

# Curriculum Vitae

**Lee A. Weidauer, Ph.D.**

## **Ethel Austin Martin Program in Human Nutrition**

Wecota Hall, Room 309, Box 506

South Dakota State University

Brookings, SD 57007

605-688-4630

Email: Lee.Weidauer@sdstate.edu

### **EDUCATIONAL PREPARATION**

South Dakota State University, Brookings, SD

Doctor of Philosophy in Nutrition, Exercise, and Food Science (May 2012)

*Dissertation: The Effect of Participation in Different Types of Physical Activity and Age on Bone Mass, Density, and Geometric Properties*

South Dakota State University, Brookings, SD

Masters of Science in Exercise Science (May 2009)

*Thesis: The Effect of a Commercially Available Caffeine Based Dietary Supplement on 40-Kilometer Time Trial Performance*

South Dakota State University, Brookings, SD

Bachelors of Science in Athletic Training (May 2007)

### **PROFESSIONAL EXPERIENCE**

2015-Present Research Associate III/Assistant Professor, Ethel Austin Martin Program in Human Nutrition/Health and Nutritional Science Department, South Dakota State University (Graduate Faculty Member)

2012-2015 Post-Doctoral Fellow, Ethel Austin Martin Program in Human Nutrition, South Dakota State University

2011- 2012 Research Coordinator, Ethel Austin Martin Program in Human Nutrition, South Dakota State University

2009-2011 Research Assistant, National Children's Study, Ethel Austin Martin Program in Human Nutrition, South Dakota State University

**PUBLICATIONS**

Minett, M., Binkley, T., **Weidauer, L.**, Specker, B. (2017) Changes in Body Composition and Bone of Female Collegiate Soccer Players Through the Competitive Season and Off-Season. *Journal of Neuromuscular and Neuronal Interactions*. (in press)

Oberlander, T., Olson, B., **Weidauer, L.** (2016) Test-Retest Reliability of the King-Devick Test in an Adolescent Population. *Journal of Athletic Training*. (in press)

**Weidauer L**, McCormack L, Gorres-Martens B, Specker B. (2016) High Prevalence of Vitamin D Insufficiency in Farming and Non-Farming Populations in South Dakota: Associations with Parathyroid Hormone, Body Fat and Bone Density. *Topics in Clinical Nutrition*. 31(3): 204-212.

**Weidauer, L.**, Binkley, T., Beare, T., Minett, M., McCormack, L., Wey, A., Specker, B. (2015) Do Sex Differences Exist in Rates of Falls and Fractures in Hutterite, Rural, and Non-rural Populations, Aged 20 to 66 Years? *Clinical Orthopedics and Related Research*. 473(8): 2514-2520. PMID: 25762018

Specker B, Wey H, Binkley T, Beare T, Minett M, **Weidauer L.** (2015) Rural vs. Non-rural Differences and Longitudinal Bone Changes by DXA and pQCT in Men Aged 20-66 years: A Population-Based Study. *Bone*. 79: 79-87. PMID: 25957824

Binkley, T., **Weidauer, L.**, Daughters, S., Vukovich, M. (2015) Changes in Body Composition in Division I Football Players Over a Competitive Season and Recovery in Off-Season. *Journal of Strength and Conditioning Research*. 29(9): 2503-2512. PMID: 26313574

**Weidauer, L.**, Wey, H, Slater, H, Moyer-Mileur, L, Specker, B. (2014) Estimation of Length or Height in Infants and Young Children Using Ulnar and Lower Leg Length with DXA Validation. *Developmental Medicine and Child Neurology*, 56: 995-1000.

**Weidauer L**, Binkley, T, Vukovich, M, Specker, B. (2014) Greater Polar Moment of Inertia at the Tibia in Athletes Who Develop Stress Fractures. *Orthopaedic Journal of Sports Medicine*, 2(7). PMID: 26535343

**Weidauer LA**, Minett M, Binkley T, Negus C, Vukovich M, Wey H, Specker B. (2014) Odd-Impact Loading Results in Increased Cortical Area and Moments of Inertia in Collegiate Athletes. *European Journal of Applied Physiology*, 114(7): 1429-1438. PMID: 24664495

Roiger T, **Weidauer L**, Kern, B. (2014) A Longitudinal Pilot Study of Depressive Symptomology in Concussed and Injured, Non-Concussed Division I Student-Athletes. *Journal of Athletic Training*, 50(3): 256-261. PMID: 25562455

Binkley, T, Parupsky, E, Kleinsasser, B, **Weidauer, L**, Specker, B. (2014) Feasibility, Compliance, and Efficacy of a Randomized Controlled Trial Using Vibration in Pre-pubertal Children. *Journal of Musculoskeletal and Neuronal Interactions*, 14(3): 294-302. PMID: 25198224

Nichenametla SN, **Weidauer LA**, Wey HE, Beare TM, Specker BL, Dey M. (2014) Resistant starch type 4-enriched diet lowered blood cholesterol and improved body composition in a double blind controlled crossover intervention. *Molecular Nutrition and Food Research*, 58(6): 1365-1369. PMID: 24478107

**Weidauer L**, Binkley T, Berry R, Specker B. (2013) Variation in Cortical Density within the Cortical Shell of Individuals across a Range in Densities and Ages. *Journal Musculoskeletal Neuronal Interactions*, 13(1): 89-96. PMID: 23445918

**Weidauer L**, Eilers M, Binkley T, Vukovich M, Specker B. (2012) Effect of different collegiate sports on cortical bone in the tibia. *Journal Musculoskeletal Neuronal Interactions*, 12(2): 68-73. PMID: 22647279

### **ABSTRACT PRESENTATIONS**

**Weidauer, L.**, Zwart, MB., Albert, J., Clapper, J., Vukovich, M., Specker, B. Neuromuscular Changes Throughout The Menstrual Cycle in Physically Active College-Aged Females. American College of Sports Medicine Annual Meeting, June 2016.

Zwart, M., Blenkinsop, O., **Weidauer, L.** The Effect of a Six Week Balance Training Program on Postural Stability. National Athletic Trainer's Association Annual Meeting, June 2013.

Hanline, V., **Weidauer, L.**, Olson, B. Test-Retest Reliability of the Stability Evaluation Test of VSR™ Sport in a Pediatric Sample. National Athletic Trainer's Association Annual Meeting, June 2013.

**Weidauer L.** Bone Changes in Athletes: Beyond Bone Density. South Dakota State University Health and Nutrition Conference, March 2013.

**Weidauer L.**, Eilers M, Negus C, Wey H, Vukovich M, Specker B. Bone changes in athletes throughout a competitive season. American Society for Bone and Mineral Research Annual Meeting, October 2012. ***ASMBR Annual Meeting President's Poster Competition Award Winner.***

**Weidauer L**, Eilers M, Vukovich M, Binkley T, Specker B. (2011) The effect of different sport activities on cortical bone in the tibia. *Med Sci Sports Exerc* 43(5): 248-249. Abstract presented at the ACSM Annual Meeting in May of 2011.

**INVITED PRESENTATIONS**

**Weidauer, L.**, Binkley, T., Beare, T., Minett, M., McCormack, L., Specker, B. Falls and Fractures in Three Populations Aged 20 to 66 Years. American Academy of Orthopedic Surgeons Musculoskeletal Sex Differences throughout the Lifespan Research Symposium, July 2014. ***Abstract selected for a Young-Investigator Travel Award.***

**Weidauer, L.**, Zwart, MB., Albert, J., Clapper, J., Vukovich, M., Specker, B. Neuromuscular Changes Throughout The Menstrual Cycle in Physically Active College-Aged Females. Avera Health Sports Medicine Symposium, June 2016.

**RESEARCH FUNDING**

South Dakota State University Scholarly Excellence Grant: “The Role of Female Sex Hormones on Neuromuscular Factors Related to ACL Injuries”, 2014-2015. \$9,000  
Role: Principal Investigator

South Dakota State University Academic and Scholarly Excellence Grant: “A Longitudinal Examination of Post-Concussion Depressive Symptomology in Division I Student-Athletes”, 2014-2015. \$2,900  
Role: Co-Investigator

National Children’s Study Formative Research Project “LOI3 PHYS-02: Assessment of Growth in Infants and Children from Birth to 5 Years of Age using Ulnar and Lower Leg Length”, 2010-2011. \$10,489  
Role: Co-Principal Investigator with Dr. Bonny Specker

**TEACHING EXPERIENCE**

*Fall 2012-Present:* Instructor for Introduction to Athletic Training  
Average Rating = 4.7/5.0

*Fall 2012-Present:* Instructor for Prevention and Care of Athletic Injuries Lab

*Fall 2009-Spring 2010:* Clinical Instructor for the Athletic Training Education Program  
Responsibilities: Managing and supervising students during clinical experience, teaching students to apply classroom knowledge and skills in professional practice, teaching hands-on skills, and assessing competencies.

*Fall 2009:* Teaching Assistant in Athletic Training Techniques: General Medical Assessment  
Responsibilities: Preparing and presenting lecture material, preparing assessment tools, instructing students during the laboratory portion, and assessing competencies.

**ACADEMIC AND COMMUNITY SERVICE**

- 2013-2016 Selection committee for bachelors and master's degree athletic training education programs
- 2013-2016 Search committee for graduate assistant athletic trainer position.
- 2012-2016 Hosted a field trip for high school seniors to introduce them to the various opportunities that are present in scientific careers.
- 2012 Mentored a fellow PhD student in the statistical analysis for their dissertation
- 2011 Student mentor for an English as a second language masters student

**JOURNAL REVIEWER**

- Clinical Orthopedics and Related Research 2016
- International Journal of Sports Medicine 2015
- Developmental Medicine and Child Neurology 2014
- Bone 2014
- Clinical Interventions in Aging 2013
- Journal of Athletic Enhancement 2013

**HONORS AND AWARDS**

- 2016 Granted graduate faculty status at South Dakota State University
- 2016 Recognized as an outstanding educator by South Dakota State University Athletics
- 2014 Young Investigator Award: American Academy of Orthopedic Surgeons Musculoskeletal Sex Differences throughout the Lifespan Research Symposium
- 2012 President's Poster Competition Award at the American Society for Bone and Mineral Research Annual Meeting
- 2008 Phi Kappa Phi

2008 Golden Key National Honour Society

2006 Mark Amundson and Margaret Schmidt Amundson Athletic Training Scholarship

**PROFESSIONAL MEMBERSHIPS**

American College of Sports Medicine

American Society for Bone and Mineral Research

**SKILLS AND TRAINING**

Extensive background in biostatistics and experimental design

Competency in data analysis using STATA, R, and JMP statistical software

Certified Athletic Trainer, ATC

Skill in densitometry using both dual-energy x-ray absorptiometry (DXA) and peripheral quantitative computed tomography (PQCT): attended the International Society for Clinical Densitometry Clinician's Course for Clinical Densitometrists in December, 2011