

Heather R. Vanderhoof

Department of Interdisciplinary Health Sciences
University of Texas at El Paso
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EDUCATION

- 2020-Present **University of Texas at El Paso El Paso, TX**
Degree: *Doctorate of Interdisciplinary Health Sciences (Ph.D.)*
Specialized Coursework in Biomechanics
Expected graduation: May 2024
GPA: 3.80
- 2018-2020 **University of Texas at El Paso El Paso, TX**
Degree: *Master of Science (M.S.) in Kinesiology*
Specialized Coursework in Biomechanics
Graduation: July 2020
GPA: 3.50
- 2014-2018 **University of Nevada, Las Vegas, Las Vegas, NV**
Degree: *Bachelor of Science (B.S. in Nutrition Sciences)*
Graduation: December 2018
Degree: *Bachelor of Science (B.S. in Kinesiological Sciences)*
Graduation: December 2018

RESEARCH EXPERIENCE

- 2020-Present -The effects of simulated pregnancy and fatigue on slip perturbations in females – Mentor: Dr. Jeffrey D. Eggleston
-Dual-task conditions during walking workstation use in healthy adults – Mentor: Dr. Jeffrey D. Eggleston
- 2018-2020 -Advancing stages of pregnancy on balance and stair locomotion in females– Mentor: Dr. Jeffrey D. Eggleston
-Computer interactions during walking workstation use in healthy adults – Mentor: Dr. Jeffrey D. Eggleston
-The effects of volleyball season in collegiate volleyball players – Mentor: Dr. Jeffrey D. Eggleston
-Live animation biofeedback in children with Autism Spectrum Disorder – Mentor: Dr. Jeffrey D. Eggleston

PROFESSIONAL EXPERIENCE

- 2020-Present **University of Texas at El Paso, TX**
Department of Interdisciplinary Health Sciences
Graduate Research Assistantship (GRA)
Stanley E. Fulton Gait Research and Applied Movement Analysis Laboratory

TEACHING EXPERIENCE

- 2022 – Present **University of Texas at El Paso, TX**
 Department of Kinesiology
 Undergraduate Lecturer: KIN 4313—Biomechanics
 College of Health Sciences, Department of Kinesiology
- 2022 Biomechanical Concepts of Angular Kinematics. Presented in KIN4313—Biomechanics, The University of Texas at El Paso, TX (*invited lecture*)
- 2022 Skeletal and Neural Considerations for Human Movement. Presented in KIN 4313 – Biomechanics, The University of Texas at El Paso, TX (*invited lecture*)
- 2018-2020 **University of Texas at El Paso, TX**
 Department of Kinesiology
 Teacher’s Assistant
 College of Health Sciences, Department of Kinesiology
- 2019 Concepts of Projectiles in Linear Kinematics. Presented in KIN 4313 – Biomechanics, The University of Texas at El Paso, TX (*invited lecture*)

GRANTS / AWARDS / FELLOWSHIPS

- 2022 **Foundation for Women’s Wellness**
 Project Title: Foot morphology and pressure distribution during stair walking in pregnant women
 Investigator(s): Heather R. Vanderhoof, Katelyn E. Conroy, Jeffrey D. Eggleston
 Role: Lead Investigator Amount Requested: \$25,000.00
- 2022 **Dodson Research Proposal, Graduate School, University of Texas at El Paso**
 Project Title: Comparative Balance, Gait Initiation, and Slip Recovery Between Localized Non-Fatigued and Fatigued Conditions During Simulated Pregnancy
 Investigator(s): Heather R. Vanderhoof, Jeffrey D. Eggleston
 Role: Lead Investigator Amount Requested: \$3000.00
- 2020 Mid-South Biomechanics Conference, OptiTrack Master’s Award: Advancing Stages of Pregnancy on Postural Sway in Healthy Females (**Vanderhoof, Sanchez, & Eggleston**).
- 2019 **Dodson Research Proposal, Graduate School, University of Texas at El Paso**
 Project Title: Balance and Gain Adaptation on Stair Mobility in Pregnant and Postpartum Women
 Investigator(s): Heather R. Vanderhoof, Jeffrey D. Eggleston
 Role: Lead Investigator Amount Requested: \$764.00
- 2019 **Sigma Xi, Graduate School, University of Texas at El Paso**
 Project Title: Balance and Gain Adaptation on Stair Mobility in Pregnant and Postpartum Women
 Investigator(s): Heather R. Vanderhoof, Jeffrey D. Eggleston
 Role: Lead Investigator Amount Requested: \$670.00

PROFESSIONAL AFFILIATIONS

2018-Present American Society of Biomechanics, Member

PUBLICATIONS

Published, Accepted, In Print

Vanderhoof, H.R., Chavez, E.A., Eggleston, J.D. (2022, Published). Gait symmetry is unaffected when completing a motor dexterity task while using a walking workstation in healthy, young adults. Target Journal: *MDPI Biomechanics*.

Saucedo, F., Chavez, E.A., **Vanderhoof, H.R.**, Eggleston, J. D. (2022, Accepted). Effects of controlled whole-body vibration training on functional performance among healthy older adults: a 6-week pilot study.

Eggleston, J.D., Olivas, A.N., **Vanderhoof, H.R.**, Chavez E.A., Alvarado, C., Boyle J.B. (2021, Accepted). Children with Autism Exhibit More Individualized Responses to Live Animation Biofeedback Than Do Typically Developing Children. *Perceptual & Motor Skills*.

Chavez, E. A., Olivas, A. N., **Vanderhoof, H. R.**, Eggleston, J. D. (In review). Dual-task walking does not alter lower extremity movement strategies nor trip risk in young adults. Target Journal: *Human Movement Science*.

Saucedo, F., Chavez, E.A., **Vanderhoof, H.R.**, Eggleston, J. D. (2021, Accepted). Six weeks of whole-body vibration exercise is not effective in improving fall risk factors among healthy older adults. *Journal of Aging and Physical Activity*.

Manuscripts in Preparation

Conroy, K.C., **Vanderhoof, H.R.**, Travis, W.J., Moreno, A.G. (2022, In preparation). Texting and walking gait variability in young adults. Target Journal: *Journal of Applied Biomechanics*.

Conroy, K.C., Vanderhoof, H.R., Moreno, A.G. (2022, In preparation). Reach to grasp kinematics in healthy young adults. Target Journal: *Journal of Applied Biomechanics*.

Conference Proceedings

University Conferences

2022 **Vanderhoof, H.R.**, Eggleston, J.D. Simulated Pregnancy on Center of Pressure Postural Sway Pre- and Post-Fatigue. Abstract accepted, could not attend, Graduate Expo, University of Texas at El Paso, El Paso, TX.

2019 **Vanderhoof, H.R.**, Sanchez, C.N., Aure, M. Barker, L.A., Eggleston, J.D. Brace yourself: Impact of prophylactic ankle brace during a rebound jump. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary, CN.

Chavez, E.A., **Vanderhoof, H.R.**, Sanchez, C.N. Harry, J.R., Dufek, J.S., Eggleston, J.D. Walking while working: The effect of walking workstation use on tripping kinematics. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary, CN.

Quintero, P., Orozco, M., Chavez, E.A., **Vanderhoof, H.R.**, Sanchez, C.N., Harry, J.R., Dufek, J.S., Eggleston, J.D. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary, CN.

Sanchez, C.N., **Vanderhoof, H.R.**, Aure, A., Barker, L.A. Eggleston, J.D. Effect of ankle braces on frontal plane knee angle and moment and vertical jump performance. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary

External Conferences

2023 **Vanderhoof, H. R.**, Eggleston, J. D. Simulated Pregnancy on Center of Pressure Sway Direction During Gait Initiation in Healthy Females. Podium Presentation. Mid-South Biomechanics Conference, University of Memphis, TN.

Moreno, A.G., **Vanderhoof, H. R.**, Chavez, E. A., Eggleston, J. D. Effect of Hands on and Off a Walking Workstation on Gait Characteristics. Podium Presentation. Mid-South Biomechanics Conference, University of Memphis, TN.

2022 **Vanderhoof, H. R.**, Eggleston, J. D. Joint Positions During Stair to Ground Transition Among Healthy Pregnant, Postpartum, and Non-pregnant Females. Abstract accepted, did not attend. Mid-South Biomechanics Conference, University of Memphis, TN.

2020 **Vanderhoof, H. R.**, Sanchez, C.N., Eggleston, J. D. Advancing Stages of Pregnancy on Postural Sway Range in Healthy Females. Abstract accepted, American Society of Biomechanics Annual Meeting, Atlanta, GA.

Eggleston, J.D., Olivas, A.N., Chavez, E.A, **Vanderhoof, H.R.**, Boyle, J.B., Alvarado, C. Live Animation Biofeedback Responses between Children with Autism and Children with Typical Development. Abstract submitted for review, American Society of Biomechanics Annual Meeting, Atlanta, GA.

Vanderhoof, H.R., Sanchez, C.N., Eggleston, J.D. Advancing Stages of Pregnancy on Postural Sway Area in Healthy Females. Podium presentation, Mid-South Biomechanics Conference, University of Memphis, TN.

2019 **Vanderhoof, H.R.**, Sanchez, C.N., Aure, M. Barker, L.A., Eggleston, J.D. Brace yourself: Impact of prophylactic ankle brace during a rebound jump. Podium presentation, International Society of Biomechanics Annual Meeting, Calgary, CN.

Chavez, E.A., **Vanderhoof, H.R.**, Sanchez, C.N. Harry, J.R., Dufek, J.S., Eggleston, J.D. Walking while working: The effect of walking workstation use on tripping kinematics. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary, CN.

Eggleston, J.D., Harry, J.R., Chavez, E.A., Cereceres, P.A., **Vanderhoof, H.R.**, Olivas, A.N., Dufek, J.S. Coordination variability and autism: A potential descriptor for movement impairment?. Poster presentation International Society of Biomechanics Annual Meeting, Calgary, CN.

Quintero, P., Orozco, M., Chavez, E.A., **Vanderhoof, H.R.**, Sanchez, C.N., Harry, J.R., Dufek, J.S., Eggleston, J.D. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary, CN.

Sanchez, C.N., **Vanderhoof, H.R.**, Aure, A., Barker, L.A. Eggleston, J.D. Effect of ankle braces on frontal plane knee angle and moment and vertical jump performance. Poster presentation, International Society of Biomechanics Annual Meeting, Calgary

COMMUNITY INVOLVEMENT

- 2022 Autism Society, 14th Annual Run/Walk for Autism Awareness, Ascarate Park, El Paso, Texas
- 2020 Int'l Women in Biomechanics - member
- Latinx in Biomechanix - member
- 2019 American Society of Biomechanics, National Biomechanics Day Annual Event, University of Texas at El Paso
- Autism Society, 10th Annual Run/Walk for Autism Awareness, El Paso Community College Valle Verde Campus, El Paso, Texas
- El Paso Bridges Academy, Annual Christmas Fair, El Paso, Texas

REFERENCES

Available upon request.