Ryan Alcantara

Email: ryan.alcantara@colorado.edu

EDUCATION

2019-Pres **Ph.D. in Integrative Physiology – University of Colorado Boulder**
Advisor: Dr. Alena Grabowski – Applied Biomechanics Lab
Anticipated Graduation: Spring 2021

2017-2019 **M.Sc. in Integrative Physiology – University of Colorado Boulder**
Advisor: Dr. Alena Grabowski – Applied Biomechanics Lab

2011-15 **B.Sc. in Applied Human Biology, Kinesiology Minor – Seattle Pacific University**
Advisor: Dr. Cara Wall-Scheffler

PROFESSIONAL EXPERIENCE

2018-Pres **Graduate Research Assistant – University of Colorado Boulder**
Funding Organization: PAC-12 Student-Athlete Health & Well-Being Grant Program

2017-18 **Graduate Teaching Assistant – University of Colorado Boulder**
Human Anatomy Laboratory, Department of Integrative Physiology

2016-17 **Biomechanics Research Technician – Brooks Running Company**
Lab Director: Eric Rohr. Performed 3D motion capture data collections, developed custom MATLAB scripts for data analysis, reported findings to Footwear R&D teams.

2015-16 **Biomechanics Lab Intern – Brooks Running Company**
Lab Director: Eric Rohr. Assisted with mechanical footwear testing, subject recruitment, and data processing in Cortex and Visual 3D.

2014-15 **Teaching Assistant – Seattle Pacific University**
Introductory Physics I & II

HONORS & AWARDS

2019 IPHY Fellowship Travel Award (MSc), University of Colorado Boulder
2018 Diversity Travel Award, American Society of Biomechanics
2018 Best MSc Poster Presentation, American Society of Biomechanics – Rocky Mountain Meeting
2018 Graduate Student Travel Grant, University of Colorado Boulder
2017 Graduate Dean's Fellowship, University of Colorado Boulder
2012 Oregon Latino Scholarship, Hispanic Metropolitan Chamber of Commerce
2011-2015 President's Scholar Award, Seattle Pacific University

PEER-REVIEWED PUBLICATIONS

Alcantara R., Trudeau M., Rohr E. (2018). Calcaneus range of motion underestimated by markers on running shoe heel. *Gait & Posture 63: 68-72*

Alcantara R. & Wall-Scheffler C. (2017). Stroller Running: Energetic and kinematic changes across pushing methods. *PLoS One 12(7): e0180575.*

CONFERENCE PRESENTATIONS

Alcantara R., Day E., Hahn M., Grabowski A. (2019). Sacral Accelerations Predict Whole Body Kinetics and Stride Kinematics During Running. *International Society of Biomechanics. (podium)*

Alcantara R., Day E., Hahn M., Grabowski A. (2019). Sacral Accelerations Predict Whole Body Kinetics and Stride Kinematics During Running. *American Society of Biomechanics, Rocky Mountain Meeting. (podium)*

Alcantara R., Beck O., Grabowski A. (2018). Mass added to a running-specific prosthesis increases metabolic power during running. *American Society of Biomechanics, National Meeting. (thematic)*

Alcantara R., Beck O., Grabowski A. (2018). Mass added to a running-specific prosthesis increases metabolic power during running. *American Society of Biomechanics, Rocky Mountain Meeting. (poster)*
***Awarded Best Poster Presentation by a master's student**

Alcantara R., Trudeau M., Brüggemann G., Hamill J., Rohr E. (2016) Running Shoe Forefoot Bending Stiffness Affects Calf Muscle EMG. *American Society of Biomechanics, Northwest Meeting. (poster)*

Alcantara R. & Wall-Scheffler C. (2016). Running With A Stroller: Kinematic and Energetic Changes Across Different Stroller Pushing Techniques. *American College of Sports Medicine Annual Meeting. (poster)*

Alcantara R. & Wall-Scheffler C. (2015). Push it, Push it Real Good: The energetic cost of running with a stroller. *Murdock College Science Research Program. (poster)*

Alcantara R. & Wall-Scheffler C. (2015). Push it, Push it Real Good: The energetic cost of running with a stroller. *Seattle Pacific University Summer Research Symposium. (podium)*

INVITED PRESENTATIONS

2019 Department of Integrative Physiology Colloquium – University of Colorado Boulder
2018 Guest Lecturer, Introductory Biomechanics – *Colorado School of Mines*
2018 Guest Speaker, Capstone Seminar – *George Fox University*
2016 Guest Speaker, Disciplinary Research and Writing Seminar – *Seattle Pacific University*

ACADEMIC SERVICE

2019 Chair, Running Performance Session – *Footwear Biomechanics Symposium*
2018 Chair, PhD Competition Session – *American Society of Biomechanics (ASB) National Meeting*
2018 Chair, Sports Session – *ASB, Rocky Mountain Regional Meeting*
2017 - 18 ASB Student Advisory Committee for Biomechanics Advocacy
2016 Panel Speaker, Biology Cornerstone Seminar – *Seattle Pacific University*

MENTORSHIP

2019-Pres CU Boulder Graduate Student Peer Mentoring Program
2019 ABL Undergraduate Summer Research Assistants
2018-19 ABL Undergraduate Research Assistants

COMMUNITY OUTREACH

2018-2019 University of Colorado Boulder National Biomechanics Day

SPECIALIZED SKILLS

Data Analysis	MATLAB, R, Python, Git/Github, Tableau, LaTeX
Laboratory Equipment	Motion Analysis Cortex, Vicon Nexus 2.x, Visual 3D, Novel Pedar, Instron Material Testing, Delsys & Noraxon EMG, IMeasureU, Treadmetrix, Bertec, Parvo Medics, Oxycon Mobile

MEDIA

Selected Press for *Energetic Cost of Stroller Running*:

New York Times

Inside Science

Society Magazine (Paris, France), by Emmanuelle Andreani

Personal Interview - SPU etc. Magazine:

https://voices.spu.edu/articles/dream-career-reality-college-etc