

# Ryan Alcantara

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Tel: (541) 951-7926

## EDUCATION

- 2017-Pres 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 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. *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

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

## COMMUNITY OUTREACH

- 2019** Organizer, National Biomechanics Day at Silver Creek HS, Longmont, CO
- 2018** Organizer, 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](#)

**Personal Interview - SPU etc. Magazine:**

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