

CURRICULUM VITAE

David James Elmer

Personal Information:

David James Elmer, Ph.D. M.Ed. CSCS
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Department of Kinesiology – Berry College
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Educational Background:

- 2011-2013 – Auburn University, Ph.D. – Exercise Science
- 2009-2011 – Auburn University, M.Ed. – Exercise Physiology
- 2005-2009 – Auburn University, B.S. – Biomedical Sciences

Employment history:

- 2019-current – Department Chair and Associate Professor of Exercise Science, Department of Kinesiology, Berry College
- 2013-2019 – Assistant Professor of Exercise Science, Department of Kinesiology, Berry College
- 2011 – Research Assistant, Thermal Laboratory, Auburn University
- 2010-2013 – Graduate Teaching Assistant, Department of Kinesiology, Auburn University

TEACHING:

KIN 498: Directed Study – Berry College
KIN 495: Exercise Science Practicum – Berry College
KIN 416: Exercise Training and Performance – Berry College
KIN 413: Exercise Assessment and Prescription – Berry College
KIN 411 WI: Exercise Physiology (Lecture and Laboratory) – Berry College
KIN 350: Neuromuscular Aspects of Training – Berry College
KIN 330: Motor Learning and Development – Berry College
KIN 311 WI: Biomechanics (Lecture and Laboratory) – Berry College
KIN 270: Research Methods in Exercise Science – Berry College
KIN 268: Medical Terminology – Berry College
KIN 265: Essentials of Strength and Conditioning – Berry College
KIN 240: Foundations of Exercise Science – Berry College
KIN 235: Exercise Science in Pop Literature – Berry College
KIN 221: Survey of Wellness (traditional and online) – Berry College
KIN 175: Fitness Walk/Jog – Berry College
KIN 106: Intro to Bicycling – Berry College
KIN 101: Weight Training – Berry College
BCC 300: Signature Seminar – Berry College
BCC 100: First-Year Seminar – Berry College
HON 450/451: Honors Thesis – Berry College
KINE 4640: Physical Conditioning and Speed – Auburn University
KINE 3680: Physiology of Exercise – Auburn University
KINE 3020: Scientific Foundations of Kinesiology – Auburn University
PHED 1400: Team Sports – Ultimate Frisbee – Auburn University

PHED 1400: Jogging for Fitness – Auburn University
PHED 1400: Team Sports – Indoor Soccer – Auburn University
PHED 1400: Team Sports – Softball – Auburn University

RESEARCH:

Published journal articles:

- Hubbard EA, Motl RW, **Elmer DJ**. Feasibility and initial efficacy of a high-intensity interval training program using adaptive equipment in persons with multiple sclerosis who have walking disability: study protocol for a single-group, feasibility trial. *Trials*. 2020 Dec;21(1):1-3.
- Brock, Kelly A., Lindsey E Eberman, Richard H. Laird, **David J. Elmer**, and Kenneth E. Games. "Sequential Pulse Compression's Effect on Blood Flow in the Lower-Extremity." *Journal of Sport Rehabilitation* 29.1 (2020): 7-11.
- **Elmer, David J.**, Elise N. Barron, and Juan L. Chavez. "Acute Demands and Recovery From Common Interval Training Protocols." *Journal of Strength and Conditioning Research* (2019).
- Leal, Anna Katherine, Edien Fernandini, Brandon Jackson, Madeleine Mason, and **David Elmer**. "A Required College Wellness Course Changes Beliefs, Attitudes, and Behaviors Related to Physical Activity." *International Journal of Physical Education, Fitness and Sports* 8.1 (2019): 110-121.
- **Elmer, D. J.**, & Toney, M. (2018). Respiratory Rate Threshold Accurately Estimates the Second Lactate Threshold. *International journal of sports medicine*, 39(04), 291-296.
- Laird, R. H., **Elmer, D. J.**, Barberio, M. D., Salom, L. P., Lee, K. A., & Pascoe, D. D. (2016). Evaluation of Performance Improvements After Either Resistance Training or Sprint Interval–Based Concurrent Training. *Journal of strength and conditioning research*, 30(11), 3057-3065.
- **Elmer, D. J.**, Laird, R. H., Barberio, M. D., & Pascoe, D. D. (2016). Inflammatory, lipid, and body composition responses to interval training or moderate aerobic training. *European journal of applied physiology*, 116(3), 601-609.
- Barberio, M. D., **Elmer, D. J.**, Laird, R. H., Lee, K. A., Gladden, B., & Pascoe, D. D. (2015). Systemic LPS and inflammatory response during consecutive days of exercise in heat. *International journal of sports medicine*, 36(03), 262-270.
- Pascoe, D.D., Barberio, M.D., **Elmer, D.J.**, Laird, R.H. (2012) Potential Errors in Mean Skin Temperature Calculation Due To Thermistor Placement As Determined By Infrared Thermography. *International Journal of Thermography*.

Published Abstracts and Presentations:

- 2022 – **Elmer, David**, Jessica Washington, Victoria Conn, and Eileen Wheelen. "Upper Body Muscle Activation and Measures of Sprint Performance." American College of Sports Medicine Conference, San Diego, CA.
- 2022 – Washington, Jessica, **David Elmer**, Victoria Conn, and Eileen Wheelen. "Upper Body Muscle Excitation During Sprinting." American College of Sports Medicine conference. San Diego, CA.
- 2022 – Smith, Madelyn G., **David Elmer**, and Elizabeth Hubbard. "Effects of 6-weeks of RPE-based, High-intensity Interval Training on Fitness and Walking in Older Adults." American College of Sports Medicine conference. San Diego, CA.
- 2022 – Hubbard, Elizabeth A., Madelyn G. Smith, and **David Elmer**. "Enjoyment and Tolerance of Exercise Intensity in Objectively Versus Subjectively Regulated Interval Exercise in Older Adults." American College of Sports Medicine conference. San Diego, CA.

- 2022 – Conn, Victoria, Eileen Wheelen, **David Elmer**, and Jessica Washington. “Upper Body Muscle Excitation During Sprinting.” Southeast American College of Sports Medicine conference. Greenville, SC.
- 2020 – **Elmer, David**, Emma Chambers, Anna Tucker, Madelyn Smith, and Elizabeth Hubbard. "A Comparison of Internal Training Loads Between Objectively-Versus Subjectively-Determined High-Intensity Interval Training: 3747 Board# 64 May 30 8: 00 AM-9: 30 AM." *Medicine & Science in Sports & Exercise* 52.7S (2020): 1023.
- 2019 – **Elmer, David**, Elise Barron, and Juan Chavez. "Differences in Physiological Demands Between Common High-Intensity Interval Training Protocols: 785: Board# 19 May 29 2: 00 PM-3: 30 PM." *Medicine & Science in Sports & Exercise* 51.6 (2019): 191.
- 2018 – Leal, A.K., Fernandini, E., Jackson, B., Mason, M., **Elmer, D.J.** “The Benefits of a Required Wellness Course in a Liberal Arts Education.” Southeast American College of Sports Medicine Regional Conference, Chattanooga, TN.
- 2017 – Ivey, M. and **Elmer, D.J.** “Estimating Lactate Threshold via Respiratory Exchange Ratio: A Pilot Study.” Southeast American College of Sports Medicine Regional Conference. Greenville, SC.
- 2017 – Leal, A., Fernandini, E., Jackson, B., Royal, H., **Elmer, D.J.** “Opinions and Attitudes About Physical Activity Among College Students: A Pilot Study.” Southeast American College of Sports Medicine Regional Conference. Greenville, SC.
- 2016 – Royal, H.K., Bradley, T.J. **Elmer, D.J.** “Effect of Protein Supplementation on Running Economy, Metabolism, Core Temperature, and Body Composition.” Thematic Poster Presentation. Southeast American College of Sports Medicine Regional Conference. Greenville, SC.
- 2016 – Brock, K.A., Games, K.E., Eberman, L.E., Laird, R.H., **Elmer, D.J.** “Sequential Compression’s Effect on Muscle Strength and Blood Flow in the Lower Extremity.” National Athletic Training Association.
- 2014 – **Elmer, D.J.**, Laird, R.H., Barberio, M.D., Lee, K.A., Pascoe, D.D. “Effect of High-intensity Interval Training vs. Traditional Endurance Training on the Blood Lipid Profile.” Southeast American College of Sports Medicine Regional Conference. Greenville, SC.
- 2014 – Laird, R.H., Kennedy, S., **Elmer, D.J.**, Barberio, M.D., Lee, K.A., Salom, L., Pascoe, D.D. “Effect of Concurrent Sprint Interval and Resistance Training on Strength, Power, and Aerobic Performance Measures.” American College of Sports Medicine National Conference. Orlando, FL.
- 2013 – **Elmer, D.J.**, Laird, R.H., Barberio, M.D., Lee, K.A., Pascoe, D.D. “Heat Stress of Performing Light Activity in an Extreme Hot/Humid Environment Wearing Military Protective Gear.” Southeast American College of Sports Medicine Regional Conference. Greenville, SC.
- 2013 – Barberio, M.D., **Elmer, D.J.**, Laird, R.H., Lee, K.A., & Pascoe, D.D. “Time Course of the Systemic Inflammatory Response to Consecutive Days of Exercise in the Heat.” National American College of Sports Medicine, June 2013. Indianapolis, IN.
- 2013 – Laird, R.H., **Elmer, D.J.**, Barberio, M.D., Lee, K.A., Pascoe, D.D. “Accuracy Of Skin Probes Vs. Infrared Imaging For Temperature Measurements In Three Different Environments.” National American College of Sports Medicine, June 2013. Indianapolis, IN.
- 2012 – **Elmer, D.J.**, Barberio, M.D., Lee, K.A., Pascoe, D.D. “Effect of Pickle and Pickle Juice Consumption on Endurance Exercise in the Heat.” Southeast American College of Sports Medicine Regional Conference, Jacksonville, FL.
- 2012 – Pascoe, D.D., **Elmer D.J.**, Laird, R.H. “Potential Errors in Mean Skin Temperature Calculation due to Thermistor Placement as Determined by Infrared Thermography.” 12th European Congress of Thermology, Porto. Thermography International. Vol. 22, Num. 3. 2012.

- 2011 – Barberio, M.D., **Elmer, D.J.**, Pascoe, D.D. “Effect of Specific HIIT Modalities on Multi-Event Performance.” Southeast American College of Sports Medicine Regional Conference, Greenville, SC.

Non peer-reviewed publications:

- Bernardo, Richie. “2018’s Best & Worst Cities for an Active Lifestyle.” WalletHub, 3 Jan. 2018, wallethub.com/edu/best-and-worst-cities-for-an-active-lifestyle/8817/#david-j-elmer. (Ask the Experts section)

Symposiums and Invited Lectures:

- 2013 – Symposium – **Elmer, D.J.**, Laird, R.H., Pascoe, D.D. “High Intensity Interval Training: From The Surgeon’s Table To The Playing Field.” Southeast American College of Sports Medicine Conference, Greenville, SC.

Professional Service:

- 2022 – Honors thesis advisor – Asbill, H. – “Effect of cross-slope on running economy, muscle activation, and gait characteristics.”
- 2022 – SEACSM conference abstract reviewer
- 2021 – Reviewer: Research Quarterly for Exercise and Sport – “The Dmax method estimates lactate threshold in adventure racers.”
- 2021 – Reviewer: Scientific Reports – Springer Nature – “An intelligent cardiopulmonary training system and adherence to training intensity: a feasibility study.”
- 2021 – Georgia Undergraduate Research Conference abstract reviewer
- 2021 – External reviewer for tenure dossier – High Point University
- 2021 – Textbook Reviewer – *A Practical Guide to Personal Conditioning*, Jones & Bartlett Learning
- 2019-2021 – Georgia Undergraduate Research Conference, Abstract Reviewer
- 2019 – Reviewer: Journal of Athletic Training – “Physical activity and health-related changes during transition out of college football.”
- 2019-2020 – Honors thesis advisor – Hawks, B. – “Effect of Training Status on Response to Exercise at Altitude.”
- 2019-2020 – Honors thesis committee member – Chambers, E. – “Subjective vs. Objective High-Intensity Interval Training.”
- 2018 – Undergraduate research mentor: Parker, H. “Effect of Diabetes Mellitus on Lactate Threshold.” Berry Student Research Symposium. Poster
- 2018 – Undergraduate research mentor: Hoover, B. “Shoulder Muscle Strengthening in Swimmers: A Pilot Study.” Berry Student Research Symposium. Poster
- 2018 – Honors thesis committee member – Terrell, J. – “Caffeine and Exercise Performance in Novice Rowing.” Berry Student Research Symposium. Poster
- 2017 – Reviewer: Journal of Physical Activity & Health – “Role of Regular Physical Activity on the Oxidative Stress in Healthy Subjects.”
- 2016 – Reviewer: Clinical Physiology and Functional Imaging – “Systemic Inflammation as a Function of the Individual and Combined Associations of Sedentary Behavior, Physical Activity and Cardiorespiratory Fitness.”

- 2015 – Reviewer: Adaptive Medicine – “Decreased serum inflammatory factor Lp-PLA2 in obese female juveniles by short term aerobic exercise.”
- 2015-2016 – Master’s thesis committee member – Brock, K., “Sequential Pulse Compression’s Effect on Muscle Blood Flow in the Lower Extremity.” Indiana State University.
- 2015 – Undergraduate research mentor: Bradley, T. “Effect of Acute High-Protein Diet on Exercise Performance and Core Temperature.” Berry Student Research Symposium. Poster.
- 2015 – Undergraduate research mentor: Royal, H. “Effect of Acute Protein Supplementation on Resting and Exercise Metabolism.” Berry Student Research Symposium. Poster.
- 2015 – Reviewer: Journal of Physical Activity and Health – “Lower extremity muscular strength and leukocyte telomere length: implications of muscular strength in attenuating age-related chronic disease.”
- 2014 – Undergraduate research mentor: Smith, H. “Optimizing High-Intensity Interval Training for Improving Aerobic Fitness: A Meta-analysis of Training Protocols.” Berry Student Research Symposium. Poster.
- 2012 – Co-investigator: In-Balance Technologies Contract – Efficacy of Electromagnetic Dog Collars.
- 2011 – Principal Investigator: Department of Defense and ExposureWear Contract – Impact of mechanical cooling vests (four) on mitigating heat stress when active in hot, humid environments (\$82,301)
- 2010 – Critical reviewer: Carry-over Effects of Backpack Carriage on Trunk Posture and Repositioning Ability.

Funding:

- 2018: Berry College Faculty Development Grant – *Heart Rate Variability in Aerobic and Anaerobic Collegiate Athletes*. (Funded - \$2,865)
- 2016: Berry College Faculty Development Grant – *Opinions, Attitudes, and Patterns of Physical Activity Among College Students*. (Funded – \$1,120)
- 2015: Berry College Faculty Development Grant – *Effect of Increased Protein Consumption on Heat Acclimation Profile*. (Funded – \$2,750)
- 2015: Berry College Community Engagement Course Enhancement Award – Motor Learning and Development. (Funded – \$1500)
- 2015: Nazione, S., Neuberger, L., Lanier, A., **Elmer, D.**, Leal, A., McElveen, M., Swann, G., Lunch, J. “Using the theory of planned behavior and the extended parallel process model to investigate the influence of faculty-student athlete relationships on student athlete concussion reporting.” Nine Sigma NCAA/DOD Mind Matters Challenge Grant. (Not funded – \$314,285)

Certifications:

- National Strength and Conditioning Association – Certified Strength and Conditioning Specialist (CSCS)
- American College of Sports Medicine – Exercise Is Medicine, Level 1
- American Red Cross – Blood Borne Pathogen Certification
- American Red Cross – Adult CPR, AED
- National Institutes of Health – Office of Extramural Research: “Protecting Human Research Participants”
- Collaborative Institutional Training Initiative Courses:
 - Group 1 Social/Behavioral Research
 - Group 3 Biomedical Research
 - Group 4 IRB Members

- IRB Reference Resource
- IACUC Members
- Research Administration (RCR)
- Social, Behavioral, and Education (SBE) Sciences (RCR)
- SafeSport
- Starbucks Global Academy – To Be Welcoming
- United Educators – Committing to Diversity, Equity, and Inclusion
- Auburn University Department of Clinical Laboratory Sciences – Phlebotomy and Blood Borne Pathogen training

Memberships:

- American College of Sports Medicine, 2012-current
- Southeast Chapter, American College of Sports Medicine, 2011-current
- National Strength and Conditioning Association, 2012-current

SERVICE:

Current Positions:

- Department Chair, Department of Kinesiology – Berry College
- Institutional Review Board, Chair – Berry College
- Promotion and Tenure Committee, Charter School of Education and Human Sciences – Berry College
- Strategic Plan Committee, Charter School of Education and Human Sciences – Berry College
- First-Year Advisory Committee – Berry College
- Religion in Life Advisory Committee– Berry College

Past Committee Positions:

- Institutional Animal Care and Use Committee – Berry College, 2019-2021
- Liberal Arts Curriculum Exploratory Committee – Berry College, 2019-2020
- Signature Seminar Committee – Berry College, 2018-2019
- Learning Management System selection committee – selection: Canvas – Berry College, 2018
- Quality Enhancement Plan Committee for SACSCOC Accreditation – co-chair, project title: “Signature Experience Program” – Berry College, 2016-2018
- Institutional Effectiveness Committee – Berry College, 2015-2017
- Health and Wellness Committee – Berry College, 2014-2016
- Writing Across the Curriculum Committee – Berry College, 2014-2016

Search Committees:

- Search committee member for position of Visiting Assistant/Associate Professor of Chemistry – Berry College, 2020
- Search committee member for position of Assistant/Associate Professor of Exercise Science – Berry College, 2017
- Search committee member for position of Assistant/Clinical Professor of Nursing – Berry College, 2016
- Search committee member for position of Assistant/Associate Professor of Exercise Science – Berry College, 2016
- Search committee chair for position of Assistant/Associate Professor of Sports Administration – Berry College, 2015-2016

- Search committee member for position of Assistant Professor of Exercise Science – Berry College, 2014-2015
- Search committee member for position of Head Track and Field Coach – Berry College, 2014-2015
- Search committee member for position of Assistant Professor of Exercise Science – Berry College, 2013-2014
- Student Representative, Search Committee for position of Assistant Professor of Exercise Science – Auburn University, 2012-2013

Advising and other service:

- Academic advising – 151 total advisees
- Faculty Liaison: Women’s Lacrosse – Berry College, 2019-2020
- Faculty sponsor and judge – SEACSM Student Quiz Bowl, 2016 and 2018
- Faculty Panel on Third Year Review: Continuing Teacher Education – Berry College, 2016
- Directed Study advisor – 9 total students
- Master’s Thesis committee and Graduate Faculty member – Indiana State University, 2015-2016
- Honors Thesis faculty advisor – Berry College, 9 total students
- Faculty advisor – Campus Outreach ministries at Berry College
- Student internship coordinator – 12 interns
- Internship site supervisor – Berry College, 10 interns
- Bonner presentation – “BCC 300 in a nutshell”
- Bonner scholarship review meeting faculty representative, Berry College, 2 students
- Guest Lecture (Exercise Science) – Community Health (KIN 313) – Berry College, 2013
- Guest Lecture (Exercise Science) – Research Methods (KIN 270) – Berry College, 2015
- Discover Berry – Faculty representative for the Department of Kinesiology – Berry College, 2013-2021
- Firsthand Friday – Cage Center tour guide and classroom host – Berry College, 2014-2016
- “Food for Finals” server – Berry College, 2014-2016
- KCAB Casino Night dealer – Berry College, 2014, 2016
- Faculty Judge – “Old Faces” Talent Show – Berry College, 2014
- College of Science and Mathematics Sub-committee of 19, War on Hunger – Auburn University, 2007

Development, Awards, and Honors:

2021: Leadership in Higher Education conference
 2020: Teaching and Learning in the Diverse Classroom
 2017: Conference on the First-Year Experience
 2016: Governor’s Teaching Fellows: Summer Fellowship Symposium – University of Georgia
 2015: Community Engagement Course Enhancement Award – Berry College
 2014: Faculty Symposium on Vocation – Berry College
 2011-2012: Preparing Future Faculty (PFF) Fellowship – Auburn University
 2011: Graduate research assistantship – Auburn University
 2010-2013: Graduate teaching assistantship – Auburn University
 2009-2010: Phi Kappa Phi
 2009: Magna Cum Laude Graduate, Auburn University
 2008: National Society of Collegiate Scholars
 2007-2009: Dean’s List: College of Science and Mathematics – Auburn University

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