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**Education**

2019-Present     **Ph.D.** Exercise Science and Nutrition; North Dakota State University, Fargo, ND (Summer, 2022 Projected).  
2019-2022       **Graduate Certificate.** College Teaching Pedagogy; North Dakota State University, Fargo, ND.  
2019-2021       **Graduate Certificate.** Statistics; North Dakota State University, Fargo, ND.  
2013-2015       **M.S.** Human Performance and Physical Education, Concentration: Exercise Physiology; Adams State University, Alamosa, CO.  
2009-2013       **B.S.** Exercise Science, Minors: Biology with Medical Services Emphasis, Coaching, Strength and Conditioning; Minnesota State University-Moorhead, Moorhead, MN.

**Professional Experience**

2019-Present     **Graduate Assistant.** Department of Health, Nutrition, and Exercise Sciences; North Dakota State University, Fargo, ND.  
2022-Present     **Graduate Research Assistant.** Department of Human Development and Family Science; North Dakota State University, Fargo, ND.  
2020-2021       **Adjunct Professor.** Department of Kinesiology; Adams State University, Alamosa, CO.  
2021-Present     **Volunteer Assistant Coach.** Cross-Country and Track and Field; Minnesota State University-Moorhead, Moorhead, MN.  
2018-Present     **Virtual Triathlon Coach.** Matt Hanson Racing.  
2019-2021       **Health and Nutrition Coach.** Profile; Sanford Healthcare, Fargo, ND.  
2015-2019       **Visiting Assistant Professor.** Department of Human Performance and Physical Education; Adams State University, Alamosa, CO.  
2014-2015       **Graduate Assistant.** Department of Human Performance and Physical Education; Adams State University, Alamosa, CO.  
2014-2015       **Volunteer Assistant Coach.** Cross-Country and Track and Field; Adams State University, Alamosa, CO.  
2012-2013       **High Performance Personal Trainer.** Cormax Fitness Center; Moorhead, MN.  
2011-2013       **Volunteer Assistant Coach.** Cross-Country and Track and Field; Minnesota State University – Moorhead, Moorhead, MN.

## Teaching and Advising

### **Department of Health, Nutrition, and Exercise Sciences; North Dakota State University, Fargo, ND.**

- **Lead Instructor:** Exercise and Disease (In Person; HNES 370).
- **Lead Instructor:** Research Methods and Design in Exercise Science (In Person; HNES 375).
- **Lead Instructor:** Exercise Physiology Lab (In Person, HyFlex; HNES 466L).
- **Teaching Assistant:** Methods in Resistance Training and Cardiovascular Conditioning (In Person; HNES 374).

### **Department of Human Performance and Physical Education; Adams State University, Alamosa CO.**

#### *Graduate Instruction*

- **Lead Instructor:** Biomechanics (In Person; HPPE 540).
- **Lead Instructor:** Introduction to Research (Online; HPPE 503).
- **Lead Instructor:** Statistical Methods in Kinesiology (Online; HPPE 543).
- **Lead Instructor:** Strength and Conditioning (Online; HPPE 539).
- **Lead Instructor:** Concepts in Exercise Science (Online; HPPE 509).

#### *Undergraduate Instruction*

- **Lead Instructor:** Biomechanics (In Person; HPPE 430).
- **Lead Instructor:** Kinesiology (In Person; HPPE 340).
- **Lead Instructor:** Exercise Physiology (In Person; HPPE 329).
- **Lead Instructor:** Coaching Techniques in Strength and Conditioning (In Person; HPPE 327).
- **Lead Instructor:** Statistics in Kinesiology (In Person; HPPE 260).
- **Advisor:** 30-40 Undergraduate Human Performance and Physical Education Majors

#### *Graduate Student Advising*

- **Committee Member:** Zach Switaj, 2016 (In Progress), Exercise Physiology.
- **Committee Member:** Kelsey Horton, 2016 (Graduated), Nutrition.
- **Committee Member:** Uchenna Ogbonnaya, 2017 (Graduated), Biomechanics.
- **Committee Member:** Alex Jordan, 2017 (Graduated), Exercise Physiology.
- **Committee Member:** David Sheppard, 2018 (Graduated), Exercise Physiology.
- **Committee Member:** Zachary Holloway, 2018 (Graduated), Sport Psychology.
- **Committee Member:** Kris Mugrage, 2018 (Graduated), Exercise Physiology.
- **Committee Member:** Matthew Greenfield, 2018 (Graduated), Strength and Conditioning.

## Peer-Reviewed Publications

1. Collins, K., Johnson, N., **Klawitter, L.**, Waldera, R., Stastny, S., Kraemer, W. J., McGrath, R. (2020). Handgrip strength asymmetry and weakness are differentially associated with functional limitations in older americans. *International Journal of Environmental Research and Public Health*, 17(9). <https://doi.org/10.3390/ijerph17093231>
2. McGrath, R., Johnson, N., **Klawitter, L.**, Mahoney, S., Trautman, K., Carlson, C., Hackney, K. J. (2020). *What are the association patterns between handgrip strength and adverse health conditions ? A topical review.* <https://doi.org/10.1177/2050312120910358>
3. Mahoney, S., **Klawitter, L.**, Hackney, K. J., Dahl, L., Herrmann, D., Edwards, B., McGrath, R., (2020) Examining additional aspects of muscle function with a digital handgrip dynamometer and

- accelerometer in older adults: A pilot study. *Geriatrics* 5(4), 86.
4. **Klawitter, L.**, Mahoney, S. J., Dahl, L., Hackney, K. J., Herrmann, S. D., Edwards, B., & McGrath, R., (2020) Evaluating additional aspects of muscle function with a digital handgrip dynamometer and accelerometer for cognitive functioning in older adults: A pilot study. *Journal of Alzheimer's Disease Reports*, (Preprint), 1-5.
  5. Johnson, N., Bradley, A., **Klawitter, L.**, Johnson, J., Johnson, L., Tomkinson, G. R., & McGrath, R. (2021). The Impact of a Telehealth Intervention on Activity Profiles in Older Adults during the COVID-19 Pandemic: A Pilot Study. *Geriatrics*, 6(3), 68.
  6. Collins, K. S., **Klawitter, L. A.**, Waldera, R. W., Mahoney, S. J., & Christensen, B. K. (2021). Differences in muscle activity and kinetics between the goblet squat and landmine squat in men and women. *Journal of Strength and Conditioning Research*, 35(10), 2661-2668.
  7. Parker, K., Vincent, B., Rhee, Y., Choi, B. J., Robinson-Lane, S. G., Hamm, J. M., **Klawitter, L.A.**, Jurvich, D.A., & McGrath, R. (2021). The estimated prevalence of no reported dementia-related diagnosis in older Americans living with possible dementia by healthcare utilization. *Ageing Clinical and Experimental Research*, 1-7.
  8. **Klawitter, L.**, Bradley, A., Hackney, K. J., Tomkinson, G. R., Christensen, B. K., Kraemer, W. J., & McGrath, R. (2021). The associations between asymmetric handgrip strength and chronic disease status in american adults: Results from the national health and nutrition examination survey. *Journal of Functional Morphology and Kinesiology*, 6(4), 79.
  9. **Klawitter, L.**, Vincent, B. M., Choi, B. J., Smith, J., Hammer, K. D., Jurvich, D. A., Dahl, L., & McGrath, R. (2021). Handgrip strength asymmetry and weakness are associated with future morbidity accumulation in americans. *The Journal of Strength & Conditioning Research* .1-7
  10. **Klawitter, L.**, & McGrath, R. (2021). Should We Pucker Up and Welcome a Potential New Assessment of Muscle Function?. *Journal of the American Medical Directors Association*, 22(4), 881-882.
  11. McGrath, B.M., Johnson, P.J., McGrath, R., Cawthon, P.M., **Klawitter, L.**, & Choi, B.J. (2022). A matched cohort analysis for examining the association between slow gait speed and shortened longevity in older Americans. *Journal of Applied Gerontology*. (In Press).
  12. Klawitter, L., Collins, K.S., McGrath, R., Ringhofer, D., Christensen, B.K. (2022). The association between handgrip asymmetry severity and future morbidity accumulation: Results from the health and retirement study. *International Journal of Exercise Science*. (In Review).

### **Professional Poster Presentations**

1. **Klawitter, L.**, Robinson, T., Orunchuck, D., November 2016. Does the Advanced Biostructural Correction Technique have a Physiological Effect on Endurance Trained Cyclists. Canadian Sports Institute Calgary, Alberta.
2. Ogbonnaya, U., **Klawitter, L.**, April 2018. Asymmetric Lower Body Force Output While Performing a Barbell Back Squat in NCAA Division II Athletes. Rocky Mountain ACSM Conference. Colorado Springs, Colorado.
3. Greenfield, M., **Klawitter, L.**, April 2018. Stance Effect on Peak Speed and Horizontal Displacement During the Pull Phases of Barbell Clean. Rocky Mountain ACSM Conference Colorado Springs, Colorado.
4. Sheppard, D., **Klawitter, L.**, April 2017. Variations in Wingate Load to Optimize Peak Power Output in NCAA DII Collegiate Athletes. Rocky Mountain ACSM Conference. Denver, Colorado.
5. Collins, K., **Klawitter, L.**, Waldera, R., Christensen, B., June 2020. Electromyographical Analysis of the Landmine Squat in College-Aged Men and Women. NSCA National Conference Las Vegas, Nevada.

6. Collins, K., **Klawitter, L.**, Waldera, R., Christensen, B., March 2020. Comparison of Sagittal Lower-Body Joint Angles During Two Squat Variations in Men and Women. Northland ACSM Conference St Paul, Minnesota.
7. **Klawitter, L.**, Mahoney, S., Dahl, L., Hackney, K., Edwards, B., Herrmann, S., Hennebry, K., McGrath, R., March 2020. Enhanced Assessments of Strength Capacity Asymmetry are Differentially Correlated with Measures of Physical Function in Older Adults: Preliminary Results from The Grip Strength, Internet Activity, and Nutrition Trial. Northland ACSM Conference St Paul, Minnesota.

### **Guest Lectures**

- “Careers in Exercise Science”; Adams State University, HPPE 100 Class; Fall 2015, Spring 2016
- “Introduction to Exercise Science”; Adams State University, HPPE 100; Fall 2016
- “Chemistry to Exercise Physiology”; Adams State University, CHEM 131; Fall 2016
- “Health and Wellness” High School MTN Bike Camp, Alamosa CO; Summer 2017

### **Professional Service**

- Ad hoc Manuscript Reviewer; *Journal of Strength and Conditioning Research*.
- Ad hoc Manuscript Reviewer; *International Journal of Exercise Science*.
- Northland ACSM Undergraduate Student Quiz Bowl Coach; North Dakota State University (2022).
- Faculty Mentor. KIN Major Club; Adams State University (2015-2019).
- Faculty Search Committee. Human Anatomy and Biology Professor; Adams State University (2016).
- Staff Search Committee. Wellness Coordinator; Adams State University (2017).
- Curriculum Accreditation. Association for Applied Sport Psychology. Adams State University (2018).
- Student Abstract and Poster Judge. Rocky Mountain ACSM Conference (2015-2018).
- Graduate Teaching Award; Department of Health, Nutrition, and Exercise Sciences. North Dakota State University (2022).

### **Certifications**

- Certified Strength and Conditioning Specialist (CSCS; 2021).
- American Heart Association First Aid/CPR (2021).

### **Research Equipment Experience**

- Maximal exercise testing
- Submaximal exercise testing
- Lactate testing
- Exercise prescription
- Body composition: Skinfolds, Bod-pod, Hydrostatic weighing, DEXA, anthropometric measures, InBody, Tanita, MuscleSound
- Blood pressure
- Flexibility
- Electromyography
- Force platforms
- Strength training
- Fitness Age
- Wingate testing

- Velodrome testing
- Myotest Accelerometer
- Bar Sensei Accelerometer
- Actilife Accelerometer
- BatMaxx
- GymAware Linear Transducer
- Opti Track Motion Capture
- Vicon Motion Capture
- Nutrition analysis
- BioPac Electronic Handgrip Dynamometry
- SAS and SPSS
- Dartfish
- Microsoft Office