

# Matthew R. Bice, Ph.D.

*Curriculum Vitae*

1809 E. 59<sup>th</sup> Street · Kearney, NE 68847

Phone: (432) 557-5657 · E-mail: [bicemr@unk.edu](mailto:bicemr@unk.edu)

Updated: August 2018

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## **EDUCATION**

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- Ph.D.**      *Southern Illinois University Carbondale* – Carbondale, Illinois  
*Department of Public Health Education & Recreation*  
**Degree Date:** May 2013  
**Dissertation:** *Retrospective evaluation of factors that influence the implementation of C.A.T.C.H. in Southern Illinois*  
**Dissertation Chair:** Stephen Brown, Ph.D.
- M.S.**      *The University of Texas of the Permian Basin*  
*Department of Kinesiology*  
**Degree Date:** May 2009  
**Thesis:** *Neuromuscular adaptations in elderly adults are task-specific during stepping and obstacle clearance tasks*  
**Thesis Chair:** James Eldridge, Ph.D.
- B.S.**      *The University of Texas of the Permian Basin*  
*Department of Kinesiology*  
**Degree Date:** May 2007  
**Major:** Exercise Science
- CPR/AED**    Pro Rescuers; Responding to Emergencies; First Aid  
Certificate ID: GTK3CI  
Date completed: 08/03/2016

## **ACADEMIC ADMINISTRATIVE APPOINTMENT**

2018 – Present      **Interim Associate Dean for Graduate Studies & Research**  
University of Nebraska at Kearney      Kearney, Nebraska

*As the Interim Associate Dean, I am responsible for assisting in the approval of new graduate programs, changes to existing graduate programs, and duties assigned by the Dean for Graduate Studies. In addition, I am responsible for overseeing institutional research, specifically the Institutional Review Board and IACUC.*

## ACADEMIC APPOINTMENTS

2018 – Present	<b>Associate Professor</b> (Tenure track) University of Nebraska at Kearney Department of Kinesiology and Sport Sciences <i>Physical Activity and Wellness Laboratory</i>	Kearney, Nebraska
2013 – 2018	<b>Assistant Professor</b> (Tenure track) University of Nebraska at Kearney Department of Kinesiology and Sport Sciences <i>Physical Activity and Wellness Laboratory</i>	Kearney, Nebraska
2011 – 2013	<b>Graduate Teaching Assistant</b> Southern Illinois University-Carbondale, Department of Health Education	Carbondale, Illinois
2012 – 2013	<b>Graduate Research Assistant</b> Southern Illinois University-Carbondale, Department of Health Education, PEP Grant. I worked under the supervision of Dr. Kim Miller.	Carbondale, Illinois
2010 – 2012	<b>Doctoral Research Assistant</b> Southern Illinois University-Carbondale, Center of Rural Health and Social Services. I worked under the supervision of Jeff Franklin.	Carbondale, Illinois
2009 – 2010	<b>Graduate Research Assistant</b> Southern Illinois University-Carbondale, Environmental Health. I worked under the supervision of Dr. Stephen Brown and Dr. D.T. Ratnapradia	Carbondale, Illinois
2007 – 2009	<b>Graduate Research Assistant</b> The University of Texas of the Permian Basin, Dept. of Kinesiology, Biomechanics & Exercise Physiology Laboratory. I worked under the supervision of Dr. James Eldridge & Dr. Doug Powell	Odessa, Texas
2007 – 2009	<b>Graduate Teaching Assistant</b> The University of Texas of the Permian Basin, Dept. of Kinesiology.	Odessa, Texas

## I. TEACHING

### University of Nebraska at Kearney

Average Teaching Score                      2013 – Present                      **4.78/5.0**

<u>Courses Taught</u>		<u>Credit hours</u>	
PE 310	Intro to Physiology of Exercise	Lecture & Lab	3
PE 388	The Science of Play	Online Course	3
PE 467/867	Fitness Testing	Lecture & Lab	3
PE 475	Research Methods in Ex. Sci	Lecture	3

### Description of Courses Taught

**PE 310: Introduction to Human Physiology of Exercise.** Provides a foundation of scientific basis for understanding the body's anatomical structures and physiologic responses to acute exercise, as well as its adaptations to chronic exercise (with laboratory).

**PE 388: The Science of Play.** This course is designed to introduce the interaction between neuroscience and physical activity (play). An interdisciplinary experience where students apply the knowledge, cognitive abilities, and communication skills they have gained from General Studies in designing and completing an original project or paper. Students employ methods and interpretive means of two or more disciplines to integrate knowledge and synthesize their results.

**PE 467/867: Fitness Testing.** Techniques and theory of testing for personal fitness. Measures include vital capacity, body density, stress testing, aerobic and anaerobic fitness (with laboratory). This course is taught at the undergraduate and graduate student level.

**PE 475: Research Methods in Exercise Science.** This course is designed to introduce advanced undergraduate students to the processes of research in the field of Exercise Science including the processes of finding, reading and understanding Exercise Science research; data collection, data analysis; and data interpretation.

### Undergraduate Advisement/Mentoring

<u>University of Nebraska Kearney</u>	<u>Advisees</u>	<u>Enrolled students</u>
2018 – 2019		
2017 – 2018	29	25
2016 – 2017	41	33
2015 – 2016	51	41
2014 – 2015	61	54
2013 – 2014	21	21

## **Graduate Advisement/Mentoring**

### *Doctoral Graduate Students*

Eric Wiedenman. Doctoral Dissertation Committee  
Southern Illinois University – Carbondale 2017 – present  
Project: “A Retrospective Examination of Resiliency and Self-efficacy among high school sport and non-sport participants.”

Chelsea Feusner. Doctoral Dissertation Committee  
University of Nebraska (Educational Administration)

### *Masters Graduate Students*

Cody Willmore. Masters Thesis Supervisory Committee  
University of Nebraska at Kearney 2018 – present  
Project: “Aquaponics: A study assessing growing patterns”

Jourdan Ringenberg. Masters Thesis Supervisory Committee  
University of Nebraska at Kearney 2017 – present  
Project: “The impact of crop fields on spatial distribution of the eastern cottontail (*Sylvilagus floridanus*) in South-Central Nebraska.”

John P. Rech. Masters Thesis Supervisory Committee  
University of Nebraska at Kearney 2017 – present  
Project: “Motivation of Nebraska Senior Games Contestants to Engage in Physical Activity”

Tyler Patterson. Masters Thesis Supervisory Committee  
University of Nebraska at Omaha 2017 – present  
Project: “College Athletes’ Sport Participation: An Examination of Motivational Differences between Collegiate Athletes of various Divisions.”

## **Undergraduate Research Mentoring**

*Undergraduate Research Fellowship recipients are denoted by †*

Tyan Boyer.† University of Nebraska at Kearney August 2018 – present  
Project: “Aquaponics: Assessment of physical activity while gardening”  
Co-mentored with Dr. Angela Hollman  
\*2018 Rural Futures Institute Student Serviceship Recipient

Paula Zakrzewski.† University of Nebraska at Kearney August 2017 – present  
Project: “Aquaponics: A Segway to Health, Science, and Wellness”  
“Exercise and Temporal Food Choices (EAT-FC)”

Katie Unvert.† University of Nebraska at Kearney August 2017 – present  
Project: “Aquaponics – A Teaching Model for Health”

- Natasha Ashley. University of Nebraska at Kearney August 2017 – 2018  
Project: “Exercise and Temporal Food Choices (EAT-FC)”
- Collin Fleecs.† University of Nebraska at Kearney August 2016 – 2018  
Project: “Sleep’s effect on Physical Performance”  
\*2017 & 2018 Rural Futures Institute Student Serviceship Recipient
- Jillian Rocheford.† University of Nebraska Kearney August 2016 – 2018  
Project: “Environmental influence during rehabilitation”
- Kylie Kenedy.† University of Nebraska Kearney January 2016 – 2018  
Project: “Perceived Body Composition: Perception vs. Reality”
- Elenna Leininger.† University of Nebraska Kearney August 2015 – 2018  
Project: “Exercise Motivation among college students (Intramurals)”
- Alex Liess.† University of Nebraska Kearney August 2015 – May 2016  
Project: “Muscle Activation among various gait tasks”
- Skyler Jorgensen.† University of Nebraska Kearney August 2014 – Dec 2015  
Project: “Rehabilitation Motivation post Shoulder Surgery”  
\*2015 Student Summer Research Program Recipient
- Traci Turek.† University of Nebraska Kearney August 2014 – Dec 2015  
Project: “Physical Activity Motivation among Sororities and Fraternities”

### **Teaching “Other”**

Mortar Board – Senior Advisor

2016 – present

*Description:* Mentor a group of selected students (~24 students per year) on service projects, career development, and leadership opportunities. Activities include: volunteering at local elementary schools, write letters of support to military personnel around campus, host faculty appreciation events, initiate freshman/sophomore recruitment, among others. Further, as the senior advisor, I facilitate bi-monthly meetings through the school year.

## **II. SCHOLARSHIP**

My research agenda focuses on the following main areas: **1.)** School health obesity prevention treatment interventions **2.)** Evaluation of health education programs, and **3.)** Behavior change determinants of physical activity and nutrition including psychological, physiological, and social influences.

Current projects (alphabetical order):

**Appetite suppression and food choices:** Appetite is influenced by various aspects but our research group examines appetite via hormone response and rating of hunger post exercise.

**Aquaponics growing systems:** Aquaponics systems are self-sufficient systems that can produce fruit, vegetables, and fish. These systems can produce food all year long and our efforts include using these systems as a health/science teaching model in middle schools. Our research group plans to examine the process and impact of implementation among teachers and students in rural communities.

**Behavior motivation.** Motivation is a valuable tool in understanding human behavior. I am interested in physical activity and nutrition behaviors and underlying motivation among adults.

**Corporate Social Responsibility (CSR):** CSR has become a topic of concern for many companies worldwide, some being more successful than others. My role involves evaluating the impact of CSR on employee wellness.

**Health Camps (THETA):** Our research group has a passion for youth. We have created a summer camp that focuses on teaching children how to establish healthy lifestyle by growing food and physical fitness.

**Skills for Success:** Health and Physical Education is diminishing across the country. My efforts focus on fundamental movement patterns and its impact on children's health and wellbeing.

### **Refereed Journal Publications**

Student coauthors are denoted by \*

1. **Bice, M.**, Ball, J., Bickford, N., Bickford, S., Hollman, A., Coughlin, A.\*, Dinkel, D., Meyer, R., & Ranglack, D. (2018) Community Gardens: Interactions between communities, schools, and impact on students. *The Health Educator* 50(1) 2 – 10.
2. Kenedy, K. \*, Wiedenman, E.M.\*, Ball, J., Dinkel, D., Akehi, K. & **Bice, M.** (2017). An examination of estimated BMI and perceived wellness among students at a midsized Midwest university. *American Journal of Health Studies*, 32(3) 136-143. [data-based, student author]
3. Adkins, M., **Bice, M.**, Heelan, K.A., & Ball, J. (2017). Enhancing Physical Education with a Supplemental Physical Activity Program. *Journal of Physical Education, Recreation, and Dance (JOPHERD)*, 88(8), 28-34. [data-based]
4. Adkins, M., **Bice, M. R.**, Worrel, V., & Unruh, N. (2017) Keeping the Physical Educator “connected” - An examination of comfort level, usage and professional development available for technology integration in the curricular areas of physical education. *Contemporary Issues in Education Research*, 10 (4), 225-230. [data-based]
5. Dinkel, D., Hanson, C., Koehler, K., Anderson Berry, A., Kyvelidou, A., **Bice, M.**, Wallen, J., Bagenda, D., Jana, L., & Pressler, J. (2017). An overview of assessment methodology for obesity-related variables in infants at risk. *Nutrition and Health*, 1-13. [Literature Review] DOI: 10.1177/0260106017732268

6. Adkins, M., **Bice, M.**, Dinkel, D. & Rech, J.P\*. (2017). Leveling the playing field: Assessment of gross motor skills in low socioeconomic children to their higher socioeconomic counterparts. *International Journal of Kinesiology and Sport Science* 5(3), 28-34. [data-based]. DOI:10.7575/aiac.ijkss.v.5n.3p.28
7. Ball, J., **Bice, M.**, & Maljak, K. (2017). Exploring the relationship between self-determination theory, adults' barriers to exercise, and physical activity. *The Health Educator* 49(1), 19-37. [data-based]
8. Bickford, N., Smith, L., Bickford, S., **Bice, M.**, & Ranglack, D. (2017). Evaluating the role of CSR and SLO in Ecotourism: Collaboration for economic and environmental sustainability of Artic resources. *Resources*, 6(21), 1-9. [Literature Review]. DOI: 10.3390/resouces6020021
9. Turek, T.\*, Wragge, P.\*, **Bice, M.**, & Ball, J. (2017) Physical Activity Motivation among Sororities and Fraternities in a Midwest university. *International Journal of Kinesiology in Higher Education*, 1(2), 1-10. [data-based, student author]. DOI:10.1080/24711616.2017.1282762
10. Reed, J., Struwe, L., **Bice, M.R.**, Yates, B. (2017). The Impact of Self-Monitoring Food Intake on Motivation, Physical Activity and Weight Loss in Rural Adults. *Applied Nursing Research*, 35, 36-41. [data-based] DOI:10.1016/j.apnr.2017.02.008
11. Jorgensen, S.\*, **Bice, M.**, Unruh, S., Akehi, K., Crockett, H., & McReynolds, J. (2017). Motivation of Shoulder Surgery Patients for Rehabilitation. *International Journal of Exercise Science*, 10(2), 234-245. [data-based, student author]
12. **Bice, M.R.**, Hollman, A., Bickford, S., Bickford, N., Ball, J., Wiedenman, E.M.\*, Brown, G., Dinkel, D., & Adkins, M. (2017). Kinesiology in 360 Degrees. *International Journal of Kinesiology in Higher Education*, 1(1), 9-17. DOI:10.1080/24711616.2016.1277671
13. Ball, J., Banas, J., & **Bice, M.** (2016). Understanding Health Care Brokering Among Young and Middle-Aged Adults. *American Journal of Health Studies*, 31(4), 190-198. [data-based]
14. **Bice, M.R.**, Ball, J., & McClaran, S. (2016) Technology and Physical Activity Motivation. *International Journal of Sport and Exercise Psychology*, 14 (4), 295-304. [data-based] DOI:10.1080/1612197X.2015.1025811
15. **Bice, M.**, Ball, J., Parry, T. & Adkins, M. (2016). Retrospective evaluation of high school primary physical activities and adulthood physical activity need satisfaction. *Sport Science Review XXV*, 3-4, 183-198 [data-based]. DOI: 10.1515/ssr-2016-0010

16. Ball, J., **Bice, M.R.**, & Parry, T. (2016). Retrospective evaluation of high school sport participation and adult BMI status, physical activity levels, and motivation to exercise. *American Journal of Health Studies*, 31(1), 105 - 111.
17. **Bice, M.R.**, Carey, J., Adkins, M., Brown, G., & Ball, J. (2016) The Use of Mobile Applications to Enhance Learning of the Skeletal System in Introductory Anatomy & Physiology Students. *The International Journal of Kinesiology in Higher Education* 27(1) 16-22.
18. **Bice, M.R.**, Ball, J., Adkins, M., & Ramsey, A. (2016). Health Technology Ownership and Use: Implications for Adult Physical Activity. *Journal of Sport and Health Research* 8(10), 13-22.
19. Ball, J., & **Bice, M.R.** (2015). Adult BMI and Physical Activity: Retrospective evaluation of High School Sport and Recreation Participation. *Recreational Sports Journal*, 39(2), 144-156. DOI:10.1123/rsj.2015-0065.
20. Adkins, M., **Bice, M.R.**, Bartee, T., & Heelan, K.A. (2015). Increasing Physical Activity during the School Day through Physical Activity Classes: Implications for Physical Educators. *The Physical Educator*, 72, 173-184.
21. Ball, J., **Bice, M.R.**, & Adkins, M. (2015) Qualitative Assessment of an Electronic Activity-Tracking Device: Strengths, Weaknesses, and Considerations in Behavior Change Interventions for Health Educators. *The Health Educator*, 47(1), 20-26.
22. Brown, G., **Bice, M.R.**, Shaw, B., & Shaw, I. (2015). Online Quizzes Promote Inconsistent Improvements on In-Class Test Performance in Introductory Anatomy & Physiology. *Advances in Physiology Education*, 39(2), 63-66. DOI: 10.1152/advan.00064.2014
23. Ball, J., **Bice, M.R.**, & Parry, T. (2014) Adults' Motivation for Physical Activity: Differentiating Motives for Exercise, Sport, and Recreation. *Recreational Sports Journal*, 38(2), 130-142. DOI:10.1123rsj.2014-0048.
24. **Bice, M. R.**, Ball, J., Brown, S., & Parry, T. (2014) Influence of high school sport participation on adult physical activity. *Journal of Sport and Health Research*, 6 (3), 253-264.
25. Hudson, H., Bliss, K., **Bice, M.R.**, Lodyga, M., & Ragon, B. (2014) Creating Peer-led Media to Teach Sensitive Topics: Recommendations from Practicing Health Educators. *Journal of Health Education Teaching*, 5(1), 28-35.
26. **Bice, M. R.**, Ball, J., & Ramsey, A. T. (2014) Relations between Mindfulness and Mental Health Outcomes: Need Fulfillment as a Mediator. *International Journal of Mental Health Promotion*, 16(3), 191-201. DOI: 10.1080/14623730.2014.931066.



27. **Bice, M. R.**, Brown, S., & Parry, T. (2014) Retrospective Evaluation of Factors that Influence the Implementation of C.A.T.C.H. in southern Illinois schools. *Health Promotion Practice, 15*(5), 706-713. DOI: 10.1177/1524839914526206.
28. Miller, K., & **Bice, M.R.** (2014) The Coordinated School Health Program: Implementation in a Rural Elementary School District. *The Health Educator, 46* (1), 20-24.
29. **Bice, M.R.**, Ramsey, A., Ball, J. (2012). Implementation and Evaluation of the C.A.T.C.H. Health Education Classroom Curriculum. *Eta Sigma Gamma Student Monograph, 29*(2), 13-18.
30. **Bice, M.R.**, Hanson, N.J., Renshaw, D., Eldridge, J., Reneau, P., Powell, D. (2011) Neuromuscular adaptations in elderly adults are task-specific during stepping and obstacle clearance tasks. *International Journal of Exercise Science, 4*(1), 278-86.
31. Renshaw, D., **Bice, M.R.**, Cassidy, C., Eldridge, J., Powell, D. (2010) A comparison of three computer-based methods of determining EMG signal amplitude. *International Journal of Exercise Science, 3*(1), 44-48.

### **Invited Refereed Publications**

1. **Bice, M.** (2015). Predictions of Adult Physical Activity: Fact or Fiction. *AGON – International Journal of Sport Sciences, 5*(1), 3-6. [Invited]

### **Manuscripts Accepted for Publication (IN PRESS)**

- **Bice, M.** Ball, J., Hollman, A., & Adkins, M. (ACCEPTED August 2018) Health Technology Use: Implications for Physical Activity behaviors among college students. *International Journal of Kinesiology in Higher Education. (Submitted 3.8.18; Resubmitted 6.27.18)* [data-based] DOI: 10.1080/24711616.2018.1516524.
- Hollman, A., **Bice, M.**, Ball, J., Bickford, N., Shafer, A., & Bickford, S. (ACCEPTED August 2018) A comparison of scholarly productivity among current professors who obtained terminal degree. *American Journal of Distance Education, 32*(4) X-X (Submitted 1.21.18; Resubmitted 8.3.18). [data-based]
- Ball, J., **Bice, M.**, & Maljak, K. (ACCEPTED June 2018) Exploring the relationship between college students' barriers to exercise and motivation. *American Journal of Health Studies (Submitted 2.1.18; Resubmitted 6.14.18)*. [data-based]
- Warehime, S.A.\*, Snyder, K.E., Schaffer, C.L., **Bice, M.R.**, Adkins-Bollwit, M.M., & Dinkel, D.M. (ACCEPTED August 2017, early 2019 Publication) Exploring secondary science teachers' use of classroom physical activity. *The Physical Educator*. [data-based]

### Manuscripts in Review

- Leininger, E.\* , Wiedenman, E.\* , Adkins, M., Akehi, K., Ball, J., & **Bice, M.** An examination of intramural college students' exercise motives and how they relate to body mass index. *American Journal of Health Studies*. (Submitted 7.2.18) [data-based, student author]
- **Bice, M.**, Ball, J., Hollman, A., Meyer, D., & Ringenberg, J. A qualitative assessment of considerations on how teachers can use classroom growing systems as a health education teaching model. *The Health Educator* (Submitted 6.27.18). [data-based]
- Hollman, A., Hollman, T., Shimerdla, F., **Bice, M.**, & Adkins, M. Information technology pathways in education: Interventions with middle school students. *Journal of Research on Technology in Education*. (Submitted 6.11.18; Resubmitted 8.24.18) [data-based]

### Manuscript(s) in Process

- Koehler, K., Blaskewicz Boron, J., Smith, T., **Bice, M.**, & Stevens, J. Differential relationship between physical activity and intake of empty-calorie and nutrient-dense food. *Medicine & Science in Sports and Exercise*. [data-based]
- Ringenberg, J.\* , **Bice, M.**, Hollman, A., Meyer, D., Ball, J. Wiedenman, E.\* , Bickford, S., & Bickford, N. Aquaponics: An innovative teaching model for Science Education.
- **Bice, M.**, Ball, J., Adkins, M., & Easton, H. Pilot study: Innovation perceptions & motivation to implement an after-school health program in rural Nebraska.
- Rochford, J. Akehi, K., Unruh, S., Weed, W., & **Bice, M.** Environmental effects on patient satisfaction in a rehabilitation clinic. [data-based, student author]
- Unvert, K., Ringenberg, J., Meyer, D., Bickford, N., Hollman, A., Bickford, S., & **Bice, M.** Aquaponics: A Segway to health and wellness. [data-based, student author]
- Fleecs, C., **Bice, M.**, & Brown, G. Sleep deprivation: Effects on peak power (Anaerobic Capacity). *Journal of Strength & Conditioning Research*. [data-based, student author]

### Submitted International / National Presentations

- Adkins, M., Hollman, A., **Bice, M.**, Rech, J.\* , & Becker, B. The STEM of Academics is Physical Education.  
Hawaii International Conference on Education  
Honolulu, Hawaii January 5 – 8, 2019
- Ball, J., **Bice, M.**, Hollman, A., Meyer, D., & Ringenberg, J.\* How to use a growing system to teach health education.

**Accepted International / National Presentations**

- Bickford, N., **Bice, M.**, Ringenberg, J.\*, Hollman, A., Meyer, D., Ball, J., Wiedenman, E.\*, Bickford, S. Aquaponics: An innovative teaching model for science education.  
UArctic Congress  
Helsinki, Finland September 3 -7 2018

**Accepted Regional / State Presentations**

- Unvert, K., Ringenberg, J., Ball, J., Dinkel, D., Bickford, N., Hollman, Meyer, R., & **Bice, M.** Aquaponics Growing Systems: An Innovative Approach to Health Consciousness and Science in Elementary Education.  
Early Childhood Conference: Promoting Wellbeing for Children and Families.  
Kearney, Nebraska October 19 – 20, 2018

**Refereed International / National Presentations**

\* Denotes student author

† Denotes peer reviewed

‡ Denotes presenter responsibilities

1. Study, K.\*, Akehi, K., Noeldner, F., Ryan, W., **Bice, M.**, & Unruh, S.† The Rate of Atrophy and Hypertrophy of the Quadriceps and Hamstring Muscles after the ACL Reconstruction Surgery and during Rehabilitation: Preliminary Study.  
National Athletic Trainers Association National Convention  
New Orleans, LA June 26-28, 2018
2. Unvert, K.\*, Ringenberg, Meyer, D., Bickford, N., Hollman, A., Bickford, S., **Bice, M.**† [poster presentation]  
Aquaponics: An innovative approach to teaching Health.  
National Conference for Undergraduate Research 2018  
Edmond, OK April 4 – 7, 2018
3. Fleecs, C.\* & **Bice, M.**† [poster presentation]  
Sleep Deprivation: Effects on Peak Power (Anaerobic Capacity)  
National Conference for Undergraduate Research 2018  
Sleep Deprivation: Effects on Peak Power (Anaerobic Capacity)  
Edmond, OK April 4 – 7, 2018
4. Adkins, M., **Bice, M.**, Dinkel, D., & Rech, J.P.\*† [poster presentation]  
Leveling the playing field: Assessment of gross motor skills of low socioeconomic children to their higher socioeconomic counterparts.  
Society of Health and Physical Educators (SHAPE) America 2018 National Conference  
Nashville, Tennessee March 20-24, 2018

5. **Bice, M.**, Ball, J., Wiedenman, E., Bickford, N., Bickford, S., Hollman, A., & Meyer, D. †‡ [poster presentation]  
Aquaponics: An assessment of physical activity, nutrition, and health consciousness.  
Society of Health and Physical Educators (SHAPE) America 2018 National Conference  
Nashville, Tennessee March 20-24, 2018
6. Bickford, S., Waples, C., Hollman, A., **Bice, M.**, Brachle, B., Heikken-Moilanen, R., & Bickford, N.  
The multiple faces of CSR: An International comparison of a multidisciplinary view of CSR Best Practices based on stakeholder engagement and collective community values.  
Academy of International Business  
Dubai, United Arab Emirates (UAE) July 2 – 5, 2017
7. Bickford, S., Hollman, A., Torquati, J., Ramos, A., **Bice, M.**, & Bickford, N. [oral presentation]  
Assessing local food production and accessibility for community gardens in rural areas: Arctic and Beyond.  
The International Congress of Arctic Social Science (ICASS) IX 2017  
Umea, Sweden June 8 – 12, 2017
8. Bickford, N., Bickford, S., Lanteigne, M., **Bice, M.**, Ranglack, D., & Hollman, A. [oral presentation]  
The Village: Using high-tech for international multidisciplinary education of Indigenous sustainability.  
The International Congress of Arctic Social Science (ICASS) IX 2017  
Umea, Sweden June 8 – 12, 2017
9. Hollman, A., Torquati, J., Bickford, N., Bickford, S., & **Bice, M.** [oral presentation]  
Growing food and knowledge in the Arctic: Combining biological processes with the Internet of Things.  
The International Congress of Arctic Social Science (ICASS) IX 2017  
Umea, Sweden June 8 – 12, 2017
10. Bickford, S., Heikkinen-Moilanen, R-L., Lanteigne, M., Waples, C., Hollman, A., **Bice, M.**, Brachle, B., & Bickford, N. [oral presentation]  
A Multidisciplinary Assessment of Community Level Corporate Social Responsibility in rural communities.  
The International Congress of Arctic Social Science (ICASS) IX 2017  
Umea, Sweden June 8 – 12, 2017
11. Kasl, A., Akehi, K., Ryan, W., Unruh, S., & **Bice, M.** †  
Thigh Muscle Architecture Changes During a Soccer Season in Previously Injured and Non-Injured Female Athletes. *Med Sci Sport Exerc.* 49(5), 574.  
National ACSM Annual Meeting  
Denver, Colorado May 30 – June 3, 2017

12. Koehler, K., Blaskewicz Boron, J., Smith, T., Pinard, C., Lee, J.M., **Bice, M.R.**, & Stevens, J. † [poster presentation]  
Differential Relationships between Habitual Physical Activity and Consumption of Key Dietary Factors. *Med Sci Sport Exerc.* 49(5), 242.  
American College of Sports Medicine Annual Conference  
Denver, Colorado May 30 – June 3, 2017
  
13. Kenedy, K. \*, Rocheford, J. \*, & **Bice, M.** † [poster presentation]  
Perception of Body composition and wellness.  
National Conference for Undergraduate Research 2017  
Memphis, TN April 6-8, 2017
  
14. **Bice, M.**, Ball, J., & Turek, T. \*†† [poster presentation]  
Health Technology Use: Implications for University Fraternity and Sorority members.  
Society for Public Health Education 2017 National Conference  
Denver, Colorado March 30 – April 1, 2017
  
15. Ball, J., Banas, J., & **Bice, M.** †† [poster presentation]  
Understanding Health Care Brokering among Young and Middle-Aged Adults.  
Society for Public Health Education 2017 National Conference  
Denver, Colorado March 30 – April 1, 2017
  
16. Leininger, E. \*, Armajo, F. \*, DeVries, N. \*, Dull, C., Wiedenman, E.M. \*, Mollring, M., Akehi, K., Adkins, M., & **Bice, M.** †† [poster presentation]  
Exercise Motivation, BMI, and Physical Activity Levels Among Intramural Students.  
*RQES* 88(1), A-35  
Society of Health and Physical Educators (SHAPE) America 2017 National Conference  
Boston, Massachusetts March 16, 2017
  
17. Adkins, M., **Bice, M.**, Batt, L., & Morse, W. †† [workshop]  
50 Million Strong through State Collaboration (CSPAP, PAL, LMAS, PYFP). *RQES*  
Society of Health and Physical Educators (SHAPE) America 2017 National Conference <sup>b</sup>  
Boston, Massachusetts March 15, 2017
  
18. Bickford, S., Hollman, A., Waples, C., **Bice, M.**, Brachle, B., & Bickford, N.  
Mobilizing sustainability: Legitimizing the existence of the Finnish dairy industry.  
Responsible Business Research Seminar  
Tampere, Finland March 16, 2017
  
19. Adkins, M., **Bice, M.**, Worrell, V., & Unruh, N. † [poster presentation]  
Keeping The Physical Educator “connected” - An examination of comfort level, usage  
and professional development available for technology integration in the curricular areas  
of physical education.  
2017 International Conference on Education Hawaii.  
Lahaina, Hawaii January 1-5, 2017

20. Reed, J.R., Yates, B.C., Struwe, L., & **Bice, M.R.** <sup>†</sup> [oral presentation]  
 Impact of dietary self-monitoring on motivation, physical activity and weight loss in rural adults. 6<sup>th</sup> International Conference of Self-Determination Theory  
 Victoria, British Columbia, Canada June 2-5, 2016
21. **Bice, M.**, Ball, J., Easton, H., & Coyle, B. <sup>††</sup> [poster presentation]  
 Impact evaluation of CATCH Kids Club in rural Nebraska.  
 Society of Health and Physical Educators (SHAPE) America 2016 National Conference  
 Minneapolis, Minnesota April 5 – 9, 2016
22. Adkins, M., **Bice, M.**, Bartee, T., Heelan, K.A., & Ball, J. <sup>††</sup> [poster presentation]  
 Fundamental Movement Pattern Changes of Participants Receiving Physical Activity  
 Everyday.  
 Society of Health and Physical Educators (SHAPE) America 2016 National Conference  
 Minneapolis, Minnesota April 5 – 9, 2016
23. Ball, J., **Bice, M.**, & Adkins, M. <sup>††</sup> [poster presentation]  
 Adult BMI and Physical Activity of Participants who participated in sports.  
 Society of Health and Physical Educators (SHAPE) America 2016 National Conference  
 Minneapolis, Minnesota April 5 – 9, 2016
24. Reed, J.R., Yates, B.C., Struew, L., & **Bice, M.R.** <sup>†</sup> [oral presentation]  
 Motivation and dietary self-monitoring in rural weight loss participants.  
 40<sup>th</sup> Annual Midwest Nursing Research Society Conference  
 Milwaukee, Wisconsin March 17-20, 2016
25. **Bice, M.**, Ball, J., Adkins, M., & Parry, T. <sup>††</sup> [oral presentation]  
 Retrospective evaluation of high school primary physical activities and adulthood  
 physical activity need satisfaction.  
 National Association for Kinesiology in Higher Education 2016 National Conference  
 San Diego, California January 6 – 9, 2016
26. **Bice, M.**, Carey, J., Brown, G.A., Adkins, M., & Ball, J. <sup>††</sup> [oral presentation]  
 The use of mobile applications to enhance introductory anatomy & physiology student  
 performance on topic specific in-class tests.  
 National Association for Kinesiology in Higher Education 2016 National Conference  
 San Diego, California January 6 – 9, 2016
27. Adkins, M. & **Bice, M.** <sup>†</sup> [oral presentation]  
 Mission Possible: Physical Activity Everyday – A collaborative effort between Physical  
 Education class and structured physical activity. Physical  
 Education Teacher Education (PETE) National Conference  
 Atlanta, Georgia October 27 – 31, 2015
28. **Bice, M.**, Ball, J., & Easton, H. <sup>††</sup> [poster presentation]

- Innovation Perceptions & Motivation to Implement a Coordinated School Program in rural Nebraska.  
Society for Public Health Education 2015 National Conference  
Portland, Oregon April 23-25, 2015
29. Turek, T.\* , Wragge, P\* . & **Bice, M.** † [poster presentation]  
Physical Activity Motivation among Sororities and Fraternities  
National Conference for Undergraduate Research 2015  
Cheney, Washington April 15-18, 2015
30. **Bice, M.** & Ball, J. †† [poster presentation]  
Relations between Physical Activity, Mindfulness, and Mental Health Outcomes.  
Society of Health and Physical Educators (SHAPE) America 2015 National Conference  
Seattle, Washington March 17-21, 2015
31. Ball, J. & **Bice, M.** †† [poster presentation]  
Specific Physical Activities Participated during High School Increase Lifetime Activity.  
Society of Health and Physical Educators (SHAPE) America 2015 National Conference  
Seattle, Washington March 17-21, 2015
32. Adkins, M., **Bice, M.** & Unruh, N. †† [poster presentation]  
Physical Educators and Technology: Comfort Level of Integration.  
Society of Health and Physical Educators (SHAPE) America 2015 National Conference  
Seattle, Washington March 17-21, 2015
33. Ball, J. & **Bice, M.** †† [oral presentation]  
Exercise Motivation among adults who had access to a physical activity-tracking device.  
National Association for Kinesiology in Higher Education 2015 National Conference  
Clearwater, Florida January 8-10, 2015
34. Brown, G., Shaw, I., Shaw, B., & **Bice, M.** † [poster presentation]  
Online Quizzes Enhance Introductory Anatomy & Physiology Performance on  
Subsequent Tests, But Not Examinations. *Medicine and Science in Sports and Exercise*,  
45(5), 1655  
American College of Sports Medicine  
Orlando, Florida May 27 -31, 2014
35. **Bice, M.**, Carney, H., & Miller, K. †† [poster presentation]  
Fresh, Fit, & Fly: A Program to Improve Children’s Health  
American Alliance for Health, Physical Education, Recreation, and Dance  
AAHPERD 2014 National Convention & Expo  
St. Louis, Missouri April 2, 2014
36. **Bice, M.** †† [oral presentation]  
Coordinated School Health Programs – Success and Failures.  
American Association for Health Education/AAHPERD

AAHPERD 2013 National Convention & Expo  
Charlotte, North Carolina

April 23-27, 2013

37. **Bice, M.** & Ball, J. †‡ [poster presentation]  
High School Sport Participation and Current Adult Physical Activity Trends.  
National Association for Kinesiology in Higher Education Conference  
Fort Lauderdale, Florida January 2-5, 2013
38. **Bice, M.**, Ball, J., Ramsey, A., & Franklin, J. †‡ [poster presentation]  
C.A.T.C.H. Implementation – Teacher Hesitation – Barriers, Beliefs, & Complications.  
AAHPERD 127<sup>th</sup> National Convention & Expo.<sup>a</sup>  
Boston, Massachusetts March 2012
39. **Bice, M.**, Ball, J., Ramsey, A., & Franklin, J. †‡ [poster presentation]  
APPLICATION & Evaluation of “C.A.T.C.H” IMPLEMENTATION.  
AAHPERD 127<sup>th</sup> National Convention & Expo.<sup>a</sup>  
Boston, Massachusetts March 2012
40. Hudson, H., Bliss, K., Lodyga, M., & **Bice, M.** †‡ [poster presentation]  
Channel Surfing Contraceptives: Instructors Tuning in or Changing the Channel.  
AAHPERD 126<sup>th</sup> National Convention & Expo  
San Diego, California March 2011

<sup>a</sup> = *Not presented due to conference cancelation*

<sup>b</sup> = *Blizzard prevented presenters to reach conference location*

### **Refereed Regional / State Presentations**

Student coauthors are denoted by \*

1. Study, K.\*, Akehi, K., Noeldner, F., Ryan, W., **Bice, M.**, & Unruh, S.  
The Rate of Atrophy and Hypertrophy of the Quadriceps and Hamstring Muscles after the ACL Reconstruction Surgery and during Rehabilitation: Preliminary Study.  
Mid America Athletic Trainers Association  
La Vista, NE March 15-17, 2018
2. Adkins, M., **Bice, M.**, Brown, G., Bickford, N., & Hollman, A.  
Farm to Fresh! A multidisciplinary approach to teach Health, and Physical Activity.  
Central District Society of Health and Physical Educators of America Conference  
Sioux Falls, South Dakota January 27-29, 2018
3. Maljak, K., Valley, J., Ball, J., Parry, T., & **Bice, M.**  
Physical Education (PE) Teachers and Self-Determination Theory (SDT)  
IAHPERD (Illinois SHAPE) State Conference  
St. Charles, Illinois November 16, 2017



4. **Bice, M.**, Bickford, N., Meyer, D., Hollman, A., Bickford, S., & Ringenberg, J\*.  
Aquaponics: An innovative model to teach science and technology.  
University of Nebraska at Kearney – Community Early Childhood Conference  
Kearney, Nebraska September 22, 2017
2. Sakai, R. \*, Akehi, K., Kasl, A., Ryan, W., **Bice, M.**, & Unruh, S.  
Higher knee injury risks when athletes failed to adapt their muscle morphological characteristics during the competitive college season.  
38th Annual Mid America Athletic Trainers' Association (MAATA)  
LaVista, Nebraska March 16– 18, 2017
3. Ball, J. & **Bice, M.**  
Implementing Curricula into K-12 Schools.  
SHAPE Nebraska State Conference  
Kearney, Nebraska November 2 – 3, 2015
4. Easton, H. & **Bice, M.**  
CATCH Kids Club in rural Nebraska  
SHAPE Nebraska State Conference  
Kearney, Nebraska November 2 – 3, 2015
5. Bickford, N., Adkins, M., **Bice, M.**, Bickford, S., Shafer, A., Adams, S., Albrecht, M., Ball, J., Vaux, J., Schoenebeck, C., Hill, T., Obasi, S., Siedschlaw, K., Shafer, J., Becker, B., Messerole, M., Reed, J., Davis, E., Ramsey, A., & Hollman, A.  
Sustainable Food for Health: a comprehensive study assessing food security and benefits for wellbeing.  
Rural Futures Conference  
Lincoln, Nebraska November 2 – 3, 2015
6. Maupin, C. \*, **Bice, M.**, Heelan, K., & Bartee, T.  
Physical Fitness and Academic Performance. Undergraduate Research Fellows, UNK  
Rural Futures Institute 2015  
Lincoln, Nebraska October 22 – 23, 2015
7. **Bice, M.**, Franklin, J., & Easton, H.  
CATCH: Creating a Policy, Systems, and Environmental change in rural Schools.  
NAHPERD State 2014 Program  
Lincoln, Nebraska November 2, 2014
8. Akehi, K., **Bice, M.**, & Norman, E.  
The impact of distance running on muscle cross-sectional area and echo intensity: case study.  
Central States ACSM Regional Chapter Conference  
Overland Park, Kansas October 22 – 24, 2014
9. **Bice, M.** & Carney, H.

University & School Partnerships on Grant Funded Projects: Building Bridges.  
2013 Robert D. Russell Symposium  
Carbondale, Illinois April 8, 2013

10. **Bice, M.**  
Relationship between adult BMI and sport participation.  
Illinois Association for Health, Physical Education, Recreation and Dance  
Chicago, Illinois November 15, 2012
11. **Bice, M. & Ball, J.**  
Results and the Phenomenon of CATCH Implementation in Rural Midwest.  
Midwest District of AAHPERD Centennial Convention  
Chicago, Illinois April 25 – 27, 2012
12. **Ball, J. & Bice, M.**  
The Diffusion of Distance Education in Health Education and Promotion.  
Midwest District of AAHPERD Centennial Convention  
Chicago, Illinois April 25 – 27, 2012
13. **Bice, M., Ball, J., Ramsey, A., & Franklin, J.**  
“C.A.T.C.H. Implementation in rural southern Illinois.  
Illinois Rural Health Association Annual Conference (poster presentation)  
Effingham, Illinois April 2012
14. **Franklin, J., Wright, A., & Bice, M.**  
C.A.T.C.H: A Coordinated School Health Program – Outcomes of Implementing the  
CATCH Program and the projected plans for future implementation efforts.  
Illinois Rural Health Association  
Effingham, Illinois April 14, 2011
15. **Bice, M.** Relationship Between Lean Mass and Coactivity in Young and Old Adults.  
South Central American Society of Biomechanics  
Dallas, Texas February 2010
16. **Bice, M.** Inter-segmental Coordination and Variability within High- and Low-Arched  
Feet during Running.  
1<sup>st</sup> Annual Meeting of the South-Central Region of the American Society of  
Biomechanics  
Odessa, Texas March 2008

### **Refereed Abstracts**

1. Bastin, H., Renshaw, D., **Bice, M.**, Renshaw, D., Hanson, N.J., Eldridge, J., Ryan, M., Reneau, P, Powell, D. *Relationship between lean mass and coactivation during downward stepping with advancing age.* 59<sup>th</sup> Annual Meeting of the American College of Sports Medicine, San Francisco, California. May 29<sup>th</sup>-June 2<sup>nd</sup>, 2012.

2. Powell, D., **Bice, M.**, Renshaw, D., Hanson, N.J., Eldridge, J., Ryan, M., Reneau, P. *Effect of advancing age and lean mass on neuromuscular activation patterns and coactivation ratios during a downward stepping task.* 34<sup>th</sup> Annual Meeting of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Harrisburg, Pennsylvania. November 4<sup>th</sup> – 5<sup>th</sup>, 2011.
3. **Bice, M.**, Renshaw, D., Eldridge, J., Cassidy, C., Powell, D. *Relationship between lean mass and coactivity in young and old adults.* Third Meeting of the South Central American Society of Biomechanics. Dallas, Texas. February 25<sup>th</sup>-26<sup>th</sup>, 2011.
4. Renshaw, D., **Bice, M.R.**, Cassidy, C., Eldridge, J., Powell, D. *Methods Used to Calculate EMG Amplitude,* 2nd Meeting of the South Central American Society of Biomechanics. Denton, Texas. February 12-13, 2010.
5. Chalambaga, Elizabeth T., Powell, Douglas; Renshaw, Doug; **Bice, Matthew**; and Long, Benjamin (2009) "Lower Extremity Kinetics in High and Low-Arched Athletes during Landing," *International Journal of Exercise Science: Conference Abstract Submissions:* Vol. 2: Iss. 1, Article 10.
6. Powell D., Zhang S., Milner C., **Bice M.**, and Long B. *Coordination in Running within High- and Low-Arched Feet.* 1<sup>st</sup> Meeting of the International Foot and Ankle Biomechanics Congress. Bologna, Italy, Sept. 4-6, 2008.
7. Powell D., Zhang S., Milner C., Long B. and **Bice M.** *Differences in Lower Extremity Coordination in High- Compared Low-Arched Female Athletes during Running.* 32<sup>nd</sup> Meeting of the American Society of Biomechanics. Ann Arbor, Michigan, Aug. 5-9<sup>th</sup>, 2008.
8. **Bice M.**, Zant A., Long B., Powell D. *Inter-segmental Coordination and Variability within High- and Low-Arched Feet during Running.* 1<sup>st</sup> Annual Meeting of the South Central Region of the American Society of Biomechanics, Odessa, Texas, Feb. 29-Mar 1, 2008.

### **Conference Abstract**

1. Ruano, C., Powell, .D., Renshaw, D., Chalambaga, E., and **Bice, M.** (2009) "The Effects of Insoles on Loading Rate in Level Running," *International Journal of Exercise Science: Conference Abstract Submissions:* Vol. 2: Iss. 1, Article 9.

### **Grants and Sponsored Research**

*Funded Grants*                      *Total Funding = \$551,233.13*                      *Total Funding as PI = \$64,766*

1. Dinkel, D., Dev, D., **Bice, M.**, Wisneski, D., Kuhn, M., Karabon, A., Escayg, K., & Hatton-Bowers, H.

“Improving the intersection of policies, practices, and health behaviors in childcare: A systems approach to childhood obesity prevention.”

Sponsored by the University of Nebraska Research Initiative – Systems Science (RFA)

**Funded** \$14,680 April 20, 2018

2. Yan, Changmin (PI), Wagler, A., Adkins, M., **Bice, M.**, Franzen – Castle, L., Dev, D., & Koziol, N. *Imagine!*: Improving Kindergarteners’ Nutrition and Physical Activity Related Knowledge, Preferences and Habits through Virtually Reality Game in Rural Nebraska. Sponsored by The University of Nebraska – Lincoln; Research Council: Interdisciplinary Research Grants

**Funded** \$20,000 December 6, 2017

*Role:* Co-Investigator

*Description:* Our interdisciplinary team is developing an innovative immersive early childhood obesity prevention program, known as *Imagine!*, that delivers vicarious learning of nutrition and physical activity knowledge to kindergarteners in schools via a Virtual Reality (VR) game.

My role in this project is to serve as the physical activity expert as it pertains to the intervention, data collection, and data interpretation.

3. Ranglack, D. (PI), Bickford, N., **Bice, M.**, Bickford, S., Hollman, A., & Hayes, J. “The impact of habitat loss and fragmentation on human-wildlife conflict in an agriculturally dominated system.”

Sponsored by System Science: Formed/Forming Team Seed Grants

**Funded** \$149,910 June 13, 2017

*Role:* Co-Investigator

*Description:* The goals of this project are to investigate the impacts of habitat fragmentation and wildlife movement. Further, we will investigate wildlife movement and its impact on public health (traffic safety, human awareness, perception of wildlife).

My role in this project is to examine human-wildlife interaction from the public health perspective. Assessment will include qualitative and quantitative methodologies.

4. Koehler, K. (PI), Stevens, J., French, J., **Bice, M.**, Neta, M., Blaskewicz, B., Schmid, K., Bulbulian, R., Lee, J-M, Smith, T., Stoltenberg, S., Gustaffson, C., & Slivka, D.

“Understanding the Effects of Exercise on Future Food Intake: The Role of Behavioral, Physiological, and Neural Mechanisms.”

Sponsored by Food for Health Collaboration Initiative – Formed/Forming Team Seed Grants

**Funded** \$150,000 June 5, 2017

*Role:* Co-Investigator

*Description:* The goals of this project are to assess the influence of exercise on food choices, to identify neuroendocrine factors that explain inter-individual differences in food-choices in the post-exercise state, and to explore how exercise alters neural pathways involved in decision making about food. Data will be collected in Lincoln, Omaha, and Kearney. My role in this project is coordinate data collection at the Kearney site, research design, data dissemination, and future grant writing.

5. Reed, J., Estabrooks, P., Pozehl, B., Heelan, K., **Bice, M.**, Dinkel, D., & Haynatzki, G.  
 “Increasing Physical Activity to Improve Health through Primary Care Clinics in Rural Nebraska.”  
 Sponsored by University of Nebraska Medical Center, Center for Clinical & Translational Research  
**Funded**                      \$25,000                      May 31, 2017  
*Role:* Co-Investigator  
*Description:* The goal of this project is to design and implement a physical activity intervention in a rural community utilizing technology (activity tracking devices). My role in the project is to assist in intervention design, technology integration, and data dissemination.
  
6. Brown, G. (PI), **Bice, M.** (Co-I), Adkins, M., Hollman, A., Bickford, S., Bickford, N., Ranglack, D.  
 “Teaching Health, Exercise, Technology, & Aquaponics (THETA) Day Camps to Grow Future Health Professionals from McCook Middle School Students.”  
 Sponsored by the Rural Futures Institute (RFI)  
**Funded**                      \$20,000                      March 1, 2017  
*Role:* Co-Investigator  
*Description:* This project is to conduct a physical activity and growing camp to a rural community (McCook, NE). Funding for this project will allow our research team to host the camp during the summer of 2018 (year 1) and 2019 (year 2). The purpose of this camp is to provide rural middle school students an additional opportunity to learn science related topics through skill-based activities in hope to make healthy decisions. We are partnered with the city of McCook, Nebraska.
  
7. **Bice, M. (PI)**, Meyer, D., Bickford, N., Hollman, A., & Bickford, S.  
 “Helping Rural Middle School Science Teachers Create Classroom Aquaponic systems enhancing soft skills and career readiness.”  
 Sponsored by Nebraska’s Coordinating Commission for Postsecondary Education  
**Funded**                      \$59,766                      January 26, 2017  
*Role:* Primary Investigator  
*Description:* The goal of this proposal is to train sciences teachers in Nebraska how to incorporate aquaponics systems into existing curricula. Teachers will be trained (a) how to build and maintain aquaponics systems, (b) how to use aquaponics systems to teach science, and (c) assess the impact of implementation on student’s health and wellbeing.
  
8. Torquati, J. (PI), Adkins, M., **Bice, M.** (Co-I), Bickford, N., Bickford, N., Deutsch, C., Desmarals, M., Godfrey, M., Fisk, C., Ramos, A., Westbrook, L., Smith, D., Stamler, L., Whitfield, S., & Hollman, A.  
 “Solving for Pattern: Promoting Health through Localizing Food Systems Topic Areas to be Explored.”  
 Sponsored by Food for Health Collaboration Initiative – Planning and Proposal Generating grant.  
**Funded**                      \$20,000                      January 6, 2016  
*Role:* Co-Investigator

*Description:* The goal of this proposal was to examine food systems as it relates to community gardens. This grant resulted in various research meetings, collaborative writing workshops, and produced international presentations.

9. Koehler, K. (PI), **Bice, M.** (Co-I), Bulbulian, R., Gustafson, C., French, J., Neta, M., Stevens, J., & Stoltenberg, S.  
“Understanding the Effects of Exercise on Future Food Intake: The Role of Behavioral Physiological, and Neural Mechanisms.”  
Sponsored by Food for health Collaboration Initiative – Planning and Proposal Generating grant.

**Funded** \$20,000 January 6, 2016

*Role:* Co-Investigator

*Description:* The goals of this Planning and Proposal Generation application are to: (1) assemble Nebraska-wide expertise in a variety of disciplines to leverage existing knowledge and technology, (2) identify possible funding sources for this research, and (3) identify knowledge gaps that need to be addressed prior to preparing a competitive extramural research proposal. We will work toward these goals through three specific aims: (a) strengthen the expertise of our research group by recruiting additional collaborators from the University of Nebraska Medical Center (UNMC) and other Nebraska research institutions, (b) leverage the expertise of nationally and internationally renowned researchers in areas that are not adequately covered by our research team, and (c) position our research team to acquire seed funding and/or extramural funding. The current grant resulted in a national presentation.

10. Yan, C. (PI), Adkins, M., **Bice, M.** (Co-I), Cammack, R., Franzen-Castle, L., Chaidez, V., Durden, T., Gustafson, C., Iruka, I., Knoche, L. & Wagler, A.  
“Closing the Health Gap: An Energy-balance Approach to Bridging Early Childhood Obesity Disparities among At-risk Children in Rural and Urban Nebraska.”  
Sponsored by Food for health Collaboration Initiative – Planning and Proposal Generating grant.

**Funded** \$19,981 January 6, 2016

*Role:* Co-Investigator

*Description:* The goal of this planning grant is to create, validate, test, and disseminate an energy-balance intervention program targeting both nutrition and physical activity (NPA) among early-age at-risk children at school/home/local neighborhood/geo-digital reality in both rural and urban Nebraskan communities.

11. Akehi, K. (PI), **Bice, M.** (Co-PI) & Adkins, M.  
Sponsored by Nebraska Research Institutes (NRI) – University of Nebraska. “Impact of orthopedic surgery and rehabilitation on the lower extremity neuromuscular characteristics, muscle quality, and motivation on college athletes: cohort research study.

**Funded** \$46,166.13 April 2015 – 2016

*Role:* Co-Investigator

*Description:* The purpose of the collaborative funding request is to comprehensively enhance the current research conducted in Athletic Training, Exercise Science, and Physical Education Pedagogy Programs in the Department of Kinesiology and Sport

Sciences at UNK. In addition, funding will allow us to extend research findings into studies aimed at identifying interventions and strategies that may effectively help prevent, manage, and treat physical health and functional performance issues associated with athletic participation and physical activity.

12. Akehi, K., Murphy, B., **Bice, M.**, Unruh, S., & Brown, G. (Co-Investigator). “Impact of the post-surgical procedure rehabilitation on lower extremity muscle rapid force characteristics: cohort study.”

Sponsored by University of Nebraska Kearney Research Services Council – Collaborative grant, Internal.

**Funded**                      \$4,000.00                      2015 – 2016

\*Grant was declined by investigators due to larger funding source.

13. Ball, J. (PI) & **Bice, M.** (Co-I). “Exercise Motivation with the Nike Fuel Band.”

Sponsored by Colorado State University – Pueblo Faculty Development Grant.

**Funded**                      \$750.00                      2014 – 2015

*Role:* Co-Investigator

*Description:* The current research study included a Pre/Post research design. Quantitative data using the Exercise Motivation Inventory - 2 scores were compared from week 1 (PRE) to week 8 (POST) and examined motivational differences to partake in PA with the inclusion of the Nike FuelBand SE®. The purpose of this study was to examine whether the use of a popular activity-tracking device would influence physical activity motivation.

14. **Bice, M.** (PI) & Ball, J. “Motivation to Exercise: Influence of technology on motivation and exercise habits,”

Sponsored by University of Nebraska Kearney Research Services Council – Collaborative grant, Internal.

**Funded**                      \$5,000.00                      2014 – 2015

*Role:* Primary Investigator

*Description:* The current research study included a Pre/Post research design. Quantitative data using the Exercise Motivation Inventory - 2 scores were compared from week 1 (PRE) to week 8 (POST) and examined motivational differences to partake in PA with the inclusion of the Nike FuelBand SE®. The purpose of this study was to examine whether the use of a popular activity-tracking device would influence physical activity motivation.

#### Grant Submissions (IN REVIEW)

#### Grant in progress

1. **Bice, M.** (PI), Ball, J., Dinkel, D., Meyer, R., Bickford, N., Hollman, A., Koehler, K., Geske, J., & Luo, J.

“Aquaponics: A Segway to obesity prevention.”

Sponsored by National Institutes of Health (NIH) – [PA 18 -355]

Healthy Habits: Timing for Developing Sustainable Healthy Behaviors in Children and Adolescents (R01 Clinical Trial)

*Status: Revisions*

2. Brown, G (PI), **Bice, M.**, Abbey, B., Shaw, B., & Shaw, I. “Effects of aerobic exercise, resistance exercise, and combined aerobic & resistance exercise on food choices and endocrine signals of satiety in middle aged adults.

Sponsored by National Institutes of Health (NIH) – [PAR 16-200: Academic Research Enhancement Award – Parent R15]

**Scored**           \$351,797 (D) \$298,406 (ID)

*Status: Revisions for resubmission*

### **Technical Experience**

**SPSS:** Version 22

**Microsoft Office:** All versions and programs

**TrueOne 2400:** Metabolic Measuring System

**Motion Analysis:** Vicon Motion Capture

**Kinetics:** AMTI force plates

**EMG:** BTS Pre-amplified surface electrodes

**Isokinetics:** Biodex dynamometer

**Programming:** Visual 3D (C-Motion, Inc.), Microsoft Visual BASIC

**Body Composition:** Skin-fold Assessment, BodPod, Dexascan

## **III. SERVICE**

### **University Service**

Graduate Council	2017 – present
<i>Executive Graduate Council Representative</i>	
<i>Committee II – Chair</i>	2018 – present
University Strategic Planning Committee	2015 – present
Honors Program Curriculum Committee	2015 – present
Research Services Council	2015 – present
Research Advisory Council	2018
<i>College of Education Representative</i>	
Women’s, Gender, and Ethnic Studies Advisory Board ( <i>Formally Ethnic Studies Program Advisory Committee</i> )	2016 – 2018
Ethnic Studies Program Advisory Committee	2015 – 2016

### **College of Education**

Council for the Accreditation of Educator (CAEP) Accreditation Committee	2016 – 2018
Actively Attended College Meetings	2013 – present

### **Department of Kinesiology and Sport Sciences**

Loper Connection (Chair)	2015 - present
Graduate Faculty (Committee member)	2014 – present



Undergraduate Scholarships Committee (Committee member)	2014 – present
Department Social Committee member (Committee member)	2014 – present
Nebraska Kid Fitness Nutrition Day (Faculty Advisor)	2013 – present
Department Logo Committee member (Committee member)	2013 – present
Actively Attended Department Meetings	2013 – present
Faculty Search Committee (Physical Education)	2016 – 2017
Loperfit Club (Co-Coordinator)	2014 – 2015
Mission Possible: Physical Activity Specialist (Evaluation)	2013 – 2015
BMI Report Card (Faculty Advisor)	2013 – 2015
Faculty Search Committee (Ast. Professor – Athletic Training)	2013 – 2014
Coordinator, PATH – Physical Activity (Event date: April 26, 2014)	2014

### **Community Service**

University of Nebraska Friendship Program	2016 – present
Wagnor, South Dakota Public School District	2015 – present
Physical Activity Summer Camp	
Collaboration: Dr. Maurice Godfrey (UNMC)	
Two Rivers Public Health Department – CATCH Partner	2013 – 2017
CATCH evaluator & trainer	
Healthy Schools Advisory Council	2014 – present
Susan G. Koman	
Committee Member	2013 – present
Race Director	2013 – 2015
Coordinator of Marshalls; Event date: September 28, 2013	2013
Activate Buffalo County (Committee Member)	2013 – present
Kearney High School Women’s Soccer Team (Volunteer)	2014 – present
Goalkeeper Coach	
Kearney Soccer Club (Volunteer)	2013 – present
The Kearney Area Community Foundation Grant – Assisted with Grant writing	
<i>Assisted Bob Slaymaker (former KSC President)</i>	
Kearney Soccer Association	
<b>Funded - \$1,500</b>	2015 – 2016

### **Professional Leadership**

Society for Health and Physical Education (SHAPE) Nebraska	
<i>President</i>	2016 – present
Society for Health and Physical Education (SHAPE) Nebraska	
<i>President-elect</i>	2015 – 2016
Society for Health and Physical Education (SHAPE) Nebraska	
<i>Treasurer (6 moths)</i>	2016

### **Professional Committees**

Society for Health and Physical Education (SHAPE) America (National)	
<i>Delegate – 2018 SHAPE America Assembly</i>	2018 – present
Society for Health and Physical Education (SHAPE) Central District (Regional)	
<i>Sanford Health Fit4Schools Review Committee (Adhoc)</i>	2017 – present

<i>Nominations Committee</i>	2017 – present
<i>Archives Committee</i>	2017 – present
<i>Collaboration Committee</i>	2017 – present
<i>Future Professional and Higher Education Committee</i>	2017 – present
<i>Membership Committee</i>	2017 – present
Society for Health and Physical Education (SHAPE) Nebraska (State)	
<i>Board member</i>	2014 – present
<i>Leadership Council</i>	2014 – present
<i>Professional Development Committee - Chair</i>	2015 – present
<i>Executive Director Role Delineation Committee - Chair</i>	2014 - 2015
Nebraska Association of Health, Physical Education, Recreation, and Dance	
<i>Leadership Council</i>	2014
Eta Sigma Gamma – Southern Illinois University – Carbondale Chapter	
<i>President</i>	2010 – 2011

### **Professional Memberships**

Eta Sigma Gamma	2018 – present
Council on Undergraduate Research	2016 – present
Society of Health and Physical Educators – Nebraska	2014 – present
Society of Health and Physical Educators (SHAPE)	2014 – present
Society of Public Health Education	2014 – present
National Association of Kinesiology in Higher Education	2013 – present
Eta Sigma Gamma	2009 – 2015
American Association of Health Education	2009 – 2015
American Alliance for Health, Physical Education, Recreation and Dance	2010 – 2014
South Central Region of the American Society of Biomechanics	2007 – 2011
Illinois Rural Health Association (IRHA)	2010 – 2013

### **Professional Service as a Peer-Reviewer**

<i>International Journal of Sport and Exercise Psychology</i>	2018 – present
<i>Journal of STEM Outreach</i>	2017 – present
<i>Achievements in Food Science and Nutrition</i>	2017 – present
<i>International Journal of Kinesiology in Higher Education</i>	2015 – present
<i>Medical Research Archives</i>	2015 – present
<i>International Journal of Exercise Science</i>	2014 – present
<i>Journal of Sport and Health Science</i>	2014 – present
<i>Journal of Sport and Health Research</i>	2014 – present
<i>Pedagogy in Health Promotion</i>	2014 – present

### **Invited Presentations/Workshops**

<b>Bice, M.</b> Worksite wellness. The Buckle, Corporate offices.	Oct. 20, 2015
<b>Bice, M. &amp; Rauch, P.</b> Physical activity and nutrition guidelines for military personnel. ROTC – University of Nebraska Kearney	Feb 5, 2015

**Bice, M., Franklin, J., & Easton, H.** CATCH: Creating a policy, systems, and environmental change in rural Schools. NAHPERD, Lincoln, NE. Nov 3-4, 2014

**Bice, M.** Coordinated Approach to Child Health (C.A.T.C.H.) Implementation techniques, strategies, and barriers concerning rural school implementation. Two Rivers Health Department, Kearney, NE. July 22, 2014

### **Conference President**

Deborah Tackmann and JoAnne Owens-Nauslar. (2013). *Teaching the iY Generation: Outrageous teaching techniques*. AAHPERD 2013 National Convention & Expo. Charlotte, NC April 23 – 27, 2013

Illinois Rural Health Association State Conference Effingham, IL April 25 – 27, 2012

American Association for Health Educators 2010 National Conference – videographer  
Dr. Roberta Ogletree –advisor  
Indianapolis, IN March 2010

### **Professional Development (Trainings/Workshops)**

2018 *UNL IACUC Training*. Lincoln, Nebraska  
Sponsored by University of Nebraska at Lincoln

2016 *Coordinated School Physical Activity Program (CSPAP)* November 5, 2016  
Sponsored by SHAPE Nebraska

2015 *Physical Activity Leader (PAL)* September 26, 2015  
Sponsored by SHAPE Nebraska at University of Nebraska Omaha

2014 *eCampus Online Training* University of Nebraska Kearney November

*iBook Training* University of Nebraska Kearney April

*Apple – MacBook Air Training (UNK)* April

2013 *Tutorial, “Blackboard for beginners.”* (UNK) September

### **Professional Development (Conferences)**

2018 *Ecotourism Symposium* – Center for Great Plains Studies. Kearney, NE  
*Society of Health and Physical Educators of America National Convention*. Nashville, TN  
*Society of Health and Physical Educators Central District Conference*. Sioux Falls, SD

- 2017 *Society for Association Management (SAM) Leadership Development Conference (LDC)*. Albuquerque, NM  
*National Council on Undergraduate Research National Conference*. Memphis, TN  
*Society for Public Health Education Annual Conference*. Denver, CO  
*Society of Health and Physical Educators of America National Convention*. Boston, MA  
*Society of Health and Physical Educators Central District Conference*. Cedar Falls, IA  
*Society of Health and Physical Educators Nebraska State Conference*. Lincoln, NE
- 2016 *Society of Health and Physical Educators of America National Convention*. Minneapolis, MN  
*National Association for Kinesiology in Higher Education Annual Conference*. San Diego, CA
- 2015 *Society for Public Health Education Annual Conference*. Portland, OR  
*Society of Health and Physical Educators of America National Convention*. Seattle, WA  
*Society of Health and Physical Educators Nebraska State Conference*. Lincoln, NE  
*National Association for Kinesiology in Higher Education Annual Conference*. Clearwater, FL
- 2014 *American Alliance for Health, Physical Education, Recreation and Dance National Convention*. St. Louis, MO
- 2013 *American Alliance for Health, Physical Education, Recreation, and Dance National Convention*. Charlotte, NC  
*National Association for Kinesiology in Higher Education Annual Conference*. Fort Lauderdale, FL, 2013  
*Robert D. Russell Symposium*. Carbondale, IL, 2013
- 2012 *American Alliance for Health, Physical Education, Recreation and Dance National Convention*. Boston, MA  
*Illinois Association for Health, Physical Education, Recreation and Dance*, Chicago, IL  
*Midwest District of AAHPERD Centennial Convention*. Chicago, IL  
*Illinois Rural Health Association*. Effingham, IL
- 2011 *American Alliance for Health, Physical Education, Recreation and Dance National Convention*. San Diego, CA
- 2010 *American Alliance for Health, Physical Education, Recreation and Dance National Convention*. Indianapolis, IN

**Additional Service**

First Annual Meeting of the South Central Regional Chapter of the American Society of Biomechanics	2009
President – Kinesiology Club The University of Texas of the Permian Basin	2004 – 2007

## **Awards & Honors**

### **University of Nebraska at Kearney**

2017	College of Education – Faculty Mentor Award Undergraduate Research	April
2015	New Frontiers Magazine <i>Recognition of Faculty Research</i>	October
	College of Education Outstanding Research Award (2014-2015)	April
2014	Faculty of the Month - Interfraternity Council	April

### **The University of Texas of the Permian Basin**

2009	Most Outstanding Graduate Student, College of Arts & Sciences	May
2008	Best Abstract Award, 1 <sup>st</sup> Annual Meeting of the South-Central Region of the American Society of Biomechanics	March
2007	Most Outstanding Undergraduate Student, College of Arts & Sciences	May
2007	Outstanding Undergraduate Student, Dept. of Kinesiology	May

## **Research Collaborations**

Department of Health, Physical Education, Recreation and Athletics at Northeastern Illinois University: I work with *James Ball*, Ph.D. to investigate contributing factors of adult physical activity which include sport, recreation, and exercise participation, motivation to exercise, and technology use to track physical activity.

University of Nebraska Medical Center (UNMC): I work with *Maurice Godfrey*, Ph.D. on various tribal reservations in Nebraska and South Dakota establishing Physical Activity programs within tribal communities. Projects include summer camps, school activity programs, and family activities.

Nebraska Department of Health and Human Services & Nebraska Chronic Disease Prevention and Control Program: I work with *Brian Coyle* developing, implementing and evaluating school health efforts concerning CSPAP & PAL trainings program evaluation.

University of Nebraska at Omaha: I work with *Danae Dinkel*, Ph.D. on projects associated with classroom physical activity interventions and trainings to increase school wide physical activity.

Department of Nutrition and Health Sciences at the University of Nebraska at Lincoln: I work with *Karsten Koehler*, Ph.D. to investigate exercise and sedentary behaviors as it pertains to energy balance.

Department of Health and Human Performance at the College of Charleston: I work with *Thomas E. Parry*, Ph.D. to investigate contributing factors of adult physical activity which include sport, recreation, and exercise participation, motivation to exercise, and technology use to track physical activity.

NIMH Research Scholar, Washington University in St. Louis: I work with *Alex Ramsey*, Ph.D. to investigate mental health symptoms and adult physical activity trends. In addition, Dr. Ramsey and I have worked on mediating influences of mindfulness characteristics on negative affect and mental health symptoms.

College of Health Students at the University of Memphis: I work with *Douglas W. Powell*, Ph.D. investigating altered neuromuscular activation and biomechanical patterns associated with healthy and pathological aging.

College of Journalism and Mass Communications at the University of Nebraska at Lincoln: I work with *Changmin Yan*, Ph.D. on obesity treatment programs, specifically digital health promotion and theory-driven research in persuasive health messages.

College of Nursing at the University of Nebraska Medical Center: I work with *Jill Reed*, Ph.D. on physical activity interventions and the use of technology as means of behavior change.