Ryan Alcantara

Email: ryansalcantara@gmail.com
Tel: (541) 951-7926

EDUCATION

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

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: NCAA PAC 12 Athletic Conference

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.

2015-16 **Research Assistant – Seattle Pacific University**
Principal Investigator: Dr. Cara Wall-Scheffler. Developed undergraduate research study, performed subject recruitment, data collection, analysis, and prepared academic manuscript.

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

HONORS & AWARDS

2019 IPHY Fellowship Travel Award (MSc), University of Colorado Boulder *($600)*
2018 Diversity Travel Award, American Society of Biomechanics *($750)*
2018 Best MSc Poster Presentation, American Society of Biomechanics – Rocky Mountain Meeting
Mass added to running-specific prosthesis increases metabolic power during running ($100)
2018 Graduate Student Travel Grant, University of Colorado Boulder
Mass added to running-specific prosthesis increases metabolic power during running ($300)
2017 Graduate Dean's Fellowship, University of Colorado Boulder *($3,000)*
2012 Oregon Latino Scholarship, Hispanic Metropolitan Chamber of Commerce *($2,250)*
2011-2015 President's Scholar Award, Seattle Pacific University *($12,000/year)*

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)*

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 Mentor, CU Boulder Graduate Student Peer Mentoring Program
2019 Nick Cox, Undergraduate Summer Research Assistant

2018-19 Lauren Sandal, Undergraduate Research Assistant
2018-19 Zane Colvin, Undergraduate Research Assistant

COMMUNITY OUTREACH

2019 University of Colorado Boulder National Biomechanics Day
2018 University of Colorado Boulder National Biomechanics Day

SPECIALIZED SKILLS

Programming Tools MATLAB, R, Python, Github Version Control, 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