

CURRICULUM VITAE

University of Idaho

NAME: Joshua P. Bailey

DATE: Jan 4, 2024

RANK OR TITLE: Assistant Professor

DEPARTMENT: Movement Sciences

OFFICE LOCATION AND CAMPUS ZIP: PEB 208; PEB113A
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Moscow, ID 83844-2401

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DATE OF FIRST EMPLOYMENT AT UI: 8/7/2017

DATE OF TENURE: Untenured

DATE OF PRESENT RANK OR TITLE: 8/7/2017

EDUCATION BEYOND HIGH SCHOOL:

Degrees:

Doctor of Philosophy in Kinesiology, University of Nevada, Las Vegas, Las Vegas, NV, 2017.

Master of Science, University of Nevada, Las Vegas, Las Vegas, NV, 2014, Kinesiology – Biomechanics. Bachelor of Science, University of Nevada, Las Vegas, Las Vegas, NV, 2011, Kinesiology – Fitness Management

Certificates and Licenses:

Certified Strength & Conditioning Specialist - National Strength & Conditioning Association 2022

National Strength & Conditioning Association – Certified Personal Trainer 2007 - Present

IRONMAN Certified Coach – 2016-2018

UNLV Graduate College Mentorship Certificate – 2017

UNLV Graduate College Research Certificate – 2017

EXPERIENCE:

Teaching, Extension and Research Appointments:

Assistant Professor, College of Education, Health and Human Sciences, Department of Movement Sciences, University of Idaho, Moscow, ID, August 2017 – Present.

Graduate Assistant, Department of Kinesiology and Nutrition Sciences, University of Nevada, Las Vegas, NV, 2012-2017.

TEACHING ACCOMPLISHMENTS:

Areas of Specialization: Biomechanics, Coordination of movement patterns, Functional Movement Analysis, Strength & Conditioning

Courses Taught:

University of Idaho, Department of Movement Sciences

PEP 407/507 – Sports Biomechanics (Fall 2018-2021) Grad/UG

PEP 300 – Applied Human Anatomy & Biomechanics (Fall, 2017 - Present)

PEP 300 – Online Applied Human Anatomy & Biomechanics (Summer 2018 - 2021)

PEP 360 – Motor Behavior (Spring, 2018 - Present)

PEP 409 – Concepts of Strength & Conditioning (Spring, 2018-Present)

University of Nevada Las Vegas, Department of Kinesiology and Nutrition Sciences

KIN 456/656 Biomechanics of Endurance Performance (Spring 2017)

KIN 356 Undergraduate Biomechanics (Spring 2016)

KIN 457/657 Physiology of Endurance Performance (Fall 2015 & 2016)

KIN 743 Research Techniques of Biomechanics, TA (Spring 2015)

KIN 346L Undergraduate Biomechanics Lab (Fall 2012 – Spring 2014)

Students Advised:**Undergraduate Students:** (number per year, advised to completion)University of Idaho

21 students, (Fall 2019)

18 students, 2 BS-ESHS (Spring 2019)

14 students, 1 BS-ESHS (Fall 2018)

5 students (Spring 2018)

Graduate Students:**Advised to completion of degree-major professor***Doctoral*

Lukas Krumpl, PhD, Education, Health and Human Sciences – Exercise Science (Spring 2023)

Career-track Faculty position at Washington State University

Nickolai Martonick, PhD, Education, Health and Human Sciences – Exercise Science (Spring 2023)

Tenure-track Faculty position at WWAMI Idaho

Youngmin Chun, PhD, Education, Health and Human Sciences – Exercise Science (Summer 2021)

*Tenure-track Faculty position at Sonoma State University**Masters*Alexandra Holmes, MS, Movement and Leisure Science (Summer 2021) *Thesis*Elmer Chavez Castrejon, MS, Movement and Leisure Science (Spring 2023) *Non-Thesis*Madeline Dustin, MS, Movement and Leisure Science (Spring 2023) *Non-Thesis*Inga Erickson, MS, Movement and Leisure Science (Spring 2022) *Non-Thesis*Natsumi Kuribayashi, MS, Movement and Leisure Science (Spring 2021) *Non-Thesis*Noah Croninger, MS, Movement and Leisure Science (Spring 2021) *Non-Thesis*Logan Prinns, MS, Movement and Leisure Science (Fall 2020) *Non-Thesis*Roxanne Maslikowski, MS, Movement and Leisure Science (Spring 2020) *Non-Thesis***Advised as major professor, in progress***Doctoral*

Ashley Reeves, PhD, Education, Health and Human Sciences – Exercise Science (2021 – Present)

*Masters*Cait Brown, MS, Movement and Leisure Science (2022 – Present) *Non-Thesis*Cole Hitesman, MS, Movement and Leisure Science (2023 – Present) *Thesis*Simone Fedel, Movement and Leisure Science (2023 – Present) *Non-Thesis*Malik Whitehead, Movement and Leisure Science (2023 – Present) *Non-Thesis***Graduate student committee member, in progress**

Cari Fealy, PhD, Education, Health and Human Sciences (2022-Present)

John McAvoy, PhD, Education, Health and Human Sciences (2022-Present)

Served on graduate committee*Doctoral*

Chris Alfeiro, PhD, Education, Health and Human Sciences – Exercise Science (Spring 2022)

Sam Brooks, PhD, Education, Health and Human Sciences – Exercise Science (Spring 2021)

Masters

Hallie Elizabeth Music, MS, Kinesiology, WSU (Spring 2022)

Chad Skiles, MS, Movement and Leisure Science, U of I (Spring 2020)

Ike Brown, MS, Biology – Biological Sciences, U of I (Fall 2019)

Research Mentor:University of Idaho*Undergraduate Student Research Mentor**Scholarships/grants: (8 Students)*

Narcisse Mubibya, **McNair Fellow**, (Summer 2023)

Hunter Rouse, **UofI SURF Grant**, (Summer 2023)

Bec Kirkland, **UofI OURS Grant** (Spring 2023)

Lenah Matz, **UofI SURF Grant** (Summer 2021)

Justin Lyons, **Beckman Scholars Award**, Department of Biological Science, (Summer 2020-Summer 2021)

Aurora Mackie-Meuler, **OURS Grant** /MVSC Internship (Spring 2020)

Madeline Bryant, **UofI OURS Grant** /MVSC Internship (Spring 2020)

Liz Short, **UofI OURS Grant**/MVSC Internship (Spring 2018)

Internships: (8 Students)

Marta Magalhaes, (Spring 2021)

Devin Green, (Spring 2021)

Anna Drapeau, (Fall 2020)

Aurora Mackie-Meuler, (Spring 2020)

Madeline Bryant, (Spring 2020)

Mathew Hurd, (Spring 2019)

Katelyn Lechtenberg, (Spring 2019)

Liz Short, (Spring 2018)

Practicums: (57 Students)

Spring 2023 – 6 Students (Conrad Becker, Katelynn Quinn, Kilint Wacholz, Megs Lewis, Marissa Shepard, Mia Jarrard)

Fall 2022 – 6 Students (Will Mayo, Isaac Sanchez, Sasha Lutsenko, Gatlin Condie, Hayden Gorman, Bec Kirkland)

Spring 2022 – 5 Students (Alexis Esparza, Hunter DeRize, Isaac Ofori, Opal Koeppel-Willcoxson, Shelbi Dawkins)

Fall 2021 – 9 Students (Amanda Garcia, Ben Waggoner, Cameron Hewitt, Helen Wyman, Isaiah Owens, Kody Danel, Nathan Warren, Rocco Perez, Stella Brown)

Spring 2021 - 3 Students (Laura Spataro, Julie Gage, Sarah Hensen)

Fall 2020 – 5 Students (Anna Fomin, Ryan Beglinger, Lauryn Trublood, Jack Bloom, Isaiah Williams)

Spring 2020 – 2 Students (Brandon Busch, Shane Wickstrom)

Fall 2019 – 9 Students (Eric Hale, Quinn Pearlstein, Erin Langley, Malaina Thacker, Anna Huckabee, Emily Kaschmitter, Sierra Stevens, Aurora Mackie-Meuler, Madeline Bryant,)

Spring 2019 - 4 Students (Shayna Allert, Alexis Creighton, Jared Gott, Elmer Chavez)

Fall 2018 - 5 Students (Madeline Dustin, Rebecca Adami, Valerie Zwaanstra, Georgia Filler, Rebecca Adami) Spring

2018 – 3 Students (Rebecca Storm, Alex Gwin, Leah Fisk)

Graduate Student Research Mentor: (11 Students)

Preston Kauder, PhD, Education, Health and Human Sciences – Exercise Science (2022- Present)

Ashley Reeves, PhD, Education, Health and Human Sciences – Exercise Science (2021- Present)

Zach Havlovick, MS1, Idaho WWAMI Medical Student (Summer 2021)

Cory T. Johannsen, MS1, Alaska WWAMI Medical Student (Summer 2021)
 Nickolai Martonick, PhD, Education, Health and Human Sciences – Exercise Science (2019- 2023)
 Lukas Krumpl, PhD, Education, Health and Human Sciences – Exercise Science (2019- 2023)
 Youngmin Chun, PhD, Education, Health & Human Sciences- Exercise Science, (2018-2021)
 Jennifer Sheasley, MS1, Alaska WWAMI Medical Student (Summer 2020)
 Elmer Chavez, MS, Movement and Leisure Science (2021 – 2023)
 Madeline Dustin, MS, Movement and Leisure Science (2020 – 2022)
 Alexandra Holmes, MS, Movement and Leisure Science (2019 – 2021)

Courses Developed:

University of Idaho

PEP 360 (Online) Motor Behavior (Summer 2019)
 PEP 407/507 Sports Biomechanics (Fall 2018)
 PEP 300 (Online) Applied Human Anatomy & Biomechanics (Summer 2018)

Non-credit Classes, Workshops, Seminars, Invited Lectures, etc.:

Bailey, JP (Fall 2023). *Run to improve your running workshop*. Army ROTC University of Idaho.
 Bailey, JP (Summer 2022). *Gait mechanics analysis*, Masters of Athletic Training Program, University of Idaho
 Bailey, JP. (Spring 2022). *Air Force Exercise programming seminar*, AFROTC Detachment 905, University of Idaho/Washington State University
 Bailey, JP. (Spring 2022). *Air Force ROTC Airmen Health & Fitness Cohort Intervention*, AFROTC Detachment 905, University of Idaho/Washington State University
 Bailey, JP (Fall 2021). *Run to improve your running workshop*. Army ROTC University of Idaho.
 Bailey, JP. (Fall 2018). *Proper running form...does one size fit all?* University of Idaho, *NROTC*
 Bailey, JP. (Spring 2018). *Do you run the way you were intended?* University of Idaho, *ISEM 301: The Holistic Athlete*.
 Bailey, JP. (September 2016). *Gait & Footwear*. University of Nevada, Las Vegas undergraduate course. *SIM 386 – Assessment and Evaluation of Lower Extremity Injuries*.
 Bailey, JP & Soucy, M. (Summer 2016). *Research Misconduct*. Stanford University, NIH/NIDDK & Short-Term Research Experience for Underrepresented Persons (STEP-UP) webinar series.
 Bailey, JP & Soucy, M. (Summer 2015). *Organization: as it relates to research design*. Stanford University, NIH/NIDDK & Short-Term Research Experience for Underrepresented Persons (STEP-UP) webinar series.

Honors and Awards:

UWSOM Triple Outstanding Research Mentor Award, University of Washington School of Medicine, 2021
 NROTC Faculty Recognition, University of Idaho, 2020
 Outstanding Faculty Award, Fraternity & Sorority Life, University of Idaho, 2019
 NROTC Faculty Recognition, University of Idaho, 2019

SCHOLARSHIP ACCOMPLISHMENTS:

Publications:

(* graduate student, # undergraduate student)

Refereed/Peer-reviewed:

Martonick, N. *, McGowan, C.P., Baker, R. T., Larkins, L. W., Seegmiller, J. G., & **Bailey, J. P.** (2024) Effects of a total motion release protocol for the single leg squat on asymmetrical movement patterns. *International Journal of Sport Physical Therapy*, 19(1), 1473-1483. [DOI: 10.26603/001c.90703](https://doi.org/10.26603/001c.90703)

Gidley, L & **Bailey, J.P.** (2023) Walking kinematic coordination becomes more in-phase at extreme inclines. *Journal of Applied Biomechanics*. 39(6), 361-369. [DOI: 10.1123/jab.2021-0263](https://doi.org/10.1123/jab.2021-0263)

Music, H. E. *, **Bailey, J. P.**, & Catena, R. D., (2023) Upper extremity kinematics during walking gait changes through pregnancy. *Gait & Posture*, 104, 97-102. [DOI: 10.1016/j.gaitpost.2023.06.017](https://doi.org/10.1016/j.gaitpost.2023.06.017)

- Martonick, N.*, McGowan, C.P., Baker, R. T., Larkins, L. W., Seegmiller, J. G., & **Bailey, J. P.** (2023) Examining movement asymmetries during single leg tasks using interlimb and single subject approaches. *Physical Therapy in Sport*, 63, 24-30. DOI: [10.1016/j.ptsp.2023.07.001](https://doi.org/10.1016/j.ptsp.2023.07.001)
- Chun, Y.*, McGowan, C., Baker, R., Seegmiller, J., & **Bailey, J.P.** (2023) Differences in lower extremity joint stiffness during drop jump between healthy males and females. *Journal of Biomechanics*, 156, 111667. DOI: [10.1016/j.jbiomech.2023.111667](https://doi.org/10.1016/j.jbiomech.2023.111667).
- Brooks, S.J., Candow, D.G., Roe, A.J., Fehrenkamp, B., Wilk, V. C., **Bailey, J. P.**, Krumpl, L.*, & Brown, A.F. (2023) Creatine monohydrate supplementation changes total body water and DXA lean mass estimates in female collegiate dancers. *Journal of the International Society of Sports Nutrition*, 20(1) 2193556. DOI: [10.1080/15502783.2023.2193556](https://doi.org/10.1080/15502783.2023.2193556)
- Alfiero, C.*, Brown, A.F., Chun, Y.*, Gwin, A.*, & **Bailey, J.P.** (2023) The effect of foot position and lean mass on jumping and landing mechanics in collegiate dancers. *Journal of Applied Biomechanics*. 39(1), 15-21. DOI: [10.1123/jab.2021-0319](https://doi.org/10.1123/jab.2021-0319)
- Krumpl, L.*, Martonick, N.J.P.*, Chun, Y., Brown, A.F., & **Bailey, J.P.** (2023) The relationship between health and movement screens and field-based physical fitness tests in Reserve Officer Training Corps cadets. *International Journal of Exercise Science*, 16(4), 42-52. ISSN: [1939-795X](https://doi.org/10.1080/1939-795X)
- Martonick, N.J.P.*, McGowan, C.P., Baker, R.T., Larkins, L.W., Seegmiller, J.G., & **Bailey, J.P.** (2022) Comparison of three single leg weightbearing tasks with statistical parametric mapping. *Biomechanics*. 2, 591-600. DOI: [10.3390/biomechanics2040046](https://doi.org/10.3390/biomechanics2040046)
- Martonick, N.*, Chun, Y., Krumpl, L.*, & **Bailey, J.P.** (2022) Lower extremity kinematic waveform analysis during single leg drop task – a single subject approach. *International Journal of Sports Physical Therapy*, 17(7), 1271-1281. DOI: [10.26603/001c.55538](https://doi.org/10.26603/001c.55538)
- Chun, Y.*, McGowan, C., Kim, J & **Bailey, J.P.** (2022) Application of polynomial regression model joint stiffness. *International Journal of Exercise Science*, 15(1), 1236-1245. ISSN: [1939-795X](https://doi.org/10.1080/1939-795X)
- Chun, Y.*, **Bailey, J.P.**, Kim, J., Lee, S.C., & Lee, S.Y. (2021) Sex and limb differences in lower extremity alignment and kinematics during drop vertical jump. *International Journal of Environmental Research and Public Health*, 18, 3748. DOI: [10.3390/ijerph18073748](https://doi.org/10.3390/ijerph18073748)
- Merica, C.B.*, Chun, Y.*, **Bailey, J.P.**, & Egan, C.A. (2021) National Biomechanics Day: PETE and Exercise Science Department Collaboration and Recruitment. *Journal of Physical Education, Recreation & Dance*, 92(6), 48-56. DOI: [10.1080/07303084.2021.1936309](https://doi.org/10.1080/07303084.2021.1936309)
- Catena, R.B., **Bailey, J.P.**, Campbell, M.D., & Stewart, B.C. (2020). The correlations between gait kinematics and dynamic balance control during pregnancy. *Gait & Posture*, 80, 106-112. PMID: 32502792. DOI: [10.1016/j.gaitpost.2020.05.025](https://doi.org/10.1016/j.gaitpost.2020.05.025).
- Gidley, L., Lankford, D.E., & **Bailey, J.P.** (2020). The construction of common treadmills significantly affects biomechanical and physiological variables. *Journal of Sports Sciences*, 38(19), 2236-2241. PMID: 32552333. DOI: [10.1080/02640414.2020.1776929](https://doi.org/10.1080/02640414.2020.1776929).
- Catena, R.B., **Bailey, J.P.**, Nigel, C., & Music, H.E.* (2019). Stand-to-sit kinematic changes during pregnancy correspond with reduced sagittal plane hip motion. *Clinical Biomechanics*, 67, 107-114. PMID: 31100701. DOI: [10.1016/j.clinbiomech.2019.05.014](https://doi.org/10.1016/j.clinbiomech.2019.05.014).

- Bailey, J.P.**, Freedman-Silvernail, J., Dufek, J.S., & Mercer, J.A. (2018). Understanding the influence of perceived fatigue on coordination during endurance running. *Sports Biomechanics*, 5, 618-632. PMID: 30325255. DOI: [10.1080/14763141.2018.1508489](https://doi.org/10.1080/14763141.2018.1508489).
- Bailey, J.P.**, Freedman-Silvernail, J., Dufek, J.S., & Mercer, J.A. (2018). Effects of treadmill running velocity on lower extremity coordination variability in healthy runners. *Human Movement Science*, 61, 144-150. PMID: 30092396. DOI: [10.1016/j.humov.2018.07.013](https://doi.org/10.1016/j.humov.2018.07.013).
- Lee, SP, **Bailey, J.P.**, Barton, S., Brown, D., & Joyce, T. (2018). Adaptations of lumbar biomechanics after a four-week running training with minimalist shoes and techniques: implications for running-related lower back pain. *Physical Therapy in Sport*, 29, 101-107. PMID: 28690018. DOI [10.1016/j.ptsp.2016.11.004](https://doi.org/10.1016/j.ptsp.2016.11.004)
- Masumoto, K., Soucy, M.T., **Bailey, J.P.** & Mercer, J.A. (2017). Muscle activity during backward and forward running with body weight support. *Human Movement Science*, 55, 276-286. PMID: 28886464. DOI: [10.1016/j.humov.2017.08.015](https://doi.org/10.1016/j.humov.2017.08.015).
- Bailey, J.**, Mata, T.[#] & Mercer, J. (2017). Is the relationship between stride length, frequency, and velocity influenced by running on a treadmill or overground. *International Journal of Exercise Science*, 10(7), 1067-1075. PMID: 29170707. [PMC5685089](https://pubmed.ncbi.nlm.nih.gov/29170707/)
- Bailey, J.P.**, Mercer, J.A., and Dufek, J.S. (2016). A Comprehensive Kinematic Analysis During a 15 km Submaximal Training Run. *Int J Sports and Exerc Med.*, 2:039. [ISSN: 2469-5718](https://doi.org/10.1016/j.ijsem.2016.07.001).
- Masumoto, K., **Bailey, J.P.**, & Mercer, J.A. (2015). Determining if muscle activity is related to preferred stride frequency during running in the water and on land. *Eur J Appl Physiol*, 115, 2691-2700. PMID: 26255289. DOI [10.1007/s00421-015-3234-5](https://doi.org/10.1007/s00421-015-3234-5).
- Conference and Symposium Presentations** (*Graduate Student, [#]Undergraduate Student)
- Bailey, J.P.** & Krumpl, N. (2023). Wearable technology & mechanical metrics – data overload or effective practice for the recreational runner. *NWASCWM Conferences*. Portland, Oregon. Symposium Oral Presentation.
- Martonick, N.* & **Bailey, J.P.** (2023). Effects of a Total Motion Release (TMR) protocol for the single leg squat on asymmetrical patterns. *NW Biomechanics Symposium*. Seattle, Washington. Poster Presentation.
- Krumpl, L.* & Martonick, N.* & **Bailey, J.P.** (2023). Run mechanics in individuals with resolved versus no history of plantar fasciitis. *NW Biomechanics Symposium*. Seattle, Washington. Poster Presentation.
- Lewis, M. A., Krumpl, L., & Bailey, J.P. (2023). Morphological properties of the plantar fascia: interval vs. continuous running. *NW Biomechanics Symposium*. Seattle, Washington. Poster Presentation.
- Krumpl, L.* & Martonick, N.* & **Bailey, J.P.** (2023). The effects of treadmill running on plantar fasciitis properties in individuals with resolved versus no history of plantar fasciitis. *NW Biomechanics Symposium*. Seattle, Washington. Podium Presentation.
- Krumpl, L.* & **Bailey, J.P.** (2022) Mechanical and morphological properties of the plantar fascia in response to imposed running demands over three consecutive days. *5th North American Congress on Biomechanics*. Ottawa, Canada. Oral Presentation.
- Music, H.* & **Bailey, J.P.**, & Catena, R (2022). Arm swing during pregnancy and its impact on balance and momentum. *International Society of Posture and Gait Research 2022 World Congress*. Montreal, Canada
- Martonick, N.* & **Bailey, J.P.** (2022) Assessment of bilateral movement symmetry during three single leg movement screens. *NW Biomechanics Symposium*. Pullman, WA. Podium Presentation.

- Martonick, N.* & **Bailey, J.P.** (2022) Time Series analysis of the Single Leg Squat, Forward step down, and Lateral step down. *NWASCM Conference*. Portland, OR. Poster Presentation.
- Krumpl, L.* & **Bailey, J.P.** (2022) Morphological and mechanical properties of the plantar fascia following 400 m track repeats until fatigue. *NWASCM Conference*. Portland, OR. Oral Presentation
- Chavez, E.*, Krumpl, L.*, Maronick, N.*, & **Bailey, J.P.** (2022). Baseline examination of lower limb differences among ROTC cadets as measured by Y-Balance test. *NWASCM Conference*. Portland, OR. Poster Presentation
- Matz, L.#, Chun, Y., Johannsen, C.*, Krumpl, L.*, Martonick, N.*, & **Bailey, J.P.**, (2022). The effects of a passive elastic lifting device on lifting mechanics. *NWASCM Conference*. Portland, OR. Thematic Poster.
- Krumpl, L.*, Brooks, S., Brown, A. F., Alfiero, C.J.*, Martonick, N.*, Chun, Y.*, & **Bailey, J.P.** (2021) Seasonal effects on gait and posture in wildland fire fighters. *45th Annual Meeting of American Society of Biomechanics*, Virtual meeting.
- Krumpl, L.*, Martonick, N.*, Chun, Y.*, & **Bailey, J.P.** (2021) Kinematic assessment of graded exercise test. *45th Annual Meeting of American Society of Biomechanics*, Virtual meeting.
- Gatlin, C.#, Krumpl, L.*, Martonick, N.*, Chun, Y.*, & **Bailey, J.P.** (2021) The effects of high intensity run to volitional fatigue on drop jump performance. *45th Annual Meeting of American Society of Biomechanics*, Virtual meeting.
- Lyons, J.#, **Bailey, J.P.**, Chun, Y., & McGowan, C.P. (2021) Motor module comparison between strides in recreational athletes. *45th Annual Meeting of American Society of Biomechanics*, Virtual meeting.
- Chun, Y.*, Krumpl, L.*, Martonick, N.*, & **Bailey, J.P.** (2021) Altered strategies by box height and its effects on drop jump performance. *45th Annual Meeting of American Society of Biomechanics*, Virtual meeting.
- Sheasley, J.*, Krumpl, L.*, Martonick, N.*, Chun, Y.*, & **Bailey, J.P.** (2021). Identifying lower extremity asymmetries in previously injured recreational endurance runners. *Western Medical Research conference*, Virtual Meeting.
- Lyons, J.#, **Bailey, J.P.**, Chun, Y., & McGowan, C.P. (2021) Motor module comparison between strides in recreational athletes. *NW Biomechanics Symposium*. *NW Biomechanics Symposium*. Virtual meeting.
- Krumpl, L.*, Martonick, N.*, Chun, Y.*, Brown, A. F., & **Bailey, J.P.** (2020). Relationship between clinical assessments of health and fitness and field-based physical fitness tests in Reserve Officers' Training Corps (ROTC) cadets. *44th Annual Meeting of American Society of Biomechanics*, Atlanta, Georgia.
- Chun, Y.* & **Bailey, J. P.** (2020). Effects of box height on instantaneous lower extremity joint stiffness during drop vertical jump. *44th Annual Meeting of the American Society of Biomechanics*, Atlanta, Georgia.
- Chun, Y.* & **Bailey, J. P.** (2020). Application of quadratic regression model in the calculation of lower extremity joint stiffness. *44th Annual Meeting of the American Society of Biomechanics*, Atlanta, Georgia.
- Chun, Y.*, **Bailey, J.P.**, Kim, J., & Lee, S.Y. (2019). Knee mechanics of drop jump in individuals with low and high Q-angle. *XXVII Congress of the International Society of Biomechanics & 43rd Annual Meeting of the American Society of Biomechanics*. Calgary, Alberta, Canada. Oral presentation
- Gidley, A.D. & **Bailey, J.P.** (2019). Trained and untrained cyclists have distinct segmental coordination patterns. *XXVII Congress of the International Society of Biomechanics & 43rd Annual Meeting of the American Society of Biomechanics*. Calgary, Alberta, Canada. Oral presentation
- Fisk, L.R. #, Gidley, A.D. & **Bailey, J.P.** (2019). Pilot study: effects of intensity on exercise on coordination in person with progressive multiple sclerosis. *NW Biomechanics Symposium*. Bozeman, Montana. Podium

Presentation.

Dustin, M.K.[#], Chavez, E.[#], & **Bailey, J.P.** (2019). Coordination variability in interval treadmill running in healthy adults. *NW Biomechanics Symposium*. Bozeman, Montana. Poster Presentation.

Chavez, E.[#], Dustin, M.K.[#], & **Bailey, J.P.** (2019). Coordination variability during treadmill running in healthy endurance runners. *NW Biomechanics Symposium*. Bozeman, Montana. Poster Presentation.

Holmes, A.H.[#] & **Bailey, J.P.** (2019). The effects of training on the stability leg of collegiate dancers. *NW Biomechanics Symposium*. Bozeman, Montana. Poster Presentation.

Refereed/Adjudicated (currently scheduled or submitted):

Sheasley, J., Krumpl, L., Martonick, N., Chun, Y., & Bailey, J.P. The effects of self-reported pain and injury on the Y-balance test and Functional Movement Screen in recreational endurance runners. *Journal of Orthopaedic & Sports Physical Therapy*. [Submitted 05, 2023].

Krumpl, L.* , Schiele, N., Cannavan, D., Larkins, L., Brown, A.F., & **Bailey, J.P.** The effects of a submaximal treadmill run on plantar fascia properties and run mechanics in individuals with resolved plantar fasciitis.

Krumpl, L.* , Schiele, N., Cannavan, D., Larkins, L., Brown, A.F., & **Bailey, J.P.** Mechanical and morphological properties of the plantar fascia in response to running demands over three consecutive days. *The Foot* [Submitted 05, 2023].

Krumpl, L.* , Schiele, N., Cannavan, D., Larkins, L., Brown, A.F., & **Bailey, J.P.**, Morphological and mechanical properties of the plantar fascia in response to high intensity interval running. *Journal of Biomechanics*. [Submitted 02, 2023 -currently under revision].

Chun, Y., McGowan, C., Baker, R., Seegmiller, J., & **Bailey, J.P.** Differences in Jump Performance, Joint Stiffness, and Isokinetic Strength between Female athletes and Ballet-trained Dancers. *Journal of Sports Sciences*. [Rejected 2022, plan resubmit 2023].

Invited Presentations and Other Creative Activities:

Bailey, JP. (Spring 2023). *Frontal plane training for the sagittal plane athlete*. National Strength and Conditioning Association Idaho State Clinic, University of Idaho.

Bailey, JP. (Spring 2023). *Air Force Fitness & Nutrition Session*, AFROTC Detachment 905, University of Idaho/Washington State University

Vandal Theory Podcast, [‘The Perfect Running Gait’](#) 2020

Grants and Contracts Awarded:

Internal funding total: \$12,000

Wahl, L. (PI), & **Bailey, J.P.** (CO-PI). Idaho Global Entrepreneurial Mission FY24 (IGEM). *SureSquat textile exoskeleton designed to improve proper lifting mechanics*. \$94,158.22, CO-PI \$31,993.

Bailey, J.P. (2023). CEHHS Dean’s Excellence Fund Request. **\$12,000**.

Bailey, J.P. (2022). NSCA Young Investigator Research Grant. *Neuromuscular Screens and musculoskeletal injury responses to a 10-week suspension intervention in Reserve Officer Training Corps cadets*. \$21,437 [Unfunded].

- Radzac, K & **Bailey, J.P.** (2022). DoD FY 22 PRORP Clinical Trial Program [W81XWH-22-PRORP-CTA]. *Readiness through telemedicine care (ROTC)*. \$51,612 Subaward [Unfunded].
- Vakanski, A., Baker, R., **Bailey, J.P.**, & Min, X.. (2022). National Institute of Health R01 [PA-20-185]: Smart and Connected Health (SCH). *Systems for Computer-Aided Evaluation of Home-based Physical Rehabilitation*. \$757,244 Co-investigator \$136,046 [Unfunded].
- Radzac, K & **Bailey, J.P.** (2021). DoD FY 21 CRRP RDTRA [W81XWH-20-S-CRRP]. *Readiness through telemedicine care (ROTC)*. \$35,311 Subaward [Unfunded].
- Bailey, J.P.** (2021). MW CTR-IN Pilot Grant – Department of Health and Human Services Public Health Services. *Exercise strategies for motor pattern retention in persons with Multiple Sclerosis*. \$58,500 [unfunded].
- Radzac, K & **Bailey, J.P.** (2020). DoD FY 20 CRRP RDTRA [W81XWH-20-S-CRRP]. *Readiness through telemedicine care (ROTC)*. \$22,949 Subaward [Unfunded].
- Bailey, J.P.**, Baker, R.T., Paul, D.R., & Vakanski, A. (2020). Department of Labor & Industries: SHIP Grant – Safety & Health. *MSD Self-Assessment Triage Kiosk*. \$24,000 Subaward [Unfunded].
- Vakanski, A., Paul, D., Baker, R., **Bailey, J.P.**, & Min, X.. (2018). National Science Foundation [NSF 18-541]: Smart and Connected Health (SCH). *SCH:INT: A system for assessment of patient performance in physical rehabilitation*. \$507,377 [unfunded].
- Dousay, T., **Bailey, J.P.**, & Egan, C. (2018) Spencer Foundation. *VR & Somatic Learning for re-engagement*. \$750,000 [unfunded].
- Bailey, J.P.** (2018). W.M. Keck Foundation – Undergraduate Education. *Undergraduate Biomechanics Teaching Laboratory*. \$275,000 [unfunded].
- Mercer, JA, Zhan, J, Navalta, J, Lough, N, Gatlin, T, **Bailey, JP**, Barker, L, & Craig-Jones, A. (2016) NSF: Partnerships for Innovation: Building Innovation Capacity. \$1,000,000 [unfunded].
- Mercer, J.A., **Bailey, J.P.**, and Barker, L. (2016) United States of America Track and Field. \$123,217 [unfunded]
- Mercer, J.A., **Bailey, J.P.**, Barker, L., and Soucy, M. (2015) Arthritis foundation. \$75,000 [unfunded].
- Bailey, J.P.** and Mercer, J.A. (2015) National Strength & Conditioning Association Doctoral Research Grant \$15,000 [unfunded].
- Student Grants: As research mentor, equipment funds support laboratory usage and consumables
- Rouse, H. & **Bailey, J.P.** (2023). University of Idaho – OUR Summer Undergraduate Research Fellowship 2023. *Does functional power threshold test differ between bikes*. \$6000 (\$5000 fellowship, **\$1000** equipment).
- Kirkland, B., & **Bailey, J.P.** (2023). OUR Undergraduate Research Grant Spring 2023. *Correlation between strength training and distance running injuries*. (**\$1000**)
- Martonick, N. & **Bailey, J.P.** (2023). ACSM NW Student Research Grant. *Effects of a Total Motion Release treatment on asymmetrical movement patterns during the single leg squat*. (**\$1000**).
- Krumpl, L. & **Bailey, J.P.** (2023). ACSM NW Student Research Grant. *Plantar fascia thickness and stiffness in response to treadmill running in runners with resolved plantar fasciitis*. (**\$1000**).

- Reeves, A. & **Bailey, J.P.** (2022). NW Athletic Training Association Research Grant. *Effects of a mind-body intervention on kinesiophobia and movement mechanics in patients with anterior cruciate ligament reconstruction. (\$994).*
- Matz, L. & **Bailey, J.P.** (2021). University of Idaho – OUR Summer Undergraduate Research Fellowship 2021. *The effects of sure squat on lifting mechanics for individuals with a history of resistance training and nonresistance training. \$5000 (\$4000 fellowship, \$1000 equipment).*
- Lyons, J., **Bailey, J.P.**, & McGowan, C. (2020). University of Idaho – Beckman Scholar. (**\$5000** – lab funding).
- Bryant, M., Martonick, N., & **Bailey, J.P.** (2019). University of Idaho – OUR Undergraduate Research Grant Spring 2020. *Effects of footwear on Olympic and power lifts. (\$950).*
- Mackie-Meuler, A. & **Bailey, J.P.** (2019). University of Idaho – OUR Undergraduate Research Grant Spring 2020. *Are measures of isometric strength and muscle activation predictors of Y balance performance? (\$855).*
- Short, L. & **Bailey, J.P.** (2017). University of Idaho – OUR Undergraduate Research Grant Spring 2018. *Effects of treadmill interval run on running kinematics. (\$1000).*

Honors and Awards:

SWACSM Student Research Award. Oral Presentation: A Comprehensive Kinematic Analysis of a 15 km Training Run. Southwest Chapter of American College of Sports Medicine (SWACSM). Orange Count, CA, USA, October, 2014.

SERVICE:

Major Committee Assignments:

GRPC, MSVC representative (College, 2023-2025)

CEHHS, Equity and Social Justice Committee, (College, Chair 2024)

Student Conduct Board (University, September 2022- 2025: Chair 2023-2024)

Institutional Review Board (University, Alternate Member, June 2020 – Present)

CEHHS Equity and Justice Workgroup (College, 2020 – Present, Interim Chair Spring 2022)

College Coordinating Committee, (College, 2020-2025)

M.S. Movement and Leisure Sciences Assessment Committee (Department, Committee Member, September 2017 – 2019,2020-present)

Mobilizing Men Sub-Committee, (Chair, 2019-2022), (Committee member, 2018-2022)

Multi-Campus Communications Committee (University, Committee Member, December 2018 – 2021)

Faculty Affairs Committee (College, Committee Member, November 2018 – 2021)

Search Committee Member (College, EHHS Student Services Coordinator, Spring 2023)
 Search Committee Member (University, Assistant Director, Office of Sponsored Programs, Spring 2023)
 Search Committee Member (University, Assistant Director of Fraternity & Sorority Life, Summer 2021)
 Search Committee Member (University, Assistant Sponsored Programs Administrator, Spring 2021)
 Search Committee Member (University, Assistant Director of Sponsored Accounting, Fall 2020)
 Search Committee Member (Department, Interim Chair MVSC, Fall 2020)
 Search Committee Member (Department, Clinical Assistant Professor PETE, Spring 2020)
 MVSC Scholarship Committee (Department, Committee Member, January 2019 – 2020)
 Promotion & Tenure Committee (Departmental, non-tenured assignment for review, Fall 2022)
 Promotion & Tenure Committee (College committee, Fall 2019)
 Promotion & Tenure Committee (Departmental, non-tenured assignment for Full Professor review, Spring 2018)
 Promotion & Tenure Committee (Departmental, non-tenured assignment for Full Professor review, Fall 2017)

Professional and Scholarly Organizations

Memberships:

Member at Large-Research, American College of Sports Medicine, 2023-2026
 Member, American Society of Biomechanics, 2017 – Present.
 Member, American College of Sports Medicine, 2016 – Present.
 Member, National Strength & Conditioning Association, 2007-2014 & 2017 – Present.

Reviewer, BMC Sports Science, Medicine & Rehabilitation; Medicine and Science in Sport and Exercise; Journal of Applied Biomechanics; Sports Biomechanics; Gait & Posture; Human Movement; International Journal of Exercise; Clinical Interventions in Aging; Journal of Pain Research; Journal of Sport and Health Science; Research in Sports Medicine; Applied Sciences; Children; Biomechanics; Journal of Sports Medicine and Physical Fitness

Outreach Service:

Vallivue High School District, 2023
 National Biomechanics Day Organizer, 2019, Moscow High School.
 National Biomechanics Day Organizer, 2018, One Stone High School, Boise, Idaho.
 College of Education Health and Human Sciences Ambassador students, Guest discussion for course. University of Idaho.

PROFESSIONAL DEVELOPMENT:

Teaching:

Wisconsin-Madison – Design Teach Online Course, 2019

Scholarship:

International Society of Biomechanics Symposium, August 2019
 Northwest Biomechanics Conference, April 2018
 American College of Sport Medicine Northwest Regional Conference, Feb 2018