

Gdovin, J.R., Wade, C., Williams, C.C., **Luginsland, L.A.**, Wilson, S.J., & Garner, J.C. Impact of Shoe and Cleat Type on Youth Baseball Pitching Biomechanics. *Journal of Sports Biomechanics*. 21(6), 761-772, 2019.
<https://doi.org/10.1080/14763141.2019.1679243>

Gdovin, J.R., Williams, C.C., Wilson, S.J., Cazas-Moreno, V.L., **Luginsland, L.A.**, Allen, C.R., Chander, H., Wade, C., Garner, J.C. Influences of Athletic Footwear on Ground Reaction Forces During a Side Step Cutting Maneuver on Artificial Turf. *International Journal of Kinesiology and Sports Science*. 6(2), 30-36, 2018.
<https://doi.org/10.7575/aiac.ijkss.v.6n.2p.30>

Wilson, S.J, Williams, C.C., Gdovin J.R., Eason J.D., **Luginsland, L.A.**, Hill C.M., Chander, H., Wade C., Garner, J.C. The Influence of an Acute Bout of Whole Body Vibration on Human Postural Control Responses. *The Journal of Motor Behavior*. 50(5), 590-597, 2018. <https://doi.org/10.1080/00222895.2017.1383225>

MANUSCRIPTS UNDER-REVIEW

Luginsland L.A., Haegele, J.A., Laverdure, P.A., Bennett H.J. Walking Patterns in Persons with Autism Spectrum Disorder: A Systematic Review. *World Scientific: Annual Review of Biomechanics*. (Revisions Submitted 03/2024).

Anable, N.A., **Luginsland, L.A.**, Stevens, W.R., Loewen, A.M., Jo, C.H., Jeans, K.J. Squatting in Adolescents with Unilateral and Bilateral Hip Dysplasia. *Gait & Posture*. (Submitted 09/2023).

MANUSCRIPTS IN PREPARATION

Luginsland L.A., Haegele, J.A., Bennett H.J. Understanding Auditory and Tactile Responses in Persons with a Visual Impairment.

Luginsland L.A., Haegele, J.A., Bennett H.J. Understanding Kinematic and Kinetic Differences in Adolescent Siblings with Autism Spectrum Disorder.

Luginsland L.A., Zhu, X, Haegele, J.A. Investigating Falls, Physical Activity, and Health-Related Quality of Life across the Ages in Persons with a Visual Impairment.

INVITED LECTURES/PANELIST

Luginsland, L.A. (February 2024). *Gait 101: Understanding the Basics*.

Presented for the students of KHP 4496 Exercise Science at Troy University.

Luginsland, L.A., Kruger, K.M., Tulchin-Francis, K., Wren, T.A.L. (November 2023). The Influence of Biomechanics Research on Clinical Care. Organized collaborative event between International Women in Biomechanics and Gait & Clinical Movement Analysis Society.

Luginsland, L.A., Davis, D.J., Leestma, J.K. (June 2023). Student Panel: Prepare for ASB Knoxville. Presented panelist for student members - American Society of Biomechanics.

Luginsland, L.A. (March 2023). *Understanding Gait and Balance Characteristics*. Presented for the students of PET 3310 - Kinesiology at University of North Florida.

Luginsland, L.A. (September 2022). *Biomechanics Research across Various Disciplines*.

Barrett K, Parrish K, **Luginsland LA**, Bennett, HJ. Does Direction Matter? An Analysis of the Volleyball Attack. American Society of Biomechanics, Knoxville, TN. August 8-11 2023. (Poster)

Anable N, **Luginsland LA**, Carlos, C Jr., Stevens, WR Jr. Investigating Pelvic Drop ible N,

with Unilateral and Bilateral Acetabular Hip Dysplasia. Gait & Clinical Movement
Analysis Society Annual Conference, West Chester, PA, June 2-5 2020. (Podium)
*Conference cancelled due to COVID-19

Luginsland LA, Stevens WR Jr., Nijjar B, Tulchin-

Recreation Management at University of Mississippi | Advise undergraduate students with scheduling of academic courses

Community Activities

- 2023 Event Co-Host | National Biomechanics Day | Old Dominion University Neuromechanics Lab
- 2023 Volunteer | Science Fair Judge | Larchmont Elementary | Norfolk, VA
- 2022 Conference Insider | North American Congress of Biomechanics | Invited mentor to first time attendees
- 2019-2021 Volunteer | The Legacy Scholarship | Scottish Rite for Children | Mentor former patients during their first year of college
- 2019 Volunteer | The Links STEM Academy Event | Educate students about the field of biomechanics and orthopedics through interactive courses
- 2019 Event Co-Host | National Biomechanics Day | Scottish Rite for Children Movement Science Lab
- 2018 Volunteer | Perry Initiative Program | Scottish Rite Hospital for Children
- 2017 Event Host | National Biomechanics Day | University of Mississippi Applied Biomechanics Lab
- 2017 Volunteer | Science Fair Judge | Oxford Intermediate School | Oxford, MS
- 2016 Event Co-Host | University of Success Program | University of Scranton Human Ergonomics Movement Laboratory | Introduce biomechanics to enrolled first-generation college students
- 2016 Event Co-Host | National Biomechanics Day | University of Scranton Human Ergonomics Movement Laboratory

Journal Reviewer

International Journal of Athletic Therapy & Training (2021)

RESEARCH INTERESTS

- Autism Spectrum Disorder: evaluation of movement patterns, implications in physical activity and sport
- Visual Impairments: balance and falls
- Clinical Analysis: pathology & movement patterns
- Sports Performance: athletic maneuvers & running

TECHNIQUES/SKILLS

Biomechanical Analysis Equipment/Tools:

- VICON Motion Capture Software: Nexus & Polygon
- AMTI Forceplates (Advanced Mechanical Technology, Inc., Watertown MA, USA)
- Bertec Forceplates (Bertec Inc., Columbus OH, USA)
- Delsys Trigno Wireless EMG system (Delsys Inc., Natick, MA, USA)
- Protokinetics Zeno Walkway (ProtoKinetics LLC., Havertown, PA, USA)

- MatLab (The MathWorks, Inc., Natick, MA, USA)
 - Ability to execute code, troubleshoot errors, modify pre-existing code
- EMG Motion Labs System (Motion Labs Inc., Baton Rouge, LA, USA)
- Novel® Pedobarograph Plantar Pressure Plate (Novel Inc., St. Paul, MN, USA)
- Motion Analysis system with Cortex version 3.6 Motion Capture system (Motion Analysis Corporation, Santa Rosa CA, USA)
- Wireless EMG System (Noraxon, Scottsdale AZ, USA)
- Biodex System 3/4 (Biodex Medical Systems Inc., Shirley, NY, USA)
- Neurocom® Equitest
- K4B² Oxygen Consumption System
- REDCap Software (Research Electronic Data Capture, Vanderbilt University, USA)
- EPIC Electronic Medical Record Software (Epic Systems Corporation, Verona, WI, USA)