**Employment:**

**Clinical Assistant Professor** *August 2022 – current*

**University of Michigan, Ann Arbor, MI**

School of Kinesiology

Exercise and Sports Science Initiative

**Postdoctoral Research Fellow** *July 2021 – August 2022*

**Boston Children’s Hospital | Harvard Medical School , Boston, MA**

The Micheli Center for Sports Injury Prevention

Department of Orthopedics – Division of Sports Medicine

**Education:**

**Ph.D. University of Virginia, Charlottesville, VA** *August 2017 – May 2021*

Department of Kinesiology – Sports Medicine

Dissertation: Wearable Sensors for In-Field Running Gait Analysis & Intervention (https://doi.org/10.18130/5fc5-2d47)

Teaching and Research Assistant

**M.Ed. University of Virginia, Charlottesville, VA** *June 2017*

CAATE Approved Masters of Education in Kinesiology – Athletic Training

Thesis*: Ultrasound Imaging Reveals Gluteal Muscle Changes During Gait in Healthy Individuals with Medial Knee Displacement*

**B.S. University of Pittsburgh, Pittsburgh, PA** *April 2016*

Bachelor of Science in Athletic Training

Magna Cum Laude

**Research Interests & Experience:**

**Exercise and Sports Science Initiative, University of Michigan, Ann Arbor, MI** *2022 – current*

Focus on adult and adolescent running-related injury evaluation, intervention, and prevention through indoor and outdoor gait biomechanical assessments using wearable technologies, musculotendinous ultrasound imaging evaluations, DEXA scan measurements, and patient-centered interventions based on physical measures.

**The Micheli Center for Sports Injury Prevention, Boston Children’s Hospital, Waltham, MA** *2021 – 2022*

Focus on adolescent running-related injury evaluation and prevention through outdoor gait biomechanical assessments, musculotendinous ultrasound imaging evaluations, hospital Injury Prevention Evaluations, and retrospective medical chart reviews.

**Exercise and Sports Injury Laboratory, University of Virginia, Charlottesville, VA** *2016 – 2021*

**Doctoral Work:** Focus on the implementation of wearable sensors to evaluate running biomechanics during sustained outdoor running in athletes as they relate to running-related injury risk factors, adaptations, and interventions. Interest in implementing in-field gait-training through wearable sensing in injured runners. Additional work in evaluating pelvic stabilizers during gait and other dynamic tasks in chronic ankle instability populations.

**Dissertation Title:** Wearable Sensors for In-Field Running Gait Analysis and Intervention *(Successful Dissertation Defense March 23, 2021)*

**Laboratory Assistantship:**

Effects of Altered Gravity on Sensor-Derived Running Biomechanics

Inorganic Nitrate: Sex Differences in Muscle Contractile Function and Efficiency

Measuring Running Biomechanics with Wearable Sensors

Lower Extremity Assessment Protocol Testing for Anterior Cruciate Ligament Reconstruction Patients

Effects of Gait Biofeedback and Impairment-Based Rehabilitation in Individuals with Chronic Ankle Instability

National Biomechanics Day 2018 – Charlottesville High School, St. Anne’s-Bellfield School

**Master’s Thesis:** Investigation of gluteal muscle function by means of ultrasound imaging to determine proximal adaptations during gait in a healthy population compared to a risk factor population.

**Teaching Experience:**

**University of Virginia, Department of Kinesiology**

***Instructor of Record***

1. KINE 3630 Emergency Medical Care Lecture and Lab (Undergraduate [60 students] – Fall 2020)
2. KINE 3630 Emergency Medical Care Lecture and Lab (Undergraduate [60 students] – Spring 2020)
3. KINE 3630 Emergency Medical Care Lecture and Lab (Undergraduate [59 students] – Fall 2019)
4. KINE 3630 Emergency Medical Care Lecture and Lab (Undergraduate [58 students] – Spring 2019)

***Teaching Assistant***

1. KINE 3630 Emergency Medical Care Lecture and Lab (Undergraduate [75 students] – Spring 2021)
2. KINE 5715 Clinical Practicum (MSAT Level II [20 students] – Summer 2020)
3. KINE 5710 Anatomy and Functional Kinesiology (MSAT Level I [20 students] – Summer 2020)
4. KINE 3630 Emergency Medical Care Lecture and Lab (Undergraduate [60 students] – Fall 2018)
5. KINE 3400 Principles of Nutrition Course (Undergraduate [150 students] – Spring 2018)
6. KINE 3400 Principles of Nutrition Course (Undergraduate [150 students] – Fall 2017)
7. KINE 3615 UVA Sports Medicine: Medical In-service (Undergraduate [30 students] – Spring 2017)
8. KINE 3615 UVA Sports Medicine: Medical In-service (Undergraduate [30 students] – Fall 2016)

**University of Pittsburgh, School of Health and Rehabilitation Science**

***Teaching Assistant***

1. Injury Evaluation 1 (Undergraduate [23 students] – Fall 2015)

**Professional Development:**

***Programs***

(1) **Tomorrow’s Professor Today Program** *2018 –2021*

Two-tier professional development program for graduate students conducted through the Center for Teaching Excellence designed to teaching and mentorship strategies at the collegiate level. Requirements include attending workshops, observing faculty and peer teaching, and peer-mentoring.

1. **Course Design Institute’s C3 Design Program** *2020* 6-week professional development program designed to improve student-focused course and curriculum design through foundational concepts such as student motivation, backward-integrated course design, and Fink’s Taxonomy of Significant Learning. Requirements include engaging with all course material, critically appraising sample syllabi, and creating a mock course syllabus.

***Workshops***

(1) **UVA Acts Inclusive Teaching Toolkit Four-Part Lecture Series** *2019 – 2020*

(2) **The Center for Teaching Excellence In-Class Observation and ESP Focus Group** *Oct., Mar. 2019*

(3) **The Curry School of Education January Teaching Workshop** *Jan. 2018-2020*

(4) **The Center for Teaching Excellence “Job Series” Workshop** *Sept. 2018*

(5) **The Center for Teaching Excellence “Teaching as a Graduate Student” Aug. Workshop** *2017, 2018*

(6) **The Center for Teaching Excellence “Innovation in Pedagogy” Workshop** *May 2018*

**Scholarship:**

***In Preparation and Under Review***

1. **DeJong Lempke AF,** Willwerth SB, Hunt DL, Meehan WP III, Whitney KE. Adolescent marathon training: prospective evaluation of musculotendinous changes during a 6-month endurance running program. *(under review – Journal of Ultrasound in Medicine)*.
2. Willwerth SB, Lempke LB, Lugade V, Meehan WP III, Howell DR, **DeJong Lempke AF**. Ankle sprain history does not significantly alter single- and dual-task spatiotemporal gait mechanics. (*under review – Gait & Posture)*.
3. Chandran, A., Moffit, R., **DeJong Lempke, AF,** Boltz, AJ, Alexander, AS, Robison, HJ, Kerr, ZY, Collins, CL, Wikstrom, EA. Epidemiology of Lateral Ligament Complex Tears in National Collegiate Athletic Association (NCAA) Sports: 2014/15-2018/19. (*under review - The American Journal of Sports Medicine*).
4. **DeJong Lempke AF**, Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Running-related injuries captured using wearable technology during a competitive cross-country season. *(under review – Translational Journal of the American College of Sports Medicine)*
5. **DeJong Lempke AF**, Stracciolini A, Willwerth SB, Ackerman KE, d’Hemecourt PA, Meehan WP III, Whitney KE. Clinical assessment, treatment, and referral trends for adolescent runners seeking care at an injured runners’ clinic. *(under review – Journal of Pediatric Rehabilitation Medicine)*
6. **DeJong Lempke AF,** Whitney KE, Stracciolini A, Ackerman KE, d’Hemecourt PA, Willwerth S, Meehan WP III. Outpatient runners clinic visit trends and injury characteristics among 392 child and adolescent patients: A 10-year chart review. *(under review – Clinical Journal of Sports Medicine)*
7. **DeJong Lempke AF,** Collins SE, Whitney KE, d’Hemecourt PA, Meehan WP III. Intrinsic and Extrinsic Factors Contributing to Running-Related Lower Limb Injuries Among Adolescent Runners. *(under review – Journal of Sports Science)*
8. **DeJong Lempke AF**, Stephens SL, Fish PN, Thompson XD, Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Sensor-Based Gait-Training to Reduce Contact Time for Runners with Exercise-Related Lower Leg Pain: A Randomized Controlled Trial. *(under review – BMJ Open)*
9. Santos BP, **DeJong Lempke AF,** Higgins M, Hertel J. Influence of Altered Gravity Treadmill Running on Sensor-Derived Biomechanics. *(under review – Sports Health)*
10. Remus A, **DeJong Lempke AF**, Caulfield B, Delahunt EA. Influence of Chronic Ankle Instability on Lower Limb Biomechanics During Sports Related Tasks: A Systematic Review (*under review – Sports Biomechanics)*
11. Remus A, **DeJong Lempke AF**, Wuytack F, Smith V. Outcome measurement instruments and evidence-based recommendations for measurement of the pelvic girdle pain core outcome set (PGP-COS): A systematic review and consensus process *(under review – The Journal of Pain)*
12. **DeJong Lempke AF,** Whitney KE, Stracciolini A, Willwerth SB, Ackerman KE, d’Hemecourt PA, Meehan WP III. Economic impact of outpatient clinic care for adolescent running-related injuries in the United States. *(in preparation)*.
13. **DeJong Lempke AF**, Whitney KE, Meehan WP III. Running gait adaptations among adolescent athletes with soft tissue impairments following lateral ankle sprains. *(in preparation)*

***Publications***

1. **DeJong Lempke AF**, Collins SE, Whitney KE, d’Hemecourt PA, Meehan WP III. A comparison of risk factors for running-related injuries between adult and adolescent runners. *International Journal of Sports Physical Therapy. (Accepted – June 27, 2022)*
2. Stephens SL, **DeJong Lempke AF,** Hertel J, Saliba SA. Clinical Usage, Application Procedures, and Perceived Effectiveness of Cupping Therapy Among Healthcare Professionals in the United States: A Cross-Sectional Survey. Complementary Therapies in Clinical Practice. August 2022. https://doi.org/10.1016/j.ctcp.2022.101610.
3. **DeJong Lempke AF,** Whitney KE, Collins SE, d’Hemecourt PA, Meehan WP III. Biomechanical running gait assessments across prevalent adolescent musculoskeletal injuries. Gait & Posture. July 2022. https://doi.org/10.1016/j.gaitpost.2022.05.025
4. **DeJong Lempke AF,** Hertel J. Influence of the COVID-19 Pandemic on Running Behaviors, Motives, and Running-Related Injury: A One-Year Follow-Up Survey. PLOS ONE. March 2022. https://doi.org/10.1371/journal.pone.0264361
5. **DeJong Lempke AF**, Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Prospective running assessments among division I cross-country athletes. Physical Therapy in Sport. 2022;55:37-45. doi:10.1016/j.ptsp.2022.02.003
6. **DeJong Lempke AF**, Koldenhoven RM, Jaffri AH, Hertel J. Gluteal Activity During Gait in Patients With Chronic Ankle Instability Following Rehabilitation: A Randomized Controlled Trial. J Sport Rehabil. 2021 Oct 6:1-7. doi: 10.1123/jsr.2021-0148.
7. **DeJong Lempke AF**, Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Use of wearable sensors to identify biomechanical alterations in runners with Exercise-Related lower leg pain. J Biomech. 2021;126:110646. doi:10.1016/j.jbiomech.2021.110646
8. **DeJong AF**, Koldenhoven RM, Hertel J. Hip biomechanical alterations during walking in chronic ankle instability patients: a cross-correlation analysis. Sports Biomech. 2021 Mar 5:1-12. doi: 10.1080/14763141.2021.1884285.
9. **DeJong AF**, Fish PN, Hertel J. Running behaviors, motivations, and injury risk during the COVID-19 pandemic: A survey of 1147 runners. PLOS One. 2021 Feb 12;16(2):e0246300. doi: 10.1371/journal.pone.0246300.
10. Kupperman N, **DeJong AF**, Alston P, Hertel J, Saliba SA. Athlete Workloads During Collegiate Women's Soccer Practice: Implications for Return to Play. J Athl Train. 2021 Mar 1;56(3):321-330. doi: 10.4085/205-20.
11. Koldenhoven RM, Jaffri A, **DeJong AF**, Abel M, Hart JM, Saliba SA, Hertel J. Gait biofeedback and impairment-based rehabilitation for chronic ankle instability. Scandinavian Journal of Medicine & Science in Sports. 2021;31(1):193-204. doi:https://doi.org/10.1111/sms.13823
12. **DeJong AF**, Hertel J. Validation of Foot-Strike Assessment Using Wearable Sensors During Running. Journal of Athletic Training. 2020;55(12):1307-1310. doi:10.4085/1062-6050-0520.19
13. Koldenhoven RM, Virostek A, **DeJong AF**, Higgins M, Hertel J. Increased Contact Time and Strength Deficits in Runners With Exercise-Related Lower Leg Pain. Journal of Athletic Training. 2020;55(12):1247-1254. doi:10.4085/1062-6050-0514.19
14. **DeJong AF**, Hertel J. Unique Outdoor Running Activities Captured Using Wearable Sensors in Adult Competitive Runners. International Journal of Athletic Therapy and Training.2020 Mar;25(2):76-85. https://doi.org/10.1123/ijatt.2019-0051
15. **DeJong AF**, Koldenhoven RM, Hertel J. Cross-correlations between gluteal muscle thickness derived from ultrasound imaging and hip biomechanics during walking gait. J Electromyogr Kinesiol. 2020 Apr;51:102406. doi: 10.1016/j.jelekin.2020.102406.
16. **DeJong AF**, Koldenhoven RM, Hertel J. Proximal Adaptations in Chronic Ankle Instability: Systematic Review and Meta-analysis. Med Sci Sports Exerc. 2020 Jul;52(7):1563-1575. doi: 10.1249/MSS.0000000000002282.
17. **DeJong AF**, Koldenhoven RM, Hertel J. Gluteus medius dysfunction in females with chronic ankle instability is consistent at different walking speeds. Clinical Biomechanics.2020 Jan 20. https://doi.org/10.1016/j.clinbiomech.2020.01.013 [Epub ahead of print]
18. **DeJong AF,** Mangum LC, Hertel J. Gluteus Medius Activity during Gait is Altered in Individuals with Chronic Ankle Instability: An Ultrasound Imaging Study. Gait Posture. 2019 Apr 11;71:7-13. doi: 10.1016/j.gaitpost.2019.04.007.
19. **DeJong AF**, Mangum LC, Hertel J. Ultrasound Imaging of the Gluteal Muscles During the Y-Balance Test in Individuals With or Without Chronic Ankle Instability. J Athl Train. 2019 Jan;55(1):49-57. doi: 10.4085/1062-6050-363-18.
20. **DeJong AF,** Hertel J. Gait-training devices in the treatment of lower extremity injuries in sports medicine: current status and future prospects. Expert Rev Med Devices. 2018 Nov 22. doi: 10.1080/17434440.2018.1551130.
21. **DeJong AF**, Mangum LC, Resch J, Saliba SA. Detection of Gluteal Changes Using Ultrasound Imaging During Phases of Gait in Individuals with Medial Knee Displacement. J Sport Rehabil. 2018 Mar 15: 1-35. doi: 10.1123/jsr.2017-0336.

***Other Manuscript Contributions (Acknowledgements)***

1. Kupperman N, Hertel J. Global Positioning System-Derived Workload Metrics and Injury Risk in Team-Based Field Sports: A Systematic Review. J Athl Train. 2020 Sep 1;55(9):931-943. doi: 10.4085/1062-6050-473-19.

***Media Interviews and Features***

1. Running During A Pandemic: Finding Strength, Solace and Staying Injury-Free. Article By: Anna Katherine Clay. UVA Today. 2020 Dec 2. *(Interview)*
2. Sports Medicine Professor Wants UVA to be at Forefront of Wearable Sensor Revolution. Article By: Whitelaw Reid. 2019 Nov 8. *(Feature)*

***Non-Refereed Works***

1. Driban JB, Thomas SJ, **DeJong AF**, Lempke LB, Torp DM. A Sports Med Res Discussion with Doctoral Students on Sports Medicine Research in the Era of COVID-19. *Sports Medicine Research Podcast.* Apr 22, 2020.
2. **DeJong AF**. *Sports Medicine Research Blog Posts*. 2017-current. http://www.sportsmedres.org/search?q=Alexandra+DeJong.
3. Koldenhoven R, **DeJong A.** Assessing runners’ gait using wearable sensors. *Lower Extremity Review*. 2017;(November 2017). http://lermagazine.com/article/assessing-runners-gait-using-wearable-sensors.

***Presentations***

1. **DeJong Lempke AF,** Donovan L. Tailoring Clinical Walking and Running Gait-Training Interventions to Meet Lower Extremity Injury Patients’ Needs. *2022 National Athletic Trainers’ Association Annual Conference.* Philadelphia, PA. July 2022. (Lecture).
2. **DeJong Lempke AF,** Stephens SL, Fish PN, Thompson XD, Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Sensor-Based Gait-Training to Reduce Contact Time for Runners with Exercise-Related Lower Leg Pain: A Randomized Controlled Trial. *2022 National Athletic Trainers’ Association Annual Conference.* Philadelphia, PA. July 2022.(Free Communication Oral Presentation).
3. Stephens SL, **DeJong Lempke AF**, Hertel J, Saliba SA. Cupping Therapy: Clinical Usage, Application Procedures, and Perceived Effectiveness. *2022 National Athletic Trainers’ Association Annual Conference*. Philadelphia, PA. June 2022. (Poster).
4. **DeJong Lempke AF,** Whitney KE, Meehan WP III. Running Gait Adaptations Among Adolescent Athletes With Soft Tissue Impairments Following Lateral Ankle Sprains. *2022 Sports Medicine Research Day.* Boston, MA. June 2022. (Rapid Fire Oral Presentation).
5. **DeJong Lempke AF,** Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Prospective Running Assessments Among Collegiate Cross-Country Athletes. *2022 American College of Sports Medicine Annual Conference.* San Diego, CA. June 2022. (Thematic Poster).
6. Leal Chanchi M, **DeJong Lempke AF**, Kocher M, Shore B, Meehan WP, Willwerth S, Hunt D, d’Hemecourt PA, Whitney KE. Running Biomechanics Features Among Adolescent Athletes with Lower Leg Chronic Exertional Compartment Syndrome. *2022 American College of Sports Medicine Annual Conference.* San Diego, CA. June 2022. (Poster).
7. Whitney KE, d’Hemecourt PA, Stracciolini A, **DeJong Lempke AF**. Child and Adolescent Hamstrings:Quadriceps Strength Ratio Effects on Running Biomechanics. *2022 American College of Sports Medicine Annual Conference.* San Diego, CA. June 2022. (Poster).
8. de Zevallos JO, Hogwood AC, Kruse K, De Guzman J, Buckley M, **DeJong Lempke AF**, Weltman AL, Allen JD. The Effect of Dietary Nitrate Supplementation on Skeletal Muscle Contractile Properties in Females and Males. *2022 American College of Sports Medicine Annual Conference.* San Diego, CA. June 2022. (Poster).
9. Whitney KE, d’Hemecourt PA, Stracciolini A, **DeJong Lempke AF**. Running gait biomechanics in children and adolescents, age and sex-specific features. *2022 American Medical Society for Sports Medicine Annual Conference.* Austin, TX. April 2022. (Podium Presentation).
10. **DeJong Lempke AF**, Collins SE, Whitney KE, d’Hemecourt PA, Meehan WP III. Intrinsic and Extrinsic Factors Contributing to Running-Related Lower Limb Injuries Among Adolescent Runners. *2022 Eastern Athletic Trainers’ Association Annual Meeting & Clinical Symposium*, Mashantucket, CT. January 2022. (Poster).
11. **DeJong Lempke AF,** Fish PN, Hertel J. Survey of Running Volume, Behaviors and Motives During the COVID-19 Pandemic. *2021 Virtual Canadian Athletic Therapist’s Association Conference*. October 2021. (Electronic Poster).
12. **DeJong AF,** Fish PN, Hertel J. Survey of Running Volume, Behaviors and Motives During the COVID-19 Pandemic. *2021 Virtual National Athletic Trainer’s Association Conference*. June 2021. (Electronic Poster).
13. **DeJong AF**, Hart JM, Hryvniak DJ, Rodu JS, Hertel J. Use of Wearable Sensors to Identify Biomechanical Alterations in Runners with Exercise-Related Lower Leg Pain. *2021 Virtual Running Medicine Conference.* March 2021. (Oral Poster)
14. Fish PN, **DeJong AF**, Hertel J. Survey of Running Volume, Behaviors, and Motives during the COVID-19 Pandemic. *2021 Virtual Running Medicine Conference.* March 2021. (Oral Poster)
15. **DeJong AF,** Napier CV. Out of the Clinic and Into the Field: Monitoring Running Mechanics Using Wearable Sensors. *2020 Virtual National Athletic Trainers’ Association Annual Conference*. June 2020. (Clinical Symposium – Electronic Lecture and Live Q&A Session).
16. **DeJong AF**, Hertel J. Influence of Rating of Perceived Exertion on Collegiate Cross-Country Athletes’ Running Biomechanics. *2020 Virtual National Athletic Trainers’ Association Annual Conference*. June 2020. (Electronic Poster)
17. Koldenhoven RM, Jaffri AH, **DeJong AF**, Howell M, Abel MF, Saliba S, Hart J, Hertel J. Gait biofeedback and impairment-based rehabilitation for chronic ankle instability: A randomized controlled trial. *2020 Virtual National Athletic Trainers’ Association Annual Conference*. June 2020. (Virtual Oral Presentation – Free Communications Early Career Award Winner).
18. **DeJong AF**, Hertel J. Relationship Between Wearable Sensor Foot Strike Outcomes and Ankle Sagittal Plane Kinematics During Treadmill Running. *2020 Virtual American College of Sports Medicine Annual Conference.* May 2020. (Electronic Poster).
19. **DeJong AF**, Hertel J. Unique Outdoor Running Activities Captured Using Wearable Sensors in Adult Competitive Runners. *Symposium on Regenerative Rehabilitation*, University of Virginia, Charlottesville, VA. October 2019. (Poster).
20. **DeJong AF**. Wearable Sensors for Distance Running Analyses: A Framework for Evaluating Lower Leg Pathologies. (Symposium – Moving beyond the laboratory: using novel sensor technologies and mobile platforms to assess individuals with CAI.) *8th International Ankle Symposium,* Amsterdam, Netherlands. October 2019. (Oral).
21. **DeJong AF,** Koldenhoven RM, Hertel J. Gluteus medius dysfunction throughout walking gait in chronic ankle instability patients compared to copers. *8th International Ankle Symposium,* Amsterdam, Netherlands. October 2019. (Oral).
22. **DeJong AF**, Koldenhoven RM, Hertel J. Altered Gluteus Medius Contraction during Gait in Chronic Ankle Instability versus Coper and Healthy Groups. *2019 International Society of Biomechanics/American Society of Biomechanics Annual Meeting,* Calgary, Alberta, Canada. August 2019. (Oral).
23. **DeJong AF**, Hertel J. Unique Outdoor Running Activities Captured Using Wearable Sensors in Adult Competitive Runners. *2019 National Athletic Trainers’ Association Annual Conference*, Las Vegas, NV. June 2019. (Oral). https://doi.org/10.4085/1062-6050-54.6s.S-1
24. Dembeck AF, **DeJong** AF, Hertel J, Saliba SA. Gluteal Muscle Activation in Participants With and Without Low Back Pain During a Dynamic Balance Task. *2019 National Athletic Trainers’ Association Annual Conference*, Las Vegas, NV. June 2019. (Oral).
25. **DeJong AF**, Hertel J. Gluteus Medius Activation During Gait Is Altered With Chronic Ankle Instability: An Ultrasound Imaging Study. *2019 American College of Sports Medicine Annual Conference.* Orlando, FL. May 2019. (Oral).
26. Dembeck AF, **DeJong** AF, Hertel J, Saliba SA. Gluteal Muscle Activation in Participants With and Without Low Back Pain During a Dynamic Balance Task. *2019 Connecticut Athletic Trainers’ Association Annual Symposium*, Cromwell, CT. May 2019. (Oral).
27. **DeJong AF**, Hertel J. Monitoring In-Field Running Biomechanics during Trail and Road Races: A Case Series. *2019 University of North Carolina Human Movement Science Conference.* Chapel Hill, NC. March 2019. (Oral).
28. **DeJong AF**, Hertel J. Monitoring In-Field Running Biomechanics during Trail and Road Races: A Case Series. *2019 Curry Research Conference.* Charlottesville, VA. March 2019. (Oral).
29. Mangum LC, Morris K, **DeJong AF,** Saliba SA. Lumbar Multifidus Muscle Thickness During Therapeutic Exercise In Individuals With And Without Chronic Low Back Pain: A Reliability Of Ultrasound Imaging Study. *American Institute of Ultrasound in Medicine,* Orlando, FL. March 2019. (Poster).
30. **DeJong AF**, Mangum LC, Hertel J. Preliminary Investigation of Ultrasound Imaging of the Gluteal Muscles during the Y-Balance Test in Individuals with Chronic Ankle Instability. *2018 European College of Sport Science Annual Conference*, Dublin, Ireland. July 2018. (Oral).
31. **DeJong AF**, Mangum LC, Resch J, Saliba SA. Ultrasound Imaging Reveals Gluteal Muscle Changes During Gait in Healthy Individuals with Medial Knee Displacement. *2018 National Athletic Trainers’ Association Annual Conference*, New Orleans, LA. June 2018. (Poster).
32. **DeJong AF**, Mangum LC, Resch J, Saliba SA. Ultrasound Imaging Reveals Gluteal Muscle Changes During Gait in Healthy Individuals with Medial Knee Displacement. *2018 Curry Research Conference*, University of Virginia, Charlottesville, VA. April 2018. (Poster).
33. Mangum, LC, **DeJong, AF.** Patellar Offset Angle Greater in Individuals with Medial Knee Displacement During a Single Leg Squat. *American Institute of Ultrasound in Medicine,* New York, NY. March 2018. (Oral).
34. **DeJong AF**, Mangum LC, Resch J, Saliba SA. Ultrasound Imaging Reveals Gluteal Muscle Changes During Gait in Healthy Individuals with Medial Knee Displacement. *2017 Master’s Thesis Defense,* University of Virginia, Charlottesville, VA. June 2017. (Oral).
35. **DeJong AF.** Kinesiotape and the Scapulohumeral Rhythm: Clinical Effectiveness in Subacromial Impingement. *Athletic Training Student Association Senior Symposium*, University of Pittsburgh, Pittsburgh, PA. October 2015. (Oral and Poster)*.*

***Invited Presentations/Guest Lectures***

1. **DeJong Lempke AF.** Running Biomechanics “In The Wild”: Implications for Injury Assessment and Risk Reduction. *Athletic Trainers of Massachusetts (ATOM) Continuing Education Unit Presentation*. Boston, MA. May 26, 2022. (Invited Speaker)
2. **DeJong Lempke AF.** Use of Wearable Sensors in Running Medicine. *Michigan State University Continuing Education Unit Presentation.* East Lansing, MI. March 2, 2022. (Remote Invited Speaker)
3. **DeJong Lempke AF.** Using Novel Approaches to Biomechanical Assessments. *Science & Engineering Research Center (SERC) High School Course, The Potomac School.* McLean, VA. November 18, 2021. (Remote Guest Speaker).
4. **DeJong Lempke AF.** Biomechanics Associated with Running-Related Injury: Gait Assessments in Natural Settings. *Injury Biomechanics Session at the Mid-Atlantic Regional Chapter of the American College of Sports Medicine Fall Conference*. Harrisburg, PA. November 6, 2021. (Invited Speaker)
5. **DeJong Lempke AF.** Interview on Topics Related to Sport Injury. *Auburn University Graduate Clinical Biomechanics Seminar.* Auburn University, Auburn, AL. 2021 (Remote Guest Speaker).
6. **DeJong AF.** Outdoor Running Activities Captured Using Wearable Sensors in Adult Competitive Runners. *University of Montana Athletic Training Journal Club.* University of Montana, Missoula, MT. Oct 2020 (Remote Guest Speaker)
7. **DeJong AF.** Wearable Sensors for Distance Running Analyses. *KINE 6730 – Human Performance in Sports Medicine,* University of Virginia, Charlottesville, VA. Jan 2020. (Guest Lecturer)
8. **DeJong AF.** Incorporating Wearable Technology into Clinical Practice. *University of Wisconsin Madison Undergraduate Athlete Monitoring Seminar.* Virtual Seminar to University of Wisconsin Madison, Madison, WI. November 2019. (Remote Guest Lecturer)
9. **DeJong AF**, Richardson R, Feiner E, Cross K, Takata D. *Panel Discussion for Undergraduate Sports Medicine Inservice.* University of Virginia, Charlottesville, VA. November 2017. (Panel Discussion)
10. Mangum LC, **DeJong AF.** Ultrasound Imaging Laboratory. *The Art and Science of Sports Medicine Conference,* University of Virginia, Charlottesville, VA. June 2017. (Interactive Laboratory Session)

**Mentorship:**

***Boston Children’s Hospital Research Mentorship***

1. **Elspeth Hart** *(2022-current)*
2. **Gauri Desai** *(2022)*
3. **Sarah Willwerth** *(2021-2022)*

***University of Virginia Undergraduate & Master’s Research Mentorship***

1. **Pamela Fish** *(2019-2021)*
2. **Miranda Furtado** *(2018-2020)*
3. **Katherine Michos** *(2018)*
4. **Anna Calaicone** *(2018)*
5. **Daniel Ziskind** *(2018)*
6. **T. Alex Hicks** *(2020-2021, MSAT)*
7. **Brian P. Santos** *(2020-2021, MSAT)*
8. **Adrienne F. Dembeck, ATC** *(2017-2018, MEd)*

***Northern Arizona University Master’s Thesis Mentorship***

1. **Caitlyn Heredia** *(2020-current)*

**Grant Funding and Research Support:**

***Funding Applications***

1. Source: VALD Applied Research Initiative

Title: Monitoring Rehabilitation Recovery Following Injury: Augmenting Clinical Practice with Automated Human Performance Technology

PI: Drs. Alexandra DeJong Lempke and Landon Lempke

Description: Use of VALD force plates, dynamometers, and 2-dimensional motion capture technology to serially assess strength, range of motion, and movement biomechanics across clinical timepoints for patients with lower extremity injury undergoing specific return-to-play rehabilitation protocols.

Amount: $24,000

Period: Submitted May 18, 2022

***Current Funding***

1. Source: National Athletic Trainers’ Association (Doctoral Dissertation Grant)

Title: In-Field Gait-Training for Runners with Exercise-Related Lower Leg Pain

PI: Alexandra F. DeJong, MEd, ATC

Description: Apply gait-training interventions in natural running environments using wearable sensing technology to positively impact gait biomechanics in runners with exercise-related lower leg pain.

Amount: $2,500.00

Period: June 15, 2020 – current

***Completed Support***

1. Source: University of Virginia (School of Education and Human Development Pilot Grant)

Title: Measuring Running Biomechanics with Wearable Sensors

PI: Jay Hertel, PhD, ATC

Role: Study Coordinator 1

Period: October 2017 – December 2019

Description: Assess running biomechanics during typical training programs in natural environments over the course of one week in a variety of types of runners using wearable sensors.

1. Source: University of Virginia Curry School Research and Development Fund (Curry IDEAs Grant)

Title: Sensor-derived Patterns to guide Running INterventions during Training (SPRINT): Applications for Running-Related Injury

PI: Alexandra F. DeJong Lempke, PhD, ATC

Period: June 1, 2019 – May 1, 2021

Amount: $998.00

Description: Apply gait-training interventions in natural running environments using wearable sensing technology and machine-learning algorithms to positively impact gait biomechanics in runners with exercise-related lower leg pain. This study was approved for grant funding for an innovative, developmental, and exploratory dissertation award.

1. Source: Mid-Atlantic Athletic Trainers’ Association (Graduate Student Grant)

Title: Field-Based gait-training for runners with exercise-related lower leg pain

PI: Alexandra F. DeJong Lempke, PhD, ATC

Period: October 2017 – May 1, 2021

Amount: $850.00

Description: Apply gait-training interventions in natural running environments using wearable sensing technology to positively impact gait biomechanics in runners with exercise-related lower leg pain.

***Support Not Funded***

(1) Source: American College of Sports Medicine

Title: Gait-training using wearable sensors for runners with exercise-related lower leg pain

PI: Alexandra F. DeJong Lempke, PhD, ATC

Period: Submitted January 2020

(2) Source: Boston Children’s Hospital (ICCTR Pilot Grant)

Title: Prospective one-year descriptive study among youth runners participating in endurance training

PI: Dr. William P. Meehan III

Period: Submitted July 2021

(3) Source: National Institutes of Health (F32 Fellowship Grant) – FOA: PA-21-048

Title: Biomechanical and Musculotendinous Properties of Prevalent Child and Adolescent Running- Related Injuries

PI: Dr. Alexandra F. DeJong Lempke

Period: Submitted December 2021

(4) Source: American College of Sports Medicine

Title: Influence of Heat on Running Biomechanics During The Falmouth Road Race

PI: Alexandra F. DeJong Lempke, PhD, ATC

Period: Submitted December 2021

(5) Source: National Athletic Trainers Association New Investigator Grant

Title: Prospective One-Year Study Among Youth Runners Participating In Endurance Training

PI: Dr. Alexandra F. DeJong Lempke

Period: Submitted August 9, 2021

**Clinical Experience:**

1. ***University of Virginia, Charlottesville, VA*** 2018 –2019

Athletic Training Camp Coverage

*USA Field Hockey (2019)*

*Softball (2018)*

1. ***University of Virginia, Charlottesville, VA*** 2016 –2017

Graduate Assistant Athletic Trainer

*UVA Field Hockey; UVA Women’s Lacrosse*

1. ***University of Pittsburgh, Pittsburgh, PA***

Undergraduate Athletic Training Student 2015 – 2016

*Pitt Men’s Wrestling; Pitt Women’s Softball; Pitt Women’s Basketball*

1. ***Disney’s ESPN Wide World of Sports Complex, Orlando, FL*** 2015

Athletic Training Intern

*Youth Soccer, Basketball, Football, Volleyball, Field Hockey, Baseball, and Softball Camps and Tournaments*

1. ***South Fayette High School, Pittsburgh, PA*** 2015

Undergraduate Athletic Training Student Volunteer

*AAU Basketball Tournament*

1. ***North Allegheny High School, Pittsburgh, PA*** 2014

Student Athletic Trainer

*NAHS Football; NAHS Men’s and Women’s Basketball*

**Additional Work Experience:**

1. ***Formula Complete Fitness Studio, Charlottesville, VA*** 2020-2021

Personal Trainer/Fitness Instructor

*Running and Strength Training Coaching*

**Honors and Awards:**

(1) School of Education and Human Development Outstanding Graduate Student Teaching Assistant Award 2021

(2) Hunter Student Research Conference 2021 Feedback Award

(3) Ronnie Barnes Scholarship Fund –National Athletic Trainers’ Research Award Foundation 2020

(4) David H. Perrin Athletic Training & Sports Medicine Doctoral Student Award – University of Virginia

(5) Member of the Raven Honor Society – University of Virginia

(6) Curry School Foundation Alice Becker Hinchcliffe Williams Scholarship – University of Virginia. 2019

(7) Biomechanics Interest Group Student Travel Award –American College of Sports Medicine

(8) Dr. Joe Gieck Graduate Athletic Training Scholarship – University of Virginia 2017

(9) David H. Perrin Undergraduate Athletic Training Scholarship – University of Pittsburgh 2016

**Professional Service:**

***Symposia and Conferences***

1. Moderator for the National Athletic Trainers’ Association 2022 Annual Conference session *Utilization of Performance Biometrics to Reduce Injury Risk and Guide Rehabilitation in a Division I Athletic Setting: A Team-Based Approach.* (2022).
2. Laboratory Assistant for the National Athletic Trainers’ Association 2019 Annual Conference session *Thoracic Manual Therapy for the Treatment of Cervical and Shoulder Pain.* (2019).
3. Laboratory Assistant for the National Athletic Trainers’ Association 2018 Annual Conference session *Musculoskeletal Sonography: Basic Principles and Application Techniques in Athletic Training.* (2018).
4. Moderator for the Virginia Athletic Trainers’ Association Educational Program. (2017).

***Service to the Profession***

1. Reviewer for NATA Research & Education Foundation Grant Proposals 2022 – Current
2. Reviewer for Medicine in Novel Technology and Devices
3. Guest Editor for JoVE
4. Reviewer for Injury Prevention
5. Reviewer for Journal of Applied Biomechanics 2021 – Current
6. Reviewer for Journal for the Measurement of Physical Behaviour
7. Reviewer for Sports Engineering
8. International Ankle Consortium – Impact Committee Member 2020 – Current
9. Reviewer for Journal of Foot and Ankle Research
10. Reviewer for Translational Sports Medicine
11. Reviewer for Frontiers in Sports and Active Living
12. Reviewer for Brazilian Journal of Physical Therapy
13. Reviewer for BMC Musculoskeletal Disorders
14. Host for the Sports Medicine Research Podcast Webinar 2019 – Current
15. Reviewer for Physical Therapy in Sport
16. Reviewer for the International Journal of Athletic Therapy and Training
17. Reviewer for Sports Biomechanics
18. Writer for the Sports Medicine Research Blog 2018 – Current
19. Reviewer for the Journal of Athletic Training
20. Reviewer for the Journal of Sports Sciences
21. Reviewer for PeerJ
22. Reviewer for the Journal of Sport and Rehabilitation 2017 – Current
23. Initiation of Marine Physiological Assessment of Combat Training (IMPACT)

Movement Screening Volunteer at MBC Quantico, VA 2018

1. Collaborator for the 2017 VATA Quiz Bowl 2017

***Service to the University***

1. Curry School of Education – Education Council Equity Committee Member 2020 – 2021
2. Curry School of Education – Curry Research Conference Communications Committee Leader
3. Curry School of Education – Curry Research Conference Committee Member 2019 – 2021
4. Curry School of Education – Education Council Kinesiology Graduate Representative
5. Curry School of Education – Education Council Social Committee Member
6. Media Contributor to the University of Virginia Kinesiology Department Instagram Page 2018 – 2021
7. Media Contributor to the University of Virginia Exercise and Sports Injury Lab Twitter Page 2017 – 2021
8. University of Virginia Post-Professional Master’s Objective Structured Clinical Examination

(OSCE) Preceptor 2017 - 2018

1. University of Virginia Undergraduate Emergency Medical Care Laboratory Assistant 2016 - 2017
2. University of Virginia Sports Medicine Undergraduate Volunteer Mentor

**Community Service:**

1. Boston Marathon Medical Tent Volunteer 2022
2. Virginia Communities for Equality Volunteer 2020 – 2021
3. EdCouncil Community Service Events 2019 – 2021
4. Pittsburgh Girls’ Study Participant 1999 – 2020
5. Pitt Make a Difference Day Volunteer 2012 – 2016
6. Personal Aide Service for Multiple Sclerosis Patient 2014
7. Allegheny General Hospital Physical Therapy Aide Volunteer 2013

**Professional Memberships & Continuing Education:**

***Professional Memberships***

1. International Womxn in Biomechanics 2020 – Current
2. International Ankle Consortium 2019 – Current
3. American College of Sports Medicine (ID: 832220) 2018 – Current
4. National Athletic Trainers’ Association (ID: 73555) 2014 – Current
5. Boston Children’s Hospital Postdoctoral Association 2021 – 2022
6. Virginia Athletic Trainer Association 2016 – 2021
7. Mid-Atlantic Athletic Trainer Association
8. American Institute of Ultrasound in Medicine 2017 - 2018
9. Eastern Athletic Trainer Association 2014 - 2016
10. Pennsylvania Athletic Trainer Association
11. National Society of Collegiate Scholars 2013 - 2016
12. Rehabilitation Science Student Association

***Professional Meetings***

1. Virtual National Athletic Trainers’ Association Annual Meeting and Clinical Symposia 2021
2. The Department of Physical Medicine and Rehabilitation at the University of Virginia Health System’s Virtual Running Medicine Conference
3. Virtual Hunter Student Research Conference, School of Education and Human Development
4. Virtual National Athletic Trainers’ Association Annual Meeting and Clinical Symposia 2020
5. Virtual American College of Sports Medicine Annual Conference
6. The 8th International Ankle Symposium, Amsterdam, The Netherlands 2019
7. International Society of Biomechanics/American Society of Biomechanics Annual Conference, Calgary, Alberta, Canada.
8. The National Athletic Trainers’ Association 70th Annual Meeting and Clinical Sympsoia, Las Vegas, NV
9. American College of Sports Medicine Annual Conference, Orlando, FL.
10. The University of North Carolina at Chapel Hill Human Movement Science Conference, Chapel Hill, NC.
11. The Department of Physical Medicine and Rehabilitation at the University of Virginia Health System’s Running Medicine Conference, Charlottesville, VA.
12. The Curry Research Conference, Curry School of Education, Charlottesville, VA.
13. European College of Sports Science Annual Conference, Dublin, Ireland 2018
14. American Institute of Ultrasound in Medicine Annual Convention, New York, NY.
15. The Department of Physical Medicine and Rehabilitation at the University of Virginia Health System’s Running Medicine Conference, Charlottesville, VA.
16. The National Athletic Trainers’ Association Annual Meeting and Clinical Sympsoia, New Orleans, LA.
17. The Curry Research Conference, Curry School of Education, Charlottesville, VA.
18. The 7th International Ankle Symposium, Chapel Hill, NC. 2017
19. The National Athletic Trainers’ Association Annual Meeting and Clinical Sympsoia, Houston, TX.
20. The Art and Science of Sports Medicine Annual Conference, Charlottesville, VA.
21. The National Athletic Trainers’ Association Annual Meeting and Clinical Sympsoia, Baltimore, MD. 2016
22. The Art and Science of Sports Medicine 44th Annual Conference, Charlottesville, VA.

**Professional Certifications:**

1. American Red Cross Certified CPR/AED Instructor 2018 – Current
2. Certified Athletic Trainer (BOC#2000024559; NPI#1831567502)
3. American Red Cross Certified CPR/AED Professional Rescuer and Health Care Provider 2014 – Current
4. Commonwealth of Virginia – Athletic Training Licensure (0126002576) 2016 – 2021
5. Commonwealth of Pennsylvania Dept. of Health and Bureau of Emergency Medical Services –

Emergency Medical Technician 2014 – 2016

1. National Registry of Emergency Medical Technicians – Emergency Medical Technician 2014 – 2016