

K. Jason Crandall, Ph.D., ACSM C-EP
Associate Professor
Jason.Crandall@wku.edu

EDUCATION

University of Utah, Salt Lake City, UT **2004**
Doctor of Philosophy: Exercise and Sport Science
Major Area: Exercise Physiology
Cognate Areas: Counseling Psychology
Analyses and Development of Teaching Methods

University of Northern Colorado, Greeley, CO **1999**
Master of Arts: Kinesiology
Emphasis: Exercise Physiology

Western Kentucky University, Bowling Green, KY **1996**
Bachelor of Science: Physical Education
Minor: Health Education
Magna Cumme Laude

PROFESSIONAL EXPERIENCE

Associate Professor

Western Kentucky University, *Bowling Green, KY* **2013-Present**

- Responsible for teaching undergraduate and graduate courses in the School of Kinesiology, Recreation, and Sport including:
- Research Fellow in the WKU Center for Gerontology

Assistant Professor

Kentucky Wesleyan College, *Owensboro, KY* **2010-2013**

- Exercise Science Program Director
- Designed and implemented Exercise Science major in the fall of 2011
- Responsible for teaching undergraduate courses in the Department of Kinesiology and Health Promotion

Adjunct Professor

Kentucky Wesleyan College, *Owensboro, KY* **2004-2010**

- Responsible for teaching undergraduate courses in the Physical Education and Health Department

Assistant Professor

Morehead State University, *Morehead, KY*

2003-2004

- Responsible for teaching quantitative and writing intensive undergraduate and graduate courses in the Physical Education Department

Graduate Teaching Assistant

University of Utah, *Salt Lake City, UT*

1999-2002

- Responsible for teaching quantitative and writing intensive undergraduate courses in the Exercise and Sport Science Department

P.E.A.K. Director of Athletic Testing

University of Utah, *Salt Lake City, UT*

2001-2002

- P.E.A.K. (Performance Enhancement through Applied Knowledge) is a clinic within the Department of Exercise and Sport Science responsible for clinical and athletic testing
- Responsible for conducting athletic testing for University of Utah athletic teams and Salt Lake City community athletic groups
- Conducted athletic testing for United States Junior National Ski team
- Conducted athletic testing for the United States Olympic Speed skating team
- Performed blood draws for faculty/staff cholesterol screenings.

Consultant

1998-1999

Personal Exercise Guidance Program, *Greeley and Fort Collins, CO*

- Consulted obese and overweight clientele in proper exercise techniques
- Worked in conjunction with the Rocky Mountain Eating Disorders Program

SCHOLARSHIP

External Grants:

United States Center for Medicare Services Civil Money Penalty Grant; *Bingocize®: An evidence-based health promotion program to improve the quality of life of Kentucky certified nursing facility residents. \$773,449.00 (Funded)*

2017

Owensboro Regional Health Hospital Community Benefit Grant. *Bingocize® improves health and quality of life in older adults. \$36,677.00 (Funded)*

2017

National Institutes of Health Academic Research Enhancement Award (AREA) R15; *Bingocize®: A Novel Mobile Application to Help Maintain or Improve Older Adults' Health, Function, and Cognition. \$471,398.00 (In Review)*

2017

Kentucky NSF EPSCoR – Research Startup Support grant (RSS) Investigators: Lee Winchester (PI), K. Jason Crandall (Senior Personnel). *The Efficacy of Intermittent Blood Flow Restriction Walk Training for Enhancement of Function and Physiological Health in the Older Adult Population. \$63,440.00. (In Review)*

Ergotron Inc. <i>Evaluation of sit-stand desktop workstations in the workplace.</i> \$25,000.00 (Funded)	2016
Retirement Research Foundation Grant. <i>Efficacy of a mobile application for improving older adults' health, function, and cognition.</i> \$94,682.00 (Funded)	2015
National Institutes of Health Small Business Innovation Research (SBIR) Direct to Phase II Grant (R44) \$881,752 (Not Funded)	2015
Kentucky Science and Technology Corporation Kentucky Commercialization Fund Grant \$74,860.00 (Funded)	2014
Kentucky Science and Technology Corporation SBIR/STTR Phase Double Zero Program Grant \$3,650.00 (Funded)	2014
Owensboro Health Hospital Community Benefit Grant \$7,800.00 (Funded)	2013
Wal-Mart Foundation Grant \$500.00 (Funded)	2012
Owensboro Medical Health Systems Community Benefit Grant \$3,365.00 (Funded)	2012
Kentucky Adult Day Care Association \$400.00 (Funded)	2012
Green River Area Development District \$300.00 (Funded)	2012

Funded Internal Grants:

Western Kentucky University Center for Citizenship & Social Justice <i>Scholars in Service</i> Grant to fund Graduate Assistant Thesis Research \$1000.00	2017
Western Kentucky University/University of Louisville Southern Kentucky Area Health Education Center \$760.00	2016
Western Kentucky University/University of Louisville Southern Kentucky Area Health Education Center \$820.00	2016
Western Kentucky University Research and Creative Activities Program (RCAP) grant \$16,000.00	2015

Western Kentucky University College of Health and Human Services Faculty Research Grant \$6,000.00	2015
Western Kentucky University ALIVE Center Community Partnership Grant \$1,324.00	2015
Western Kentucky University Faculty-Undergraduate Student Engagement (FUSE) Grant \$3,000.00	2014
Western Kentucky University Faculty-Undergraduate Student Engagement (FUSE) Grant \$3,000.00	2013
Western Kentucky University College of Health and Human Services Faculty Scholarship Grant \$5,500.00	2013
Western Kentucky University ALIVE Center Community Partnership Grant \$2,500.00	2013
Kentucky Wesleyan College Mini-Grant for High Impact Learning Practices \$2,000.00	2012
Kentucky Wesleyan College Mini-Grant for High Impact Learning Practices \$2,500.00	2012

Peer-reviewed Published Articles:

***Denotes student author**

Falls, D*, **K.J. Crandall**, Shake, M., Norris, B., Arnett, S. Efficacy of a mobile application for improving gait performance in community-dwelling older adults. *Journal of Aging and Physical Activity*. (In Review).

K.J. Crandall, Bubnis, M*, , M.A. Schafer, F. Grieve & K. Dispennette*. Examining the Relationship Between Training Environment and Muscle Dysmorphia Symptoms. *International Journal of Exercise Science*. (In Review)

Glasscock, A*, **K.J. Crandall**, & J. Neils-Strunjas. Undergraduate clinical education and research student perceptions of the geriatric population: A pilot study. *Journal on Excellence in College Teaching*. (In Preparation)

Sobrero, G., S. Arnett, M. Schafer, W. Stone*, T.A. Tolbert, A. Salyer-Funk, **K.J. Crandall**, L.B. Farley, J. Brown*, S. Lyons, T. Esslinger, K. Esslinger, J. Maples. (2017). A Comparison of High Intensity Functional Training and Circuit Training on Health and Performance Variables in Women: A Pilot Study. *Women in Sport and Physical Activity Journal*. 25(1): 1-30. DOI: <http://dx.doi.org/10.1123/wspaj.2015-0035>.

Crandall, K.J. & M. Shake. (2016). A mobile application for improving functional performance and health education in older adults: A pilot study. *Journal of Aging Science*. 4(2): 1-5.

Crandall, K.J., B. Zagdsuren*, M.A. Schafer, & T. S. Lyons. (2016). Static and active workstations for improving workplace physical activity and sitting time. *International Journal of Human Movement and Sports Sciences*. 4 (2): 20-25, DOI: 10.13189/saj.2016.040202.

Willard, M.R*., **K. J. Crandall**. (2016). Intergenerational service-learning to combat ageism in exercise science students. *Kentucky Association for Health, Physical Education, Recreation, and Sport*. 53(2): 55-67.

K.J. Crandall, K. Steward, & T. Warf*. (2016). A mobile application to reduce perceived stress in female undergraduate students. *American Journal of Health Studies*. 31 (2): 68-73.

Pearson, R.* , **K.J. Crandall**, & J. Maples. (In Press). Applied research experiences engage exercise science undergraduate students. *International Journal of Exercise Science*.

Williams, K*., A.K. Brown*, **K.J. Crandall.**, & R. Tinius. (2016). Evidence-based educational information increases knowledge regarding physical activity during pregnancy in women of child-bearing age. *Kentucky Association for Health, Physical Education, Recreation, and Sport*. 54(1): 36-46

Walker, S*. & **K. J. Crandall**, (2016). Wiihabilitation for Improving Balance in Clinical Populations. *Kentucky Association of Health, Physical Education, Recreation, and Dance*. 54 (1): 64-71.

Fairman C*, K. Kendall, B. Harris, **K.J. Crandall**, J. McMillan. (2016). Effectiveness of a training program using an Alter-G treadmill to improve physiological and psychosocial measures in female breast cancer survivors. *International Journal of Exercise Science*. 9(1): 101- 109.

Crandall, K. J. & K.I. Steenbergen*. (2015). Older adults' functional performance and health knowledge after a combination exercise, health education, and bingo game. *Gerontology and Geriatric Medicine*. October-December: 1-8, DOI: 10.1177/2333721415613201.

Crandall, K.J. (2014). Bingocize[®]: Successful integration of intergenerational service-learning into an exercise science practicum project. *Journal of Community Engagement in Higher Education*, 6 (2): 1-6.

Crandall, K.J., T. Carlin*, & A. Flynn*. (2015). Comparison of Dominant and Non-Dominant Range of Motion in Collegiate Baseball Pitchers. *International Journal of Human Movement and Sports Sciences*, 3(2): 16-18, DOI: 10.13189/saj.2015.030202.

Crandall, K.J., C. Fairman*, and D. Anderson*. (2015). Functional fitness in older adults after a combination multicomponent exercise program and bingo game. *International Journal of Exercise Science*, 8 (1): 38-48.

Vowels, M.R.* & **K.J. Crandall**. (2014). A descriptive study of exercise science students' knowledge of, and attitudes toward, older adults. *Kentucky Association of Health, Physical Education, Recreation, and Dance Journal*, 51 (2): 66-78.

Crandall, K.J. and C. Zachary*. (2013). The efficacy of service-learning in health education to increase pre-service teachers' openness to diversity. *Kentucky Association of Health, Physical Education, Recreation, and Dance Journal*, 51 (1): 8-15.

Erb, O.* and **Crandall, K.J.** (2012). Effects of a NOIST standards based after-school physical activity program on health-related fitness in elementary school children. *Kentucky Association of Health, Physical Education, Recreation, and Dance Journal*, 50 (1): 7-12.

Crandall, K.J., P.A. Eisenman, L. Ransdell, and J. Reel. (2012). Physical activity perceptions and binge eating disorder in community-dwelling women. *Food and Health*, 2 (5): 119-126. doi: 10:5923/j.fph.20120205

Other Scholarly Contributions:

Conference Proceedings:

Crandall, K.J., G. Xing, & Shake, M. Bingocize 3.0: A game based platform for promoting wellness in older adults. Conference on Bioinformatics, Computational Biology, and Health Informatics, September 09-12, 2015, Atlanta, GA, ACM 978-1-4503-3853-0/15/09. <http://dx.doi.org/10.1145/2808719.2811416>"

Published Abstracts:

Crandall, K.J., Falls, D., Shake, M., Norris, Elizabeth, Arnett, S., Dispennette, K., & Mathews, R. (2017). A mobile application for improving gait characteristics in community-dwelling older adults. *Medicine and Science in Sports and Exercise*, 47 (5) supplement.

Crandall, K.J. & K.I. Steenbergen (2015). Functional performance and health knowledge after a combination exercise, health education, and bingo game. *Medicine and Science in Sports and Exercise*, 47 (5) supplement.

Crandall, K.J., D. Anderson, and C. Fairman. (2014). Improved functional fitness in community-dwelling older adults using a combination exercise and bingo game. *Medicine and Science in Sports and Exercise*.

Gold, O. and **K.J. Crandall** (2013). Healthy Minds, Healthy Bodies: An after-school based physical activity program to combat childhood obesity. *Kentucky Association for Physical Education, Health, Recreation, and Dance Journal* 50 (2): 49.

Crandall, K.J., D. Anderson, and C. Fairman. (2013). Bingocize: Combining exercise and bingo to improve functional fitness and reduce fall risks in older adults. *Kentucky Association for Physical Education, Health, Recreation, and Dance Journal* 50 (2): 50.

Published Reviews:

Clocks, B., **K.J. Crandall**, E. Eastep, J. Vener, N. Detling, C. Schoen, and L. Ransdell. (2001). Review of *International Encyclopedia of Women and Sport*. In *Women in Sport and Physical Activity*.

Estanol-Johnson, E., C. Schoen, **K.J. Crandall**, and L. Ransdell (2001). Review of Breakin' the Glass: History of the ABL. *Women in Sport and Physical Activity*.

Theses:

Falls, D., **K.J. Crandall**, M. Shake., B. Norris, S. Arnett, R.P. Mathews, & K. Dispennette. Efficacy of a mobile application for improving gait performance in community-dwelling older adults. Western Kentucky University, Bowling Green, KY. March, 2017.

Bubnis, M., **K.J. Crandall**, M. Schafer, R. Grieves. Body Image Comparisons Between CrossFit and Traditional Strength Training Participants. Western Kentucky University, Bowling Green, KY. May, 2016.

Vowels, M. & **K.J. Crandall**. Intergenerational Service-Learning in Exercise Science. Undergraduate Honors Thesis, Western Kentucky University, Bowling Green, KY. December 2014.

W. Stone, M. Schafer, S. Lyons, S. Arnett, G. Evans, D. Hoover, **K.J. Crandall**, J. Maples. Twenty-four hour post exercise hypotension following concurrent cardiovascular and resistance exercise. Master of Kinesiology, Western Kentucky University, Bowling Green, KY. May 2014

C. Fairman, K. Kendall, B. Harris, J. McMillan, **K.J. Crandall**, P. Hyde. Effects of physical activity with antigravity treadmill training on physiological measures in breast cancer patients. Master of Kinesiology, Georgia Southern University, Statesboro, GA. December 2013.

Invited Reviews:

Review of "Implementing a University-Wide Global Health Service-learning Course", for the *International Journal of Research on Service-Learning and Community Engagement*, July, 2017.

Review of "Dynamic sitting: An under-the-table leg-movement device and energy expenditure", for the *International Journal of Exercise Science*, November, 2016.

Review of "Tremor-dampening eating utensil", for the *Kentucky Science and Engineering Foundation's Phase SBIR/STTR Phase Zero Grant*, October, 2016.

Review of "Motivating University Employees for Health and Fitness: Bethel University Fitbit Challenge," for the *International Journal of Workplace Health Management*, December, 2015.

Review of "Community engagement initiative: Academia partnering with the health department and community agencies for change," for *Journal of Community Engagement and Higher Education*, October, 2015

Review of "Students' emotional experiences in direct versus indirect academic service-learning courses" for *International Journal of Research on Service-Learning and Community Engagement*, April 2015.

Review of "Activity monitors step count accuracy in community-dwelling older adults" for *Gerontology and Geriatric Medicine*, January 2015.

Review of "TRX Suspension Training: A new functional training approach for older adults – development, training control and feasibility" for *International Journal of Exercise Science*, December 2014.

Review of "Needs Assessment of an International Service-learning Program: An Innovative Approach to Community-Based Learning" for *Journal of Community Engagement in Higher Education*, June 2014.

Review of "Social Exergaming: A pilot study of enjoyment and physiological responses using Gamercize" for *International Journal of Exercise Science*, August 2013.

Review of textbook "American College of Sports Medicine's Exercise for Older Adults", April 2013.

Review of "Prediction of everyday eating characteristics by stress induced laboratory eating in obese women with binge eating disorder" for *Psychology Reports*, November 2012.

Professional Presentations:

Dispennette, K., Stevens, L., Machine, T., Clark, B., Neils-Strunjas, J., and **Crandall, K.J.** Bingocize®: An evidence-based health promotion program for improving functional performance, social engagement, and health knowledge in rural older adult communities. Kentucky Rural Health Association Conference, Bowling Green, KY.; November, 2017.

Taylor, J., Piatt, J. & **Crandall, K.J.** Bingocize®: An interdisciplinary health promotion program for older adults. American Therapeutic Recreation Association Annual Conference, Orlando, FL.; September, 2017. Accepted for Presentation

Crandall, K.J., Bischoff, H., & Davis, J. Bingocize® : A Fun Health Promotion Program to Get your Residents Moving! American Association of Service Coordinators, Orlando, FL.; September, 2017. Accepted for Presentation

Crandall, K.J., Shake, M., & Kratner, L. Bingocize®: An innovative health promotion program to improve physical and mental fitness. University of Louisville Institute for Sustainable Health & Optimal Aging Conference, Louisville, KY.; June 12th, 2017.

Shake M., **Crandall, K.J.**, Mathew, R., Makenna, S., Richardson, C., Nunez, K., and Zierten, M. Bingocize®: An Intervention for Older Adults' Cognition, Functional Performance, and Health Knowledge IAGG World Congress of Gerontology and Geriatrics, San Francisco, CA.; July 2017.

Crandall, K.J., Falls, D., Shake, M., Norris, Elizabeth, Arnett, S., Dispennette, K., & Mathews, R. A mobile application for improving gait characteristics in community-dwelling older adults. American College of Sports Medicine Annual Meeting, Denver, CO.; 2017.

Falls, D., **Crandall, K.J.**, Shake, M., Norris, B., Arnett, S., Mathews, R.P., & Dispennette, K. Efficacy of a mobile application for improving gait performance in community-dwelling older adults. Southeast American College of Sports Medicine Conference, Greenville, SC; February 2017.

Vondy, R., Schafer, M., **Crandall, K.J.**, Lyons, S., Olenick, A., Blankenship, L., Shaker, N. Evaluation of Sit-Stand Desktop Workstations in Sedentary Office Workers. WKU Student Research Conference, Spring 2017.

Roland, E., Edens, K.L., Reisert, K., Saint, K.P., Schafer, M.A. & **Crandall, K.J.** The Effects of a Sit-Stand Workstation Intervention on Workday Psychological Stress in University Staff. WKU Student Research Conference, Spring 2017.

French, M., Tade, M., Neils-Strunjas, J., **Crandall, K.J.**, Glascock, A., McAlpin, K., & Schaefer, S. A Qualitative Analysis of Persons With Dementia & Their Experience With the Game Bingocize®. American Speech-Language-Hearing Association, Philadelphia, PA; November 2016.

Crandall, K.J. & Falls, D. Bingocize®: A unique health promotion activity for maintaining independence and reducing fall risk in older adults. LeadingAge Kentucky Conference. Louisville, KY; September, 2016

Shake, M.C., Cooling, J., Sklenar, A.M., Mathews, R., & **Crandall, K.J.** Bingocize®: Exploring the usage of a mobile application to enhance older adults' functional performance, health knowledge, and fluid cognition. Association for Psychological Science Convention, Chicago, IL.; May 2016.

Bubnis, M., **Crandall, K.J.**, Schafer, M., Grieve, F. Muscle dysmorphia comparisons between high intensity functional training and traditional strength training environments. American College of Sports Medicine Annual Meeting, Boston, MA; June, 2016.

Falls, D., **Crandall, K.J.**, Shake, M., Xing, G., Schafer, M., Sklenar, A., Cooling, J., Brown, J. Glover, S., Mathews, R.P., & Olenick, A. Mobile application for improving functional

performance, health education, and cognition in older adults. American College of Sports Medicine Annual Meeting, Boston, MA; June, 2016.

Olenick, A., **Crandall, K.J.**, Schafer, M.A., Zagdsuren, B., Lyons, T.S., Brown, J., & Falls, D. Workstations to increase workplace physical activity and reduce sitting time: A pilot study. American College of Sports Medicine Annual Meeting, Boston, MA; June, 2016.

Crandall, K.J. and D. Falls. Bingocize®: A Mobile Application for Reducing Fall Risk in Older Adults. ThinkFirst Conference on Injury Prevention, Chicago, IL; May, 2016.

French, M., M. Tade, J. Neils-Strunjas, **K.J. Crandall**, A. Glascock, & S. Schaefer. A Novel Game for Improving Engagement in Older Adults with Dementia. WKU Student Research Conference, Spring 2016.

Falls, D., **Crandall, K.J.**, Shake, M., Xing, G., Schafer, M., Sklenar, A., Cooling, J., Brown, J., Glover, S., Mathews, R.P., & Olenick, A. Mobile application for improving functional performance, health education, and cognition in older adults. WKU Student Research Conference, Spring 2016.

Bubnis, M., **Crandall, K.J.**, Schafer, M., & Grieve, F. Body image comparisons between high intensity functional training and traditional strength training participants. WKU Student Research Conference, Spring 2016.

Latham, A., Warf, T., & **Crandall K.J.** Mobile application to reduce perceived stress in female undergraduate students. WKU Student Research Conference, Spring 2016.

Brown, J., Battogtokh, Z., **Crandall, K.J.**, Schafer, M.A., Lyons, T.S., Falls, Dustin, & Olenick, A. Workstations to increase workplace physical activity and reduce sitting time: A pilot study. WKU Student Research Conference, Spring 2016.

Williams, K. Brown, A, Cowan, C. **Crandall, K.J.**, Tinius, R. Effect of evidence-based educational information on knowledge regarding exercise during pregnancy in women of child-bearing age. WKU Student Research Conference, Spring 2016.

Brown, J., Battogtokh, Z., **Crandall, K.J.**, Schafer, M.A., Lyons, T.S., Falls, Dustin, & Olenick, A. Workstations to increase workplace physical activity and reduce sitting time: A pilot study. Southeast, Greenville, SC; February 19th, 2016.

Crandall, K.J. & K.I. Steenbergen. Functional Performance and Health Knowledge After a Combination Exercise, Health Education, and Bingo Game. Kentucky Posters-at-the-Capitol, Frankfort, KY., February 25th, 2016.

French, M., M. Tade, J. Neils-Strunjas, **K.J. Crandall**, A. Glascock, & M. Schaefer. A novel game for improving engagement in older adults with dementia. Kentucky Speech and Hearing Association Convention, Lexington, KY, February 18th, 2016.

Crandall, K.J. & M. Willard. Intergenerational Service-Learning Initiative Engages Exercise Science Students and the Older Adult Community. WKU Student Success Summit, January 21st, 2016.

Crandall, K.J., F. Haynes, & K. Steward. Mobile Application to Reduce Perceived Stress in Female Undergraduate Students. WKU Student Success Summit, January 21st, 2016.

Crandall, K.J. & K.I. Steenbergen. Functional Performance and Health Knowledge After a Combination Exercise, Health Education, and Bingo Game. Kentucky Rural Health Association Conference, Western Kentucky University, September 17th, 2015.

Crandall, K.J. & K.I. Steenbergen. Functional Performance and Health Knowledge After a Combination Exercise, Health Education, and Bingo Game. American College of Sports Medicine Annual Meeting, San Diego, CA; May 2015.

Crandall, K.J., G. Xing, & Shake, M. Bingocize[®] 3.0: A Game Based Platform for Promoting Wellness in Older Adults. Conference on Bioinformatics, Computational Biology, and Health Informatics, Atlanta, GA; September 2015.

Cooling, J., **Crandall, K.J.**, & Shake, M. The Effects of Physical Exercise on Cognitive Control in Older Adults. National Science Foundation Research Experience for Undergraduates (REU) Mini-conference. Western Kentucky University, August 2015.

Zagdsuren, B., Sobrero, G.L., Inman, C., Stone, W., Arnett, S. W., Schafer, M.A., Lyons, T.S., Maples, J., **Crandall, K.J.**, & Callahan, Z. Crossfit Vs. Circuit-training: Effects Of A Ten-week Training Program On Aerobic, Anaerobic And Flexibility Indicators. American College of Sports Medicine Annual Meeting, San Diego, CA; May 2015.

Sobrero, G.L., Inman, C., Stone, W., Zagdsuren, B., Arnett, S. W., Schafer, M.A., Lyons, T.S., Maples, J., **Crandall, K.J.**, & Callahan, Z. Crossfit Vs. Circuit-trained Individuals: Effects Of A Ten-week Training Program On Body Composition And Bone Mineral Density. American College of Sports Medicine Annual Meeting, San Diego, CA; May 2015.

Brown, J.T., Sobrero, G.L., Inman, C., Stone, W., Zagdsuren, B., Arnett, S. W., Schafer, M.A., Lyons, T.S., Maples, J., **Crandall, K.J.**, & Callahan, Z. Crossfit Vs. Circuit-trained Individuals: Effects Of A Ten-week Training Program On Muscular Strength And Endurance. American College of Sports Medicine Annual Meeting, San Diego, CA; May 2015.

Wessel, P., Sobrero, G.L., Inman, C., Stone, W., Zagdsuren, B., Arnett, S. W., Schafer, M.A., Lyons, T.S., Maples, J., **Crandall, K.J.**, & Callahan, Z. Crossfit Vs. Circuit-trained Individuals: Effects Of A 10-week Training Program On Power. American College of Sports Medicine Annual Meeting, San Diego, CA; May 2015.

Willard, M.R. & **K. J. Crandall**. Intergenerational Service Learning to Combat Ageism in Exercise Science Students. WKU Impact Expo, Spring 2015.

Willard, M.R. & **K. J. Crandall**. Intergenerational Service-Learning with Exercise Science Students. American College of Health Care Administrators Conference, San Antonio, TX., April, 2015.

Sobrero, G.L., S.W. Arnett, M.A. Schafer, W.J. Stone, T. S. Lyons, J. Maples, **K. J. Crandall**, T. Esslinger, & K. Esslinger. CrossFit vs. Resistance-Trained Individuals: Effects of a Six-Week Training Program on Selected Performance Indicators. WKU College of Health and Human Services Faculty Research Showcase, Spring 2015.

R. McMullen, W. Weatherholt, S. Wells, & **K.J. Crandall**. The effects of static and dynamic stretching on the vertical jump test of novice athletes. WKU Student Research Conference, Spring 2015.

Flynn, A. T. Carlin, T. Peter, L. Clarkson, and **K. J. Crandall**. Dominant vs. non-dominant shoulder and trunk flexibility in college baseball pitchers. WKU Student Research Conference, Spring 2015.

Crandall, K.J., D. Anderson, & C. Fairman. Improved functional fitness in community-dwelling older adults using a combination exercise and bingo game. WKU College of Health and Human Services Faculty Research Showcase, Spring 2015.

Crandall, K.J., M. Shake, & G. Xing. Bingocize® 3.0: A unique mobile application for improving physical and mental fitness in older adults. WKU College of Health and Human Services Faculty Research Showcase, Spring 2015.

Pearson, R., **K.J. Crandall**, E. Oregon, & J. Maples. Applied Research Experiences Engage Exercise Science Undergraduate Students. WKU College of Health and Human Services Faculty Research Showcase, Spring 2015.

Nash, K., **K.J. Crandall**, & J. Maples Demographics and Health Status of Rural Kentucky Population Served By The Institute Of Rural Health From 2011-2013. WKU Student Research Conference, Spring 2015.

Nash, K., **K.J. Crandall**, & J. Maples Demographics and Health Status of Rural Kentucky Population Served By The Institute Of Rural Health From 2011-2013. WKU College of Health and Human Services Faculty Research Showcase, Spring 2015.

WJ. Stone, MA. Schafer, G. Sobrero, SW. Arnett, TS. Lyons, D. Hoover, J. Maples, and **K. J. Crandall**. Post-exercise hypotension following concurrent exercise. Southeast Regional American College of Sports Medicine Conference: Jacksonville, FL., February 2015.

R. McMullen, W. Weatherholt, S. Wells, & **K.J. Crandall**. The effects of static and dynamic stretching on the vertical jump test of novice athletes. Kentucky Posters-at-the-Capitol, Frankfort, KY., February 27th, 2014.

Weatherholt, W. R. McMullen, S. Wells, & **K.J. Crandall**. Effects of Static and Dynamic

Stretching on Vertical Jump Performance. Kentucky Association for Health, Physical Education, Recreation, and Dance Conference. Lexington, KY., November 17-18, 2014.

VanArsdall, N., B. Carter, P. de Seroux, & **K. J. Crandall**. Correlation between ACL Injuries and Vertical Jump Distractions. Kentucky Association for Health, Physical Education, Recreation, and Dance Conference. Lexington, KY., November 17-18, 2014.

Anglemyer, C.P., M. R. Cook, **K. J. Crandall**, M.D. Brackenhoff, B.A. Kursonis, M.R. Lapp, K.R. Smith, & A.L. Williams. The Effects of Participation in a Bingocize® Program on Self-Efficacy, Muscular Strength, Balance & Flexibility of Older Adults, Indiana Association for Health, Physical Education, Recreation & Dance (IAHPERD) State Conference, Indianapolis, IN., November 5 – 7, 2014.

Vowels, M.R. & **K.J. Crandall**. Intergenerational Service-Learning in Exercise Science. Kentucky Regional Engagement Conference. Morehead, KY., November 2014.

Vowels, M. R. & **K. J. Crandall**. A Descriptive Study of Exercise Science Students' Knowledge of, and Attitudes Toward, Older Adults. Kentucky Honors Roundtable Conference. Bowling Green, KY., September 27, 2014.

Crandall, K.J., M. Shake, & G. Xing. Bingocize® 3.0: A unique mobile application for improving physical and mental fitness in older adults. Kentucky Innovation Entrepreneurship Conference. Louisville, KY., September 5th, 2014.

C. Fairman, K. Kendall, B. Harris, J. McMillan, **K.J. Crandall**, P. Hyde. Effects of physical activity with antigravity treadmill training on physiological measures in breast cancer patients. American College of Sports Medicine Conference. Orlando, FL., May, 2014.

Crandall, K.J., D. Anderson, and C. Fairman. Improved functional fitness in community-dwelling older adults using a combination exercise and bingo game. American College of Sports Medicine Conference. Orlando, FL., May, 2014.

Schafer, M.A., G.L. Sobrero, S.W. Arnett, T. S. Lyons, J.W. Navalta, W. J. Stone, S.D. Bean, **K.J. Crandall**, J. Maples, D. Hoover. Performance Indicators in ROTC Cadets After 12 Weeks of Training that Included CrossFit. American College of Sports Medicine Conference. Orlando, FL., May, 2014.

Brackenhoff, M., **K.J. Crandall**, M. Cook, A. Kursonis, M. Lapp, K. Smith, A. Williams. The effect of participation in a Bingocize® program on self-efficacy, muscular strength, balance, and flexibility of older adults. Indiana Wesleyan University Celebration of Scholarship. Marion, IN., April 16th, 2014.

Crandall, K.J. and C. Zachary. The efficacy of service-learning in health education to increase pre-service teachers' openness to diversity. WKU College of Health and Human Services Faculty Research Showcase. Spring 2014.

Duvall, Z., Robertson, L., Herrenbruck, A., **Crandall, K.J.** Flexibility and range of motion improvements in older adults after completing a 12-week, progressive interval exercise program. National Council on Undergraduate Research Conference. Lexington, KY., April 4th, 2014.

Crandall, K.J. and C. Zachary. The efficacy of service-learning in health education to increase pre-service teachers' openness to diversity. Southern District American Alliance for Health, Physical Education, Recreation, and Dance. Louisville, KY., February, 2014.

C. Fairman, K. Kendall, B. Harris, J. McMillan, **K.J. Crandall**. The safety and efficacy of an anti-gravity treadmill at improving cardiovascular endurance, measures of body composition, and quality of life in female breast cancer survivors. Southeast Regional American College of Sports Medicine Conference: Greenville, SC., February, 2014.

Stone, W. J., M.A. Schafer¹, G. Sobrero, S.W. Arnett, T.S. Lyons, J. Maples, **K.J. Crandall**, J.W. Navalta, S.D. Bean, F.T. Esslinger, K. Esslinger Muscular endurance and anaerobic power in ROTC cadets after a twelve week training program containing Crossfit. Southeast Regional American College of Sports Medicine Conference: Greenville, SC., February, 2014.

Sobrero, G.L., W.J. Stone, M.A. Schafer, S.W. Arnett, T.S. Lyons, **K. J. Crandall**, J. Maples, J.W. Navalta, S.D. Bean, F.T. Esslinger, K. Esslinger. Evaluation of upper and lower body power in first year ROTC cadets after one semester of ROTC training that included Crossfit. Southeast Regional American College of Sports Medicine Conference: Greenville, SC., February, 2014.

Crandall, K.J., and D. Anderson. Bingocize®: A replicable model to improve functional physical fitness in older adults while engaging university students and the community. Kentucky Regional Engagement Conference. Richmond, KY., November, 2013

Crandall, K.J. and D. Anderson. Mobility and balance gains: An evidence-based model that improves ADL's and engagement. American Association of Service Coordinators National Conference: Indianapolis, In., August 19th, 2013.

Erb, O. and **K.J. Crandall**. Healthy Minds, Healthy Bodies: An innovative approach to reducing childhood obesity. Kentucky Association for Health, Physical Education, Recreation, and Dance: Louisville, Ky., 2012.

Crandall, K.J. and O. Erb. Healthy Minds, Healthy Bodies: A novel approach to reducing childhood obesity. Kentucky Wesleyan College Scholar's Day, April 19th, 2012.

Crandall, K.J. and C. Zachary. Efficacy of service-learning in health education to improve pre-service teachers' openness to diversity. Conference on Applied Learning in Higher Education: Saint Joseph, MO., 2012.

Crandall, K.J. Steps to Integrate Service-Learning in Your Curriculum. Kentucky Wesleyan College Faculty Brown Bag series 2012.

Invited Presentations:

Crandall, K.J. and M. Schafer. Bingocize[®] training workshop. Tennessee Commission on Aging and Disability, Murfreesboro, TN., August 2017.

Crandall, K.J. Bingocize[®]: A novel health promotion program for improving functional performance, health knowledge, and social engagement in older adults. University of Kentucky Exercise Science Seminar Series. University of Kentucky, Lexington, KY; January 20th, 2017.

Crandall, K.J. Bingocize[®]: Research Training for Indiana University Recreational Therapy students. Indiana University, Bloomington, IN; January 13th, 2017.

Crandall, K.J. Bingocize[®]: A novel mobile app for increasing exercise and health education. Kentucky Science Center Discovery Festival, Owensboro, KY., June 4th, 2016.

Crandall, K.J. Bingocize[®]. Kentucky Safe Aging Coalition Falls and Osteoporosis Summit. Jeffersonville, KY., September 10, 2015.

Crandall, K.J. Physical activity and healthy aging. Keynote speaker, Barren River District Health Department Healthy Aging Expo, Bowling Green, KY., September 2nd, 2015.

Crandall, K.J. How does exercise effect your metabolism? Edge Fit Fitness Center, Owensboro, KY., June 2015.

Crandall, K.J. and M. Schafer. Bingocize[®] training workshop. Lincoln Trails Area Development District, Elizabethtown, KY., May 2015.

Crandall, K.J. and M. Schafer. Bingocize[®]. Kentucky River Area Development District, Lexington, Ky., June 2015.

Crandall, K.J. Bingocize[™]. Kentucky Safety and Prevention Alignment Network, Barren River Area Agency on Aging and Independent Living Falls Summit. Bowling Green, KY., June 24th, 2014.

Crandall, K.J. The aging process and Bingocize[™]. Kentucky River Area Development District Elder Abuse Conference. Hazard Community and Technical College, Hazard, Ky., 2014.

Crandall, K.J. and D. Anderson. Bingocize[™]. Cumberland Valley Area Development District Area Agency on Aging training. London, Ky., 2013.

Crandall, K.J. and D. Anderson. Bingocize[™]. Green River Area Development District Area Agency on Aging training. Owensboro, Ky., 2013.

Crandall, K.J. and D. Anderson. Bingocize[™]. Shelby Senior Service's evidenced-based training. Shelbyville, In., 2013.

Crandall, K.J., D. Anderson, W. Payne, and L. Robertson. Bingocize[™]. Kentucky Housing Authority's Housing Management Conference. Louisville, Ky., 2013.

Crandall, K.J., D. Anderson, and W. Payne. Bingocize[™]. Kentucky River Area Development District, Big Sandy Area Development District, and Gateway Area Development District: Hazard, Ky., 2013

Crandall, K.J., C. Fairman, and D. Anderson. Bingocize™! Using games to improve physical activity adherence. Kentucky Adult Day Care Association Conference – Lexington, Ky., August 22nd, 2012.

Crandall, K.J., C. Fairman, and D. Anderson. Bingocize™! Using games to improve physical activity adherence. Kentucky Housing Corporation’s Housing Management Conference- Louisville, Ky., May 16th, 2012.

Crandall, K.J., C. Fairman, and D. Anderson. Bingocize™! Using games to improve physical activity adherence. Kentucky Association for Gerontology- Lake Barkley, Ky., April 23, 2012.

Grant Reviews:

Review of “Soft Sensor Materials for In-Home Patient Activity Monitoring” for the Kentucky Science and Engineering Foundation SBIR/STTR Phase Zero Program, February, 2016.

TEACHING AND SERVICE

Teaching and Service Awards:

Nominee for WKU College of Health and Human Service Public Service Award **2016-2017**

Nominee for WKU College of Health and Human Service Public Service Award **2015-2016**

University and School Service:

Member WKU School of Kinesiology, Recreation, and Sport Director search committee **2017**

Member WKU Intellectual Property Committee **2015-Present**

Judge for WKU Student Research Conference **2014-2016**

Member WKU Exercise Science faculty search committees **2014-2015**

Faculty Sponsor WKU Exercise Science Club **2014-2016**

Member WKU Exercise Science student awards committee **2014**

Member WKU Exercise Science curriculum committee	2014-Present
Member of Kentucky Wesleyan College psychology faculty search committee	2013
Member of Kentucky Wesleyan College Institutional Review Board	2012-2013
Member of Kentucky Wesleyan College Teacher Education Committee	2012-2013

Awards and Scholarships:

Nominee WKU Undergraduate Research Mentoring Award	2015-2016
Western Kentucky University Office of Research Junior Investigator Award	2014
Western Kentucky University Office of Research First Time External Grant Award	2014
Kentucky Innovation Network “Bucks for Bright Ideas” Entrepreneur Award	2014
Kentucky Association for Gerontology Distinguished Educator Award	2013

Memberships:

Kentucky Academy of Science	2013
National Physical Activity Society	2013
American College of Sports Medicine	1996

Awards for Professional Service:

Nominee for the 2015 New England Resource Center for Higher Education’s
National Ernest A. Lynton Award for the Scholarship of Engagement for Early

Career Faculty	2015
University of Utah Exercise and Sport Science Graduate Service Award	2000-2001

Professional Certifications:

American College of Sports Medicine Certified Exercise Physiologist SM	2012
American College of Sports Medicine Exercise is Medicine Credential: Level 2	2012
Comprehensive Institutional Training Initiative (CITI) for Biomedical Research	2013
National Institute of Health (NIH) Protecting Human Research Participants Certification # 925491	2012
American Heart Association Basic Life Support for Healthcare Providers	2015