of physical activity in young children. *59th Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Type: *National Refereed*
- Sanders, G.J., M. Williamson, A.S. Santo, and J.E. Barkley, J.E. (2012). The effect of posture on energy expenditure and postural preference when playing active and non-active video games. *59th Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Type: *National Refereed*
- Williamson, M., Sanders, G.J., A. Carnes, A.S. Santo, E. Glickman and J.E. Barkley. (2012). The reinforcing value of a typically sedentary video game compared to the physiologically challenging video game in children. *59th Meeting of the American College of Sports Medicine, San Francisco, CA.* 2012  
Type: *National Refereed*
- Muchicko, M.M., K. Brindley, K.J. Burns, and J.E. Barkley. (2012). Peer Victimization and Physical Activity Attitudes and Behavior in Transgendered and Non-Transgendered Individuals. *59th Meeting of the American College of Sports Medicine, San Francisco, CA* 2012  
Type: *National Refereed*
- Pollock, B.S., J.E. Barkley, N. Potenzini, R.M. DeSalvo, S.L. Buser, R. Otterstetter, J.A. Juvancic-Heltzel. (2012). Validity of Borg Ratings of Perceived Exertion During Active Video Game Play. *59th Meeting of the American College of Sports Medicine, San Francisco, CA* 2012  
Type: *National Refereed*
- Barkley, J.E. S.J. Salvy, G.J. Sanders, S. Dey, K.P. Von Carlowitz, and M.L. Williamson (2011). [Peer influence and physical activity behavior in young children: a controlled study](#). *58th Meeting of the American College of Sports Medicine, Denver, CO* 2012  
Type: *National Refereed*

- Barkley, J.E., and G. Sanders (2012). The impact of positive and negative social interaction on physical activity behavior in children: findings from laboratory research. Symposium at the *Annual Meeting for the Midwest American College of Sports Medicine*. Toledo, OH  
 2012  
 Type: *Regional Refereed*
- Penko, A.L., J.E. Barkley, and J.L. Alberts (2011). [Validity of the Borg RPE Scale for Parkinson's Patients](#). *Medicine and Science in Sport and Exercise*, 43(5) Supplement: S61. 58<sup>th</sup> Meeting of the American College of Sports Medicine, Denver, CO.  
 2011  
 Type: *National Refereed*
- Sanders, G.J., A.S. Santo, C.A. Peacock, K.P. Von Carlowitz, and J.E. Barkley, J.E. (2011). [Physiologic Responses to Liking and Motivation for Playing a Video Game on a Physically Interactive Versus a Traditional Gaming System](#). *Medicine and Science in Sport and Exercise*, 43(5) Supplement: S52. 58<sup>th</sup> Meeting of the American College of Sports Medicine, Denver, CO  
 2011  
 Type: *National Refereed*
- Barkley, J.E. (2011). Can ostracism hurt a child's waistline? Invited symposium at the *Annual Meeting of the Texas Regional American Alliance for Health, Physical Education, Recreation and Dance*. Dallas, TX  
 2011  
 Type: *Regional Invited*
- Barkley, J.E. S.J. Salvy, and J.N. Roemmich (2010). [The Effect of Simulated Ostracism on Physical Activity Behavior in Children](#). *Obesity*, 18(2) Supplement: S115. 28<sup>th</sup> Annual Scientific Meeting of the Obesity Society, San Diego, CA. October 2010.  
 2010  
 Type: *National Refereed*
- Barkley, J.E., and K.S. Peer (2010). [The Acute Effects of Segmental Biomechanical Muscle Stimulation on Ankle and Hamstring Injury](#). 57<sup>th</sup> Meeting of the American College of Sports Medicine, Baltimore, MD.  
 2010  
 Type: *National Refereed*
- Juvancic-Heltzel, J.A. and J.E. Barkley (2010). [Effect of Variety on the Amount of Physical Activity in Children, Young and Older Adults](#). 57<sup>th</sup> Meeting of the American College of Sports Medicine, Baltimore, MD  
 2010  
 Type: *National Refereed*
- Peer, K.S., and J.E. Barkley. (2010). Effects of Biomechanical Stimulation on Athletic Invited symposium at the *Injury and Flexibility*. Summa Center for Sports Health's 5<sup>th</sup> Annual Symposium. Akron, OH  
 2010  
 Type: *Local Invited*
- Barkley, J.E., and J.N. Roemmich (2009). [Validity of Two Pediatric RPE Scales for Bicycle Exercise Above and Below the Ventilatory Threshold](#). 56<sup>th</sup> Meeting of the American College of Sports Medicine, Seattle, WA  
 2009  
 Type: *National Refereed*
- Rittenhouse, M.A., and J.E. Barkley (2009). [The Effect of Peer Influence on the Amount of Physical Activity Performed in 8-12 Year Old Boys](#). 56<sup>th</sup> Meeting of the American College of Sports Medicine, Seattle, WA  
 2009  
 Type: *National Refereed*

- Penko, A., and J.E. Barkley (2009). [The Physiologic Effects and Reinforcing Value of Playing a Physically-interactive Video Game in Children](#). 56<sup>th</sup> Meeting of the American College of Sports Medicine, Seattle, WA 2009  
Type: *National Refereed*
- Barkley, J.E. Increasing the Variety of Exercise Equipment Increases Physical Activity in Children. International Forum on Sport, Exercise and Leisure. Shijizhuang, China. May 2008. 2008  
Type: *International Invited*
- Barkley, J.E. Laboratory Experiences for a senior/Masters Level Exercise testing Class. International Forum on Sport, Exercise and Leisure. Shijizhuang, China. May 2008. 2008  
Type: *International Invited*
- Barkley, J.E. Curriculum Trends in Exercise Science. International Forum on Sport, Exercise and Leisure. Shijizhuang, China. May 2008. 2008  
Type: *International Invited*
- Barkley, J.E., J.N. Roemmich, E.J. Ryan, D. Bellar, M.V. Bliss and M.A. Rittenhouse (2008). The Effect of Increasing the Variety of Exercise Equipment on the Physical Activity Level of Children. *Medicine and Science in Sport and Exercise*, 40(5) Supplement: S320, May 2008. 55th Meeting of the American College of Sports Medicine, Indianapolis, IN. 2008  
Type: *National Refereed*
- Barkley, J.E., J.N. Roemmich, and L.H. Epstein (2007 May). Relationship Between A Computer Task To Assess The RRV Of Interval Versus Continuous Exercise And Free Choice Exercise. Power-point presentation at the 54rd Meeting of the American College of Sports Medicine, New Orleans, LA. 2007  
Type: *National Refereed*
- Roemmich, J.N., Barkley, J.E., Lobarinas, C.L., Epstein, L.H., Foster, J.H., and White, T.M. (2007 May). Liking and Reinforcing Value: Independent Predictors of Children's Physical Activity. Power-point presentation at the 54rd Meeting of the American College of Sports Medicine, New Orleans, LA. 2007  
Type: *National Refereed*
- Barkley, J.E., J.N. Roemmich, L.H. Epstein, and J. McNelis. (2006 June). Reinforcing Value of Interval and Continuous Exercise Above and Below the Ventilatory Threshold. Power-point presentation at the 53rd Meeting of the American College of Sports Medicine, Denver, CO. 2006  
Type: *National Refereed*
- Barkley, J.E., J.N. Roemmich, C.Kuo, L.H. Epstein, T.M. White, J.H. Foster, and R. Paluch. (2005 June). Validity of Omni and Cert RPE Scales in Children. Power-point presentation at the 52nd Meeting of the American College of Sports Medicine, Nashville, TN. 2005  
Type: *National Refereed*
- Roemmich, J.N., J.E. Barkley, L. Andrea, M. Nikova, P. Rogal, M.A. Carskadon and P.M. Suratt. (2005 June). Overweight Following Adenotonsillectomy in Children with Obstructive Sleep Disordered Breathing: Association with Decreases in Motor Activity and Hyperactivity. Poster presented at the 52st Meeting of the American College of Sports Medicine, Nashville, TN. 2005  
Type: *National Refereed*

Barkley, J.E., J.N. Roemmich, C.Kuo, L.H. Epstein, L. Gopalan, and C. Gurgol. Predictors of Self-Reported Physical Activity of Children. (2004 May). Power-point presentation at the 51st Meeting of the American College of Sports Medicine, Indianapolis, IN. 2004

Type: *National Refereed*

Barkley, J.E., M. Spencer, G.A. Farkas, K.M. McCormick, and L.E. Gosselin. (2002 June). Impact of TNF-Alpha Elimination on Ventilation and Diaphragm Contractility in Dystrophic Mice. Poster presented at the 49th Meeting of the American College of Sports Medicine, St. Louis, MO. 2002

Type: *National Refereed*

Barkley, J.E., J. Hartel, J. Granchelli, G.A. Farkas, and L.E. Gosselin. (2001 May). Impact of Prednisone on Ventilation and Diaphragm Muscle Contractility in mdx Mice. Poster presented at the 48th Meeting of the American College of Sports Medicine, Baltimore, MD. 2001

Type: *National Refereed*

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## Service

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**Workshop Instructor - ACSM Health Fitness Instructor (HFI)** 2007 - 2007

Type: *National*

**Committee, The School of Exercise, Leisure and Sport Curriculum Committee** 2007 - present

*Representative for the Physical Education unit on the committee.*

Type: *Department*

**Member, The American College of Sports Medicine (ACSM)** 2004 - present

Type: *National*

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## Grants

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**Co PI, Exploring the relationship between cell phone use, social network, and academic performance in undergraduate college students** 2014 - 2016

*College students' cellular telephone (cell phone) use is a malleable factor which emerging research suggests is negatively related to academic performance. However, the few existing studies of this phenomenon are limited by a reliance on subjective measures and inattention to the potential role of a student's social network. Thus, the purpose of this study is twofold: first, to clarify and describe in detail the relationship between cell phone use and academic performance by using objective measurements of key variables (cell phone use and academic performance) and validated controls (i.e.: academic self-efficacy, demographics); and second, to determine the role of an individual's social network in predicting cell phone use and academic performance. Should this study confirm a significant negative relationship between cell phone use and academic performance, and determine that this relationship is influenced by an individual's social network, then we will be able to develop "network-aware" strategies aimed at helping students and networks of students reduce problematic cell phone use and perform better academically. Thus, this study is the first step in the development and testing of scientifically informed interventions.*

Collaboration with: Lepp, A., Barkley, J., Li, J., Jin, R., Lane, H. and Dou, D.

Submitted: \$906,000.00

Status: Pending

Awarded: pending (0 0)

Institutes of Education Sciences, U.S. Department of Education - Applied Research

**Co PI, Cell Phone Use and Physical Activity Behavior and Attitudes** 2012 - 2013

Collaboration with: Barkley and Lepp

Submitted: \$1,800.00	Status: Awarded
Awarded: \$1,800.00 (4 2012)	
University Research Council - Applied Research	
<b>Co PI, The effect of spinal cord stimulation unit revision on perceived pain, physical activity and medication for individuals with a failed back surgery</b>	<b>2012 - 2015</b>
Submitted: \$197,000.00	Status: Awarded
Awarded: \$197,000.00 (11 2012)	
Boston Scientific - Applied Research	
<b>PI, The Acute Effect of Meals of Differing Fat and Calorie Content on Physical Activity Behavior in Children</b>	<b>2011 - 2014</b>
Collaboration with: Barkley	
Submitted: \$5,000.00	Status: Awarded
Awarded: \$5,000.00 (3 2011)	
The College of Education, Health and Human Services - Applied Research	
<b>Co PI, Simulated Ostracism on Youth's Eating and Physical Activity Behavior Role: co-Principal Investigator</b>	<b>2010 - 2014</b>
Collaboration with: Jacob Barkley Sarah Salvy	
Submitted: \$365,587.00	Status: Not Funded
National Institutes of Health - Applied Research	
<b>PI, The effect of peer influence on a session of physical activity in young children</b>	<b>2009 - 2010</b>
Submitted: \$500.00	Status: Awarded
Awarded: \$500.00 (5 2009)	
SELS - Applied Research	
<b>PI, The effect of peer influence on physical activity patterns in lean and overweight male children</b>	<b>2008 - 2009</b>
Collaboration with: Barkley, J.E.	
Submitted: \$2,462.00	Status: Awarded
Awarded: \$2,462.00 (5 2008)	
Kent State University Research Council - Applied Research	
<b>PI, The effect of peer influence on physical activity patterns in lean and overweight male children</b>	<b>2008 - 2008</b>
Collaboration with: Barkley, J.E.	
Submitted: \$6,500.00	Status: Awarded
Awarded: \$6,500.00 (12 2007)	
Kent State University Research and Graduate Studies - Applied Research	
<b>PI, Energy expenditure and the reinforcing value of the Nintendo Wii in children</b>	<b>2008 - 2008</b>
Collaboration with: Barkley, J.E.	
Submitted: \$500.00	Status: Awarded
Awarded: \$500.00 (5 2008)	
SELS - Applied Research	

<p><b>PI, The effect of increasing the variety of resistance training equipment on the amount of physical activity children perform.</b></p> <p>Collaboration with: Barkley, J.E., Bellar, D. and Bliss, M.</p> <p>Submitted: \$500.00</p> <p>Awarded: \$500.00 (0 0)</p> <p>School of Exercise, Leisure and Sport</p>	<p><b>2007 - 2008</b></p> <p>Status: Awarded</p>
<p><b>PI, Reinforcing value of interval and continuous exercise above and below the ventilatory threshold in lean and overweight children.</b></p> <p>Collaboration with: Barkley, J.E., Dix, L. and Atkins, A.</p> <p>Submitted: \$500.00</p> <p>Awarded: \$500.00 (0 0)</p> <p>School of Exercise, Leisure and Sport</p>	<p><b>2006 - 2007</b></p> <p>Status: Awarded</p>
<p><b>PI, The Effect of Exercise Intensity on Insulin Sensitivity in Obese, Insulin Resistant Children</b></p> <p>Collaboration with: Barkley, J.E.</p> <p>Submitted: \$1,500.00</p> <p>Awarded: \$1,500.00 (0 0)</p> <p>Gatorade Sports Science Institute</p>	<p><b>2004 - 2005</b></p> <p>Status: Awarded</p>
<p><b>PI, Reinforcing value of interval and continuous exercise above and below the ventilatory threshold.</b></p> <p>Collaboration with: Barkley, J.E.</p> <p>Submitted: \$1,093.00</p> <p>Awarded: \$1,093.00 (0 0)</p> <p>Mark Diamond Research Foundation</p>	<p><b>2004 - 2005</b></p> <p>Status: Awarded</p>
<p><b>Consultant, An investigation of the effectiveness of biomechanical stimulation using the Swiss Wing</b></p> <p>Collaboration with: Kimberly Peer, Ph.D.</p> <p>Submitted: \$20,000.00</p> <p>Awarded: \$20,000.00 (9 2010)</p> <p>Private Industry Grant - Applied Research</p>	<p><b>0 - 2008</b></p> <p>Status: Awarded</p>
<p><b>PI, Altering the relative reinforcing value of a prescribed bout of physical activity in lean and at-risk-for/overweight children</b></p> <p>Submitted: \$28,619.00</p> <p>Ohio Board of Regents - Applied Research</p>	<p><b>0 - present</b></p> <p>Status: Not Funded</p>