# Caelyn E. Hirschman, MS

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## **EDUCATION**

Ph.D., Integrative Physiology University of Colorado Boulder, Boulder, CO	2021 – Current
M.S., Integrative Physiology University of Colorado Boulder, Boulder, CO	2019 - 2021
B.S., Health and Exercise Science Regis University, Denver, CO	2014 - 2018
GRADUATE RESEARCH EXPERIENCE	
Graduate Student Researcher, Applied Biomechanics Lab Director: Dr. Alena Grabowski University of Colorado Boulder, Boulder, CO	2019 – Current
Postbaccalaureate Researcher, Biomechanics Lab Director: Dr. Brian Baum Regis University, Denver, CO	2018 – 2019
HONORS AND AWARDS	
Best Master's Student Poster, Rocky Mountain ASB Conference	2021

## **PUBLICATIONS**

## **Manuscripts in Progress (1)**

1. Hirschman, C.E., Montgomery, J., Grabowski, A.M. The contribution of joint quasi stiffness to theoretical leg stiffness changes during level, uphill and downhill running. To be submitted to *Royal Society Interface* 

#### **CONFERENCE PRESENTATIONS**

- **1.** Hirschman, C.E., Grabowski, A.M. (2021, August). Effects of joint quasi-stiffness on leg stiffness when running uphill/downhill. Podium presented at the American Society of Biomechanics Conference, Virtual.
- **2.** Hirschman, C.E., Zhang, J., Grabowski, A.M. (2021, August). Effects of real time visual feedback on metabolic cost and symmetry during walking in

- people with a transtibial amputation. Poster presented at the American Society of Biomechanics Conference, Virtual.
- **3.** Hirschman, C.E., Grabowski, A.M. (2021, August). Effects of ankle and knee joint quasi-stiffness on leg stiffness when running uphill/downhill. Podium presented at the Rocky Mountain American Society of Biomechanics Conference, Virtual.
- **4.** Hirschman, C.E., Zhang, J., Grabowski, A.M. (2021, August). Effects of real time visual feedback on metabolic cost during walking in people with a transtibial amputation. Poster presented at the Rocky Mountain American Society of Biomechanics Conference, Virtual.
- **5.** Hirschman, C.E., Grabowski, A.M. (2021, August). Joint quasi-stiffness and mechanical joint work changes when running uphill/downhill. Podium presented at the Rocky Mountain American Society of Biomechanics Conference, Virtual.

#### **SERVICE**

Member, Institutional Review Board

2019 -

## SKILLS

Instrumented force treadmill, motion capture, EMG, indirect calorimetry, IMU's, Biodex, stiffness testing, machine shop, MATLAB, RStudio.

## **REFERENCES**

## Dr. Alena Grabowski, PHD

Phone:

Email: Alena.Grabowski@colorado.edu

Principle Investigator of the Applied Biomechanics Lab, University of Colorado

Boulder

### Dr. Brian Baum, PhD

Phone: (303) 964-6791 Email: bbaum@regis.edu

Regis University Professor/Research Mentor