





JAMES R. BAGLEY, PhD

ASSOCIATE PROFESSOR
DEPARTMENT OF KINESIOLOGY
SAN FRANCISCO STATE UNIVERSITY

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 musclephyslab.com

 1600 Holloway Avenue, GYM 101
San Francisco, California 94132

EDUCATION

PhD - Human Bioenergetics

Emphasis: Biology & Physiology

BALL STATE UNIVERSITY

Muncie, Indiana, USA

2010 - 2015

MS - Kinesiology

Emphasis: Exercise Physiology

CALIFORNIA STATE
UNIVERSITY, FULLERTON

Fullerton, California, USA

2008 - 2010

BS - Kinesiology

Emphasis: Clinical Exercise Science

CALIFORNIA POLYTECHNIC
STATE UNIVERSITY

San Luis Obispo, California, USA

2006 - 2008

AS - General Studies

Emphasis: Sports Medicine

CUESTA COLLEGE

San Luis Obispo, California, USA

2004 - 2007

CURRENT RESEARCH AREAS

Muscle Cell Imaging /
Microscopy

Human Microbiome and
Gut-Muscle Axis

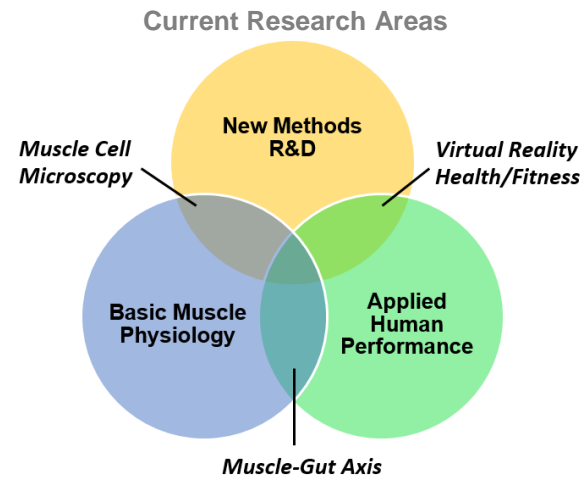
Virtual Reality (VR) and
Augmented Reality (AR)
Exercise / Fitness

OVERVIEW

Dr. James "Jimmy" Bagley is a scientist and educator.

He conducts research in the fields of exercise physiology, muscle biology, and health technology using both basic and applied science methods. His lab's primary aim is to better understand human performance.

Dr. Bagley teaches university courses in exercise physiology and he is passionate about science education. He translates complex scientific research for the public through various media & social media outlets.



PROFESSIONAL EXPERIENCE

2020 - **ASSOCIATE PROFESSOR** (*Tenured*)

Present

2015 - **ASSISTANT PROFESSOR** (*Tenure-Track*)

2020

Department of Kinesiology

San Francisco State University

- **Director (Founder):** Muscle Physiology Lab
- **Research Director (Co-Founder):** Strength & Conditioning Lab
- **Co-Director:** Exercise Physiology Lab
- **Principal Investigator:** Cell & Molecular Imaging Center, Biology Dept.
- **Courses Taught:** Exercise Physiology (KIN 482), Advanced Exercise Physiology (KIN 682), Exercise Testing & Prescription (KIN 555), Science, Sport & Fitness (KIN 355), Muscle Physiology (KIN 781)
- **University Committees:** Biosafety Committee, Lower Division Curriculum Committee, Professional Development Council (*Chair*)

2017 - **SCIENTIFIC ADVISOR**

Present

Virtual Reality (VR) Institute of Health & Exercise

- **Principal Investigator:** VR Health Research at SFSU

2014 - **VISITING RESEARCH SCHOLAR**

Present

Department of Kinesiology

California State University, Fullerton

- **Research Collaborator:** Biochemistry & Molecular Exercise Physiology Lab, Center for Sport Performance

RESEARCH

Publication
Overview

Peer-Reviewed

Articles: **29**Abstracts: **67**

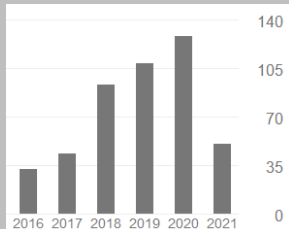
Editor Reviewed

Chapters: **1**Letters: **3**Textbooks **1**Publication
Metrics

Citations: 502

h-index: 13

i10-index: 18



(06/12/2021)

scholar.google.com/citations?user=3pbOpnIAAA&hl=en

ResearchGate

Citations: 357

Recommendations:
85

Reads: 51,216

(06/12/2021)

researchgate.net/profile/James_Bagley

PEER-REVIEWED PUBLICATIONS

SCIENTIFIC ARTICLES (*Author/Co-Author*)

- Lorenz KA, Yeshurun S, Aziz R, Ortiz-Delatorre J, **Bagley J**, Mor M, and M Kern (2021). A handheld metabolic device (Lumen®) to measure fuel utilization in healthy young adults: device validation study. *Interactive Journal of Medical Research.* 10(2): e25371.
- Machek SB, Hwang PS, Cardaci TD, Wilburn DT, **Bagley JR**, Blake DT, Galpin AJ, and DS Willoughby (2020). Myosin heavy chain composition, creatine analogues, and the relationship of muscle creatine content and fast twitch proportion to Wilks coefficient in powerlifters. *Journal of Strength & Conditioning Research.* 34(9): 3022-3030.
- Lyons A and **JR Bagley** (2020). Can resistance training at slow versus traditional repetition speeds induce comparable hypertrophic and strength gains? *Strength and Conditioning Journal.* 42(5): 48-56.
- Bagley JR**, Burghardt KJ, McManus R, Howlett B, Costa PB, Coburn JW, Arevalo JA, Malek MH, and AJ Galpin (2020). Epigenetic responses to acute resistance exercise in trained vs sedentary men. *Journal of Strength & Conditioning Res.* 34(6):1574-1580.
- Machek S, Lorenz KA, Kern M, Galpin AJ, and **JR Bagley** (2019). Skeletal muscle fiber type and morphology in a middle-aged elite male powerlifter using anabolic steroids. *Journal of Science in Sport and Exercise.* doi.org/10.1007/s42978=019-00039-z
- Grosicki GJ, Durk RP, and **JR Bagley** (2020). Rapid gut microbiome changes in a world-class ultramarathon runner. *Physiological Reports.* 7(24).
- Hood KM, Marr C, Kirk-Sorrow J, Farmer J, Lee CM, Kern M, and **JR Bagley** (2019). Validity and reliability of a Wi-Fi smart scale to estimate body composition. *Health & Technology,* 9: 839-846.
- Serrano N, Colenso-Semple LM, Lazauskas KK, Sui JW, **Bagley JR**, Lockie RG, Costa PB, and AJ Galpin (2019). Extraordinary fast-twitch fiber abundance in elite weightlifters. *PLOS ONE,* 14(2) e0207975.
- Durk RP, Castillo E, Márquez-Magaña L, Grosicki GJ, Bolter ND, Lee CM, and **JR Bagley** (2019). Relationship between cardiorespiratory fitness and relative gut microbiota composition in healthy adults. *International Journal of Sport Nutrition and Exercise Metabolism,* 1-15.
- Bathgate KE, **Bagley JR**, Jo E, Talmadge RJ, Tobias IS, Brown LE, Coburn JW, Arevalo JA, Segal NL, and AJ Galpin (2018). Muscle health and performance in monozygotic twins with 30 years of discordant exercise habits. *European Journal of Applied Physiology,* 118(10), 2097-2110
- Gomez DH, **Bagley JR**, Bolter N, Kern M, and CM Lee (2018). Metabolic cost and exercise intensity during active virtual reality gaming. *Games for Health Journal,* 7(5), 3010-316.
- Machek S and **JR Bagley** (2018). Creatine monohydrate supplementation: Considerations for cognitive performance in athletes. *Strength and Conditioning Journal,* 40(2), 82-93
- Tobias IS, Lazauskas KK, Arevalo JA, **Bagley JR**, Brown LE, and AJ Galpin (2018). Fiber type-specific analysis of AMPK isoforms in human skeletal muscle: advancement in methods via capillary nano-immunoassay. *Journal of Applied Physiology,* 124(4), 840-849.
- Arevalo JA, Lynn SK, **Bagley JR**, Brown LE, Costa PB, and AJ Galpin (2018). Lower Limb Dominance, Performance, and Fiber Type in Resistance-Trained Men. *Medicine and Science in Sport and Exercise,* 50(5) 1054-1060.
- Bagley JR**, McLeland KA, Arevalo JA, Brown LE, Coburn JW, and AJ Galpin (2017). Skeletal muscle fatigability and myosin heavy chain fiber type in resistance trained men. *Journal of Strength and Conditioning Research.* 31 (3) 602- 607.

PEER-REVIEWED PUBLICATIONS (*Continued*)

16. Yuen EP and **JR Bagley** (2016). Exercise benefits and considerations for individuals with systemic lupus erythematosus. *Strength and Conditioning Journal*, 38 (6) 69-75.
17. Murach K and **J Bagley** (2016). Skeletal muscle hypertrophy with concurrent exercise training: contrary evidence for an interference effect. *Sports Medicine*, 46(8): 1029-1039.
18. Galpin AJ, **Bagley JR**, Whitcomb B, Wiersma LD, Rosengarten J, Coburn J, and D Judelson (2016). Effects of intermittent neck cooling during repeated bouts of high-intensity exercise. *Sports*, 4 (38): 1-11.
19. Murach KA, **Bagley JR**, McLeland KA, Arevalo JA, Ciccone AB, Malyszek KK, and AJ Galpin (2016). Improving human skeletal muscle myosin heavy chain fiber typing efficiency. *Journal of Muscle Research and Cell Motility*, 37 (1): 1-5
20. McLeland KA, Cassio VR, Arevalo JA, **Bagley JR**, Ciccone AB, Brown LE, Coburn JW, Galpin AJ, and KK Malyszek (2016). Comparison of knee extension fatigue between repetition ranges. *Isokinetics and Exercise Science*, 24 (1): 33-38
21. Marsico MF, Malyszek K, **Bagley JR**, and AJ Galpin (2015). A supplemental aquatic speed training program for NFL combine preparation. *Strength and Conditioning Journal*, 37 (6): 58-64.
22. **Bagley JR** and AJ Galpin (2015). Three-dimensional printing of human skeletal muscle cells: an interdisciplinary approach for studying biological systems. *Biochemistry and Molecular Biology Education*, 43 (6): 403-407.
23. Murach KA and **JR Bagley** (2015). Less is more: the physiological basis for tapering in endurance, strength, and power athletes. *Sports*, 3 (3): 209- 218.
24. Judelson DA, **Bagley JR**, Schumacher JM, and LD Wiersma (2015). Cardiovascular and perceptual responses to an ultra-endurance channel swim: a case study. *Wilderness and Environmental Medicine*, 26 (3): 359-365
25. **Bagley JR**, Rosengarten JJ, and AJ Galpin (2015). Is blood flow restriction training beneficial for athletes? *Strength and Conditioning Journal*, 37 (3): 47-53.
26. Murach K, Raue U, Wilkerson B, Minchev K, Jemiolo B, **Bagley J**, Luden N, and S Trappe (2014). Single muscle fiber gene expression with run taper. *PLOS ONE*, 9(9): e108547.
27. **Bagley JR**, Murach KA, and SW Trappe (2012). Microgravity-induced fiber type shift in human skeletal muscle. *Gravitational & Space Research*, Vol.26 34- 40.
28. **Bagley JR**, Judelson DA, Spiering BA, Beam WC, Bartolini JA, Washburn BV, Carney KC, Muñoz CX, Yeargin SW, and DJ Casa (2011). Validity of field expedient devices to assess core temperature during exercise in the cold. *Aerospace Medicine and Human Performance*, 82 (12): 1098-1103.
29. Galpin AJ and **JR Bagley** (2011). Guiding coaches through scientific articles by examining human growth hormone research. *Strength and Conditioning Journal*, 33 (5): 62-66.

RESEARCH

Abstract & Presentation Metrics

Poster Presentations: 61

Slide Presentations: 6

Conferences/Meetings: 27

Host Organizations:

*Aerospace Medical Association (AsMA)**American College of Sports Medicine (ACSM)**American Physiological Society (APS)**Cold Spring Harbor Laboratory (CSH)**National Strength & Conditioning Assn. (NSCA)**University of Seville*

PEER-REVIEWED ABSTRACTS

ABSTRACTS & PRESENTATIONS (*Author/Co-Author*)

1. Ortiz-Delatorre J, Durk RP, Esparza A, Ruiz A, Doaz MJ, Kern M, and **JR Bagley**. Estimating energy expenditure during active virtual reality gaming. International Conference on Technology in Physical Activity and Sport (TAPAS 2020), November 24-27, 2020, Seville, Spain (*Virtual Meeting*)
2. Gasmin E, Castillo-Ortiz LY, Durk RP, Lorenz KA, Kern M, Lee CM, and **JR Bagley**. Applications and efficacy of portable wearable metabolic devices. International Conference on Technology in Physical Activity and Sport (TAPAS 2020), November 24-27, 2020, Seville, Spain (*Virtual Meeting*)
3. Stewart TH, Villanueva K, Hahn A, Ortiz J, Wolf C, Nguyen R, Bolter ND, Kern M, and **JR Bagley**. Effects of previous gaming experience on metabolic cost during active virtual reality gaming. SWACSM Annual Meeting, Oct. 2020. (*Virtual Meeting due to COVID-19*)
4. Wong AC, Castillo-Ortiz LY, Sid R, Lorenz KA, Mayo AM, Lee CM, and **JR Bagley**. Energy expenditure, enjoyment, and simulator sickness during virtual reality cycle gaming. SWACSM Annual Meeting, Oct. 2020. (*Virtual Meeting due to COVID-19*)
5. **Bagley JR**, LaFaille M, Begue G, Durk RP, and GJ Grosicki. Urinalysis reveals hemolysis in a world-class ultramarathon runner: A case study. ACSM Annual Meeting, May 26-30, 2020, San Francisco, CA (*Virtual Meeting due to COVID-19*)
6. Bolter ND, Dinardi JS, Durk RP, Begue G, Grosicki GJ, and **JR Bagley**. Psychological state of a world class ultramarathon runner: A case study. ACSM Annual Meeting, May 26-30, 2020, San Francisco, CA (*Virtual Meeting due to COVID-19*)
7. Grosicki GS, Durk RP, and **JR Bagley**. Rapid gut microbiome changes in a world-class ultramarathon runner: A case study. ACSM Annual Meeting, May 26-30, 2020, San Francisco, CA (*Virtual Meeting due to COVID-19*)
8. Marr CY, Cornett C, Villanueva K, Lorenz KA, Kim M, and **JR Bagley**. Reliability of the Seca® medical body composition analyzer in healthy young adults. ACSM Annual Meeting, May 26-30, 2020, San Francisco, CA (*Virtual Meeting due to COVID-19*)
9. Stewart TH, Villanueva K, Hahn A, Ortiz J, Wolf C, Nguyen R, Bolter ND, Kern M, and **JR Bagley**. Effects of exercise setting on energy expenditure and enjoyment during active virtual reality gaming. ACSM Annual Meeting, May 26-30, 2020, San Francisco, CA (*Virtual Meeting due to COVID-19*)
10. Zepeda CS, Pardini CE, Lazauskas KK, Tobias IS, Galpin AJ, and **JR Bagley**. Novel method to visualize AMPK protein localization in single human muscle fibers via confocal microscopy. ACSM Annual Meeting, May 26-30, 2020, San Francisco, CA (*Virtual Meeting due to COVID-19*)
11. Macheck SB, Hwang PS, Cardaci TD, Suezaki ES, Kim CS, Wilburn DT, Blake DT, Galpin AJ, **Bagley JR**, and DS Willoughby. Fiber type profile and its relation to Wilks coefficient in both male and female powerlifters. Texas ACSM Annual Meeting, February 20-21, Waco, TX (*Poster Presentation*)
12. Gregg D, **Bagley JR**, Macheck SB, Chan KN, Lit Y, Chen Y, Tobias IS, Galpin AJ, Myers JN, and R Rabkin. Skeletal muscle fiber type in older patients receiving maintenance hemodialysis treatment. Southwest ACSM Annual Meeting. October, 2019, Newport Beach, CA (*Poster Presentation*)
13. LaFaille M, Begue G, Durk RP, Grosicki G, and **JR Bagley**. Elite ultra-endurance running event (161.3km) causes hemolysis as indicated by urinalysis: A case study. Southwest ACSM Annual Meeting. October, 2019, Newport Beach, CA (*Poster Presentation*)
14. Marr CY, Cornett C, Villanueva K, Lorenz KA, Kim M, and **JR Bagley**. Reliability of the Seca® medical body composition analyzer (mBCA) in healthy young adults. Southwest ACSM Annual Meeting. October, 2019, Newport Beach, CA (*Poster Presentation*)

RESEARCH

Presentation Locations

Boston, MA
 Cold Spring Harbor, NY
 Costa Mesa, CA
 Denver, CO
 Indianapolis, IN
 Las Vegas, NV
 Long Beach, CA
 Minneapolis, MN
 New Orleans, LA
 Newport Beach, CA
 San Diego, CA
 San Francisco, CA
 Seville, Spain
 Waco, TX
 Washington, DC

PEER-REVIEWED ABSTRACTS (*Continued*)

15. Zepeda CS, Pardini CE, Lazauskas KK, Tobias IS, Galpin AJ, and **JR Bagley**. Novel method to visualize AMPK protein localization in single human muscle fibers via confocal microscopy. Southwest ACSM Annual Meeting. October, 2019, Newport Beach, CA (*Poster Presentation*)
16. Pardini C, Zapanta K, Lorenz KA, Cotter JA, Galpin AJ, and **JR Bagley**. Short-duration Simulated Microgravity Alters Human Skeletal Muscle Nuclei Morphology. Aerospace Medical Association Annual Scientific Meeting. Las Vegas, NV. May 9, 2019. (*Poster Presentation*)
17. Sui J, Serrano N, Lazauskas K, Colenso-Semple L, Tobias IS, **Bagley JR**, Yen C, Costa PB, Lockie RG, and AJ Galpin. Disagreement between Two Popular Methods for Assessing Human Skeletal Muscle Fiber Type Composition. SWACSM Annual Meeting. Costa Mesa, CA. October 26-27, 2018. (*Poster Presentation*)
18. Pardini C, Zapanta K, Serrano N, Lorenz KA, Cotter JA, Galpin AJ, and **JR Bagley**. Skeletal Muscle Fiber Type after 10-days of Simulated Microgravity with Concurrent Exercise Training. SWACSM Annual Meeting. Costa Mesa, CA. October 26-27, 2018. (*Poster Presentation*)
19. Tobias IS, Lazauskas KK, Siu J, **Bagley JR**, and AJ Galpin. AMPK Activation in Human Skeletal Muscle is Fiber Type-specific following Acute High Intensity Interval Exercise. *Nutrient Signaling Meeting, Cold Spring Harbor Laboratory*, Cold Spring Harbor, NY. October 25-28, 2018. (*Poster Presentation*)
20. **Bagley JR**, Lazauskas KK, Tobias IS, Siu J, Serrano N, Yen C, and AJ Galpin. Fiber Type-specific activation of AMPK Following Acute High Intensity Interval Exercise in Concurrently Trained Men. *ACSM Conference on Integrative Physiology of Exercise*. San Diego, CA. September 5-8, 2018. (*Poster Presentation*)
21. Machek SB, Gregg DF, Serrano N, Lazauskas KK, Lorenz KA, Kern M, Tobias I, Galpin AJ, and **JR Bagley**. Skeletal Muscle Fiber Type and Morphology in a Middle-aged Elite Male Powerlifter using Anabolic Steroids. *ACSM Conference on Integrative Physiology of Exercise*. San Diego, CA. September 5-8, 2018. (*Poster Presentation*)
22. Zapanta K, Cotter JA, Galpin AJ, and **JR Bagley**. Effects of concurrent exercise during simulated microgravity on soleus muscle fiber myonuclear content. *Medicine and Science in Sports and Exercise*, 50:5S. ACSM Annual Meeting. Minneapolis, MN. May 28 - June 1, 2018. (*Poster Presentation*)
23. Osmond A, Talmadge RJ, Bathgate KE, **Bagley JR**, Brown LE, Coburn JW, and Galpin AJ, Murach KA, and E Jo. Skeletal Muscle Gene Expression Study of Monozygous Twins with 35 years of Divergent Exercise History. *Medicine and Science in Sports and Exercise*, 50:5S. ACSM Annual Meeting. Minneapolis, MN. May 28 - June 1, 2018. (*Poster Presentation*)
24. Durk RP, Castillo E, Marquez-Magana L, Grosicki GJ, Bolter N, Lee CM, and **JR Bagley**. Relationship between Cardiorespiratory Fitness and Relative Gut Microbiota Composition in Healthy Adults. *Medicine and Science in Sports and Exercise*, 50:5S. ACSM Annual Meeting. Minneapolis, MN. May 28 - June 1, 2018. (*Slide Presentation*)
25. Gomez DH, Bolter N, Lee CM, **Bagley JR**, and M Kern. Metabolic cost Exercise Intensity during Active Virtual Reality Gaming. *Medicine and Science in Sports and Exercise*, 50:5S. ACSM Annual Meeting. Minneapolis, MN. May 28 - June 1, 2018. (*Poster Presentation*)
26. Zapanta K, Cotter JA, Galpin AJ, and **JR Bagley**. Effects of concurrent exercise during simulated microgravity on soleus muscle fiber myonuclear content. SWACSM Annual Meeting. Long Beach, CA. October 20-21, 2017. (*Poster Presentation*)
27. Durk RP, Castillo E, Márquez-Magaña L, Bolter N, Lee CM, and **JR Bagley**. Relationship between cardiorespiratory fitness and relative gut microbiota composition in healthy adults. SWACSM Annual Meeting. Long Beach, CA. October 20-21, 2017. (*Poster Presentation*)

PEER-REVIEWED ABSTRACTS (*Continued*)

28. Serrano N, **Bagley JR**, Lazauskas KK, McManus RT, Tobias IS, Valentino T, and AJ Galpin. Vastus lateralis fiber type profile of an ultramarathon runner. SWACSM Annual Meeting. Long Beach, CA. October 20-21, 2017. (*Poster Presentation*)
29. Gomez D, Lee CM, **Bagley JR**, Kern M, and N Bolter. Metabolic cost, exercise intensity, and perceived exertion during virtual reality gaming. SWACSM Annual Meeting. Long Beach, CA. October 20-21, 2017. (*Poster Presentation*)
30. Wong A, Gomez D, Parfet W, Mayo A, Bolter N, Lee CM, Kern M, and **JR Bagley**. Exercise intensity and simulator sickness during active virtual reality cycle games. SWACSM Annual Meeting. Long Beach, CA. October 20-21, 2017. (*Poster Presentation*)
31. Tobias IS, **Bagley JR**, and AJ Galpin. Estrogen effects on AMPK activation in human skeletal muscle: a pilot study. SWACSM Annual Meeting. Long Beach, CA. October 20-21, 2017. (*Poster Presentation*)
32. Tobias IS, Arevalo JA, McManus R, **Bagley JR**, Brown LE, and AJ Galpin. Methods for Time-course Measurement of the Fiber Type-specific AMPK Activation in Single Fibers Following Acute High Intensity Interval Exercise. NSCA 2017 National Conference, Las Vegas, NV (*Slide Presentation*)
33. Arevalo JA, **Bagley JR**, Rosengarten JJ, Lynn SK, Brown LE, Costa PB, and AJ Galpin. Relationship between Vertical Jump Velocity, Muscle Fiber Type, and Leg Dominance in Resistance-Trained Men. NSCA 2017 National Conference, Las Vegas, NV (*Poster Presentation*)
34. Tobias IS, **Bagley JR**, Brown LE, and AJ Galpin. AMPK subunit isoform expression differs between human skeletal muscle fiber types. 2017 ACSM Annual Meeting. Denver, CO. (*Poster Presentation*)
35. Gomez DH, Hood KM, Kirk-Sorrow J, Uong K, Farmer IV J, Lee CM, **Bagley JR**, and M Kern. Validity and reliability of a consumer bioelectric impedance analysis scale. 2017 ACSM Annual Meeting. Denver, CO. (*Poster Presentation*)
36. Curl CC, Lolmaugh M, Kern M, Valentino TR, Lorenz KA, and **JR Bagley**. Effects of bodyweight exercise on excess post-exercise oxygen consumption and metabolic expenditure. 2017 ACSM Annual Meeting. Denver, CO. (*Poster Presentation*)
37. Steers BM, Farmer IV J, Kirk-Sorrow J, Lee CM, Kern M, and **JR Bagley**. Effects of compression socks on muscle recovery in competitive Masters endurance athletes. 2017 ACSM Annual Meeting. Denver, CO. (*Poster Presentation*)
38. Arevalo JA, **Bagley JR**, Rosengarten JJ, Lynn SK, Brown LE, Costa PB, and AJ Galpin. Leg dominance and fiber type composition influence landing performance in resistance-trained men. 2017 ACSM Annual Meeting. Denver, CO. (*Poster Presentation*)
39. Hood KM, Kirk-Sorrow J, Uong K, Farmer IV J, Lee CM, **Bagley JR and M Kern**. Validity of a consumer bioelectrical impedance analysis scale to measure body composition in healthy adults. SWACSM Annual Meeting. Costa Mesa, CA. October 21-22, 2-16 (*Poster Presentation*)
40. Lazauskas K, Bathgate KE, **Bagley JR**, Jo E, Segal HL, Brown LE, Coburn JW, Ruas CV, and AJ Galpin. Muscle structure in monozygous twins with 35 years of differing exercise backgrounds. SWACSM Annual Meeting. Costa Mesa, CA. October 21-22, 2016. (*Poster Presentation*)
41. Rosengarten JJ, Arevalo JA, Lynn SK, Brown LE, **Bagley JR**, Gannon RG, Kavalek MR, Rasche ME, Costa PB, and AJ Galpin. Leg dominance influences landing strategy and is correlated with fiber-type composition. SWACSM Annual Meeting. Costa Mesa, CA. October 21-22, 2016. (*Poster Presentation*)
42. McManus R, Malek MH, Burghardt KJ, **Bagley JR**, Shumaker G, Coburn JW, Costa PB, and AJ Galpin. Epigenetic response to an acute bout of resistance exercise in trained men. SWACSM Annual Meeting. Costa Mesa, CA. October 21- 22, 2016 (*Poster Presentation*)

PEER-REVIEWED ABSTRACTS (*Continued*)

43. Arevalo JA, Gannon RG, Kavalek MR, **Bagley JR**, Lynn SK, Brown LE, Costa PB, Rasche ME, and AJ Galpin. Fiber type composition and leg dominance in resistance-exercise trained men. SWACSM Annual Meeting. Costa Mesa, CA. October 21-22, 2016 (*Poster Presentation*)
44. Arevalo JA, McManus RT, Rosengarten J, Lynn SK, Spencer JA, Brown LE, **Bagley JR**, Costa PB, and AJ Galpin. Knee extension strength and muscle fiber type composition in resistance-trained men. NSCA 2016 National Conference, New Orleans, LA. July 6-9, 2016. (*Poster Presentation*)
45. Bathgate KE, **Bagley JR**, Jo E, Segal NL, Brown LE, Coburn JW, Gullick CN, Ruas CV, and AJ Galpin. Physiological profile of monozygous twins with 35 years of differing exercise habits. NSCA 2016 National Conference, New Orleans, LA. July 6-9, 2016. (*Poster Presentation: Student Award Finalist*)
46. **Bagley JR**, Arevalo JA, Malyszek KK, Spencer JA, Rosengarten J, Barillas SR, Leyva W, McManus RT, Lee D, and AJ Galpin. Skeletal muscle phenotype and performance of an elite mixed martial artist. ACSM Annual Meeting. Boston, MA. May 31 - June 4, 2016. (*Poster Presentation*)
47. Ballon J, **Bagley JR**, McLeland KA, Arevalo JA, Brown LE, Coburn JA, Ciccone AB, and AJ Galpin. Reexamining skeletal muscle fatigability and fiber type in resistance trained men: 40 years after Thorstensson and Karlsson. ACSM Annual Meeting. Boston, MA. May 31 - June 4, 2016. (*Poster Presentation*)
48. Arevalo JA, Bathgate KE, McManus RT, Ballon J, Lee D, Rosengarten J, Barillas SR, Lynn SK, Spencer JA, Brown LE, **Bagley JR**, Costa PB, and AJ Galpin. Bilateral fiber type and performance differences in the leg muscles of resistance trained men. ACSM Annual Meeting. Boston, MA. May 31 - June 4, 2016. (*Poster Presentation*)
49. **Bagley JR**, Arevalo JA, Malyszek KK, Spencer JA, Rosengarten J, Barillas SR, Leyva W, McManus RT, Lee D, and AJ Galpin. Skeletal muscle phenotype and performance of an elite mixed martial artist. SWACSM Annual Meeting. Costa Mesa, CA. October 16-17, 2015. (*Poster Presentation*)
50. Lee D, **Bagley JR**, Arevalo JA, Spencer JA, McManus RT, Leyva W, Barillas SR, and AJ Galpin. Rapid human muscle fiber dissection methods: mechanical isolation vs enzyme digestion. SWACSM Annual Meeting. Costa Mesa, CA. October 16-17, 2015. (*Poster Presentation*)
51. Ballon J, **Bagley JR**, McLeland KA, Arevalo JA, Brown LE, Coburn JW, Ciccone AB, and AJ Galpin. Reexamining skeletal muscle fatigability and fiber type in resistance trained men: 40 years after Thorstensson and Karlsson. SWACSM Annual Meeting. Costa Mesa, CA. October 16-17, 2015. (*Poster Presentation*)
52. Arevalo JA, McManus RT, Lee D, Barillas SR, Lynn SK, Spencer JA, Brown LE, **Bagley JR**, and AJ Galpin. Bilateral differences in leg muscle fiber type of resistance trained men. SWACSM Annual Meeting. Costa Mesa, CA. October 16-17, 2015. (*Poster Presentation*)
53. McLeland KA, Arevalo JA, **Bagley JR**, Ciccone AB, Brown LE, Coburn, JW and AJ Galpin. A reexamination of fatigability and fiber type composition of human skeletal muscle. *Medicine and Science in Sports and Exercise*, 47:5, ACSM Annual Meeting. San Diego, CA. May 27 - June 1, 2015. (*Poster Presentation*)
54. Wilkerson BS, **Bagley JR**, Murach KA, Hayes ES, Galpin AJ, Raue U, Jemiolo B, Minchev K, Gustafsson T, Tesch PA, and SW Trappe. Skeletal muscle health in elite octogenarian lifelong endurance athletes and untrained men: part one. *Medicine and Science in Sports and Exercise*, 45:5, ACSM Annual Meeting. Indianapolis, IN. May 28 - June 1, 2013. (*Thematic Poster Presentation*)

PEER-REVIEWED ABSTRACTS (Continued)

55. **Bagley JR**, Murach KA, Hayes ES, Galpin AJ, Minchev K, Raue U, Gustafsson T, Tesch PA, and SW Trappe. Skeletal muscle health in elite octogenarian lifelong endurance athletes and untrained men: part two. *Medicine and Science in Sports and Exercise*, 45:5, ACSM Annual Meeting. Indianapolis, IN. May 28 - June 1, 2013. (*Thematic Poster Presentation*)
56. Murach KA, Raue U, Wilkerson BS, Minchev K, Jemiolo B, **Bagley JR**, Luden N, and SW Trappe. Molecular insight into fast-twitch fiber remodeling with taper. *Medicine and Science in Sports and Exercise*, 45:5, ACSM Annual Meeting. Indianapolis, IN. May 28 - June 1, 2013. (*Poster Presentation*)
57. **Bagley JR**, Murach KA, Minchev K, Standley RA, Trappe TA, and SW Trappe. Influence of MHC hybrid isoform protein proportions on single muscle fiber function in humans. *Medicine and Science in Sports and Exercise*, 44:5, ACSM Annual Meeting. San Francisco, CA. May 30 - June 2, 2012. (*Poster Presentation*)
58. Muñoz CX, Armstrong LE, **Bagley JR**, Maresh CM, and DA Judelson. Relationship between fluid retention following a water load and common hydration biomarkers. International Life Sciences Institute (ILSI) North America Conference, Washington D.C. November 2011.
59. **Bagley JR**, Judelson DA, Spiering BA, Beam WC, Bartolini JA, Washburn BV, Carney KC, Muñoz CX, Yeargin SW, and DJ Casa. Validity of field expedient measurement devices to assess core body temperature in the cold. *Medicine and Science in Sports and Exercise*, 43:5, ACSM Annual Meeting. Denver, CO. May 31- June 4, 2011. (*Poster Presentation*)
60. Judelson DA, Thomas WE, Coburn JW, Kersey RD, Rubin DA, **Bagley JR**, and J Ng. Effect of caffeine supplementation on catecholamine and metabolic responses to exercise in cold conditions. *Medicine and Science in Sports and Exercise*, 43:5, ACSM Annual Meeting. Denver, CO. May 31 - June 4, 2011. (*Poster Presentation*)
61. **Bagley JR**, Judelson DA, Spiering BA, Beam WC, Bartolini JA, Washburn BV, Carney KC, Muñoz CX, Yeargin SW, and DJ Casa. Validity of field expedient measurement devices to assess core body temperature during rest and exercise in the cold. MWACSM Annual Meeting. Indianapolis, IN. October 29-30, 2010. (*Slide Presentation*)
62. **Bagley JR**, Bartolini A, Carney KC, Gochioco MK, Nelson ME, Ross MM, and *WC Beam. Use of the VersaClimber® in assessing aerobic fitness of firefighters. *Medicine and Science in Sports and Exercise*, 42:5, ACSM Annual Meeting. Baltimore, MD. June 2-5, 2010. (*Slide Presentation*)
63. Muñoz CX, Judelson DA, Maresh CM, and **JR Bagley**. Effect of drink volume on thirst and markers of hydration state. *Medicine and Science in Sports and Exercise*, 42:5, ACSM Annual Meeting. Baltimore, MD. June 2-5, 2010. (*Slide Presentation*)
64. Thomas WE, Judelson DA, **Bagley JR**, Coburn JW, Kersey RD, and DA Rubin. Effect of caffeine supplementation on cycling performance during cold stress. *Medicine and Science in Sports and Exercise*, 42:5. ACSM Annual Meeting. Baltimore, MD. June 2-5, 2010. (*Slide Presentation*)
65. **Bagley JR**, Bartolini A, Carney KC, Gochioco MK, Nelson ME, Ross MM, and WC Beam. Use of the VersaClimber® in assessing aerobic fitness of firefighters. SWACSM Annual Meeting. San Diego, CA. October 23-24, 2009. (*Poster Presentation*)
66. Muñoz CX, Judelson DA, Maresh CM, and **JR Bagley**. Effect of drink volume on thirst and markers of hydration state. SWACSM Annual Meeting. San Diego, CA. October 23-24, 2009. (*Poster Presentation*)
67. Thomas WE, Judelson DA, **Bagley JR**, Coburn JW, Kersey RD, and DA Rubin. Effect of caffeine supplementation on cycling performance during cold stress. SWACSM Annual Meeting. San Diego, CA. October 23-24, 2009. (*Poster Presentation*)

EDITOR-REVIEWED PUBLICATIONS

LETTERS & COLUMNS

1. **Bagley JR** (2014). Fibre type-specific hypertrophy mechanisms in human skeletal muscle: Potential role of myonuclear addition. *Journal of Physiology*, Vol. 592 (23) pp. 5147-5148.
2. Murach KA, **Bagley JR**, and CJ Pfeiffer (2013). Point/Counterpoint: Is long duration exercise necessary for anaerobic athletes? *Strength and Conditioning Journal*, Vol. 35 (2) pp. 44-46.

NON PEER-REVIEWED WORKS

1. Machek S, Cronan S, and **JR Bagley**. "The Ultimate Science Based Supplement Guide". Published online (10/2017)
2. **Bagley J**. "How to boost your performance with tapering". *Barbell Shrugged Daily*. Published Online (9/2015)
3. **Bagley J**. "The new science of muscle memory". *Barbell Shrugged Daily*. Published Online (5/2015)
4. **Bagley J**. "You need to squat deep!". *Barbell Shrugged Daily*. Published Online (4/2015)
5. Ciccone T, Davis K, **Bagley J**, and A Galpin. "Deep squats and knee health: A scientific review". *Barbell Shrugged Daily*. Published Online (4/2015)
6. Galpin A & **J Bagley**. "3 ways to prevent post-exercise soreness". *Breaking Muscle*. Published Online (4/2015)

RESEARCH

Invited Lectures,
Panels, &
Seminars: 24



BALL STATE
UNIVERSITY

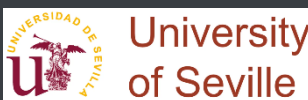
BIOLA
UNIVERSITY

fitbit

FRESNO STATE



Stanford
University



INVITED LECTURES & SEMINARS

1. *Virtual Reality (VR) Health & Exercise Lecture*, USC Sensorimotor Assessment and Rehabilitation Training in VR Center, **University of Southern California**, Los Angeles, CA 6/2021.
2. *Invited Panel - Gradate Program Q&A*. KSA Grad School Week, **San Francisco State University**, San Francisco, CA. 5/6/2021.
3. *Technology in Exercise Science*, George Fox Exercise Science Club Guest Lecture, **George Fox University**, Newberg, OR. 3/2021.
4. *VR Exercise Gaming: The Future of Fitness?* TAPAS 2020 Meeting, **University of Seville**, Seville, Spain. 11/2020.
5. *Virtual Reality (VR): The Future of Fitness?* - Health Tech Jam Workshop, **University of Illinois-Chicago**, Chicago, IL. 10/18/2020.
6. *Research in Exercise Physiology*. Guest Lecturer. KIN 251 – Careers in Kinesiology (3 sections), **San Francisco State University**, San Francisco, CA. 10/2019
7. *Invited Panel - Faculty & Student Q&A*. CHSS Fall Opening, **San Francisco State University**, San Francisco, CA. 8/26/2019.
8. *Advancing Human Performance with Technology in Kinesiology*. Exercise Science Symposium, **California State University, Sacramento**, CA. 4/19/2019
9. *Advancing Human Performance with Technology in Exercise Physiology*. Stewart Seminar Series, **Biola University**, La Mirada, CA. 3/28/2019.
10. *Careers in Exercise Physiology*. Guest Lecturer. KIN 251 - Careers in Kinesiology, (3 sections), **San Francisco State University**, San Francisco, CA. 10/2018.
11. *New Muscle Physiology Lab Research*. Guest Lecturer. Advanced Exercise Physiology Course, **California State University, Fresno**, CA. (Via Zoom Meetings) 10/2018.
12. *Social Media Panel*. Guest Lecturer. KIN 355 - Computer Applications in Kinesiology, **San Francisco State University**, San Francisco, CA. 6/2018.
13. #CareerGoals, Keynote Lecture - **Careers in Kinesiology Conference**, Kinesiology Student Association, San Francisco, CA. 11/2017.
14. *Muscle Physiology in Athletes*. Biology Department, **San Francisco State University** (Carmen Domingo Lab, Biology), San Francisco, CA 3/17.
15. *Skeletal Muscle Fiber Types and Human Performance: A Cellular and Molecular Perspective*. **SWACSM Annual Meeting**, Costa Mesa, CA. 10/2016.
16. *Muscle Physiology in Athletes: Exploring the Limits of Human Performance*. **VA Palo Alto / Stanford University** (Jonathon Myers Lab), Palo Alto, CA. 6/2016.
17. *Skeletal Muscle Phenotype and Performance of an Elite Mixed Martial Artist*. **ACSM Combat Sports Interest Group Meeting**, Boston, MA. 6/2016.
18. *Unraveling Fitness Misconceptions with Exercise Physiology*. **Fitbit Inc.** - Physiology Lecture Series, San Francisco, CA. 5/2016.
19. *Online Publishing: Bringing Scientific Knowledge to the Masses*. Guest Lecturer: KIN 325 - Computer Applications in Kinesiology, **San Francisco State University**, San Francisco, CA. 10/2015.
20. *Skeletal Muscle Physiology & Human Performance*. Guest Lecturer: KIN 795 - Seminar in Kinesiology, **San Francisco State University**, San Francisco, CA. 9/2015.
21. *Physiological Aspects of Aging*. Guest Lecturer: KINE 360 - Physical Activity and Aging, California State University, San Bernardino, CA. 7/2014.
22. *Rethinking Muscle Memory: Is it in Myonuclei?* CSUF International Coaching Clinic, California State University, Fullerton, CA. 7/2014.

MEDIA COVERAGE

Media Appearances

News/Newspapers: 13

Magazines: 9

Television: 4

Podcasts: 14

23. *Lifelong Exercise and Healthy Aging*. Exercise Science Club Meeting, Ball State University, Muncie, IN. 4/2013
24. *Lifelong Endurance Exercise and Skeletal Muscle Health*. National Institute of Education, Nanyang Technological University, Singapore. 1/2013.

MEDIA COVERAGE OF RESEARCH

INTERVIEWS & APPEARANCES

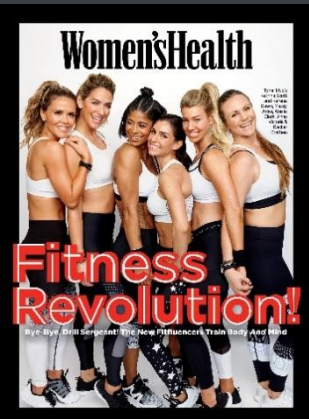
Muscle Physiology

1. **Women's Health Magazine (Print Edition)**. *Which should I do first: Strength or Cardio?* By Kiera Carter (Jan./Feb. 2021).
2. **Stacked Strength Podcast**. *Dr. Jimmy Bagley – Limits of Muscular Potential and Muscle Physiology (Interview by Daniel DeBrocke. Aired October 21, 2020)*: <https://stackedstrength.podbean.com/e/12-dr-jimmy-bagley-limits-of-muscular-potential-and-muscle-physiology/>
3. **Team USA (USAW)**. *Study: Elite Weightlifters Have Absurd Amounts of Fast Twitch Muscle Fibers*. By Jake Boly (May 15, 2019): <https://www.teamusa.org/USA-Weightlifting/BarBend/2019/May/15/Study-Elite-Weightlifters-Have-Absurd-Amounts-of-Fast-Twitch-Muscle-Fibers>
4. **Yahoo! News**. *Women's muscles just as well equipped for weightlifting as men's says new study* (March 28, 2019): <https://sg.news.yahoo.com/womens-muscles-just-well-equipped-weightlifting-mens-says-112712282.html>
5. **SF State News**. *Study of Female Weightlifters Crushes Stereotype*. By Lisa Owens Viani. March 27, 2019: <https://news.sfsu.edu/news-story/study-female-weightlifters-crushes-stereotype>
6. **Muscle Expert Podcast**. *Jimmy Bagley - Muscle Fiber Type Adaptation, AMPK and mTOR Balance and Muscle Fiber Research (Interview by Ben Pakulski. Aired May 5, 2018)*: <https://itunes.apple.com/us/podcast/muscle-expert-podcast-ben-pakulski-interviews-how-to/id725296816?mt=2>
7. **Men's Health Magazine (Print Edition)**. *Inside the Muscle Cell*. By Lou Shuler (Jan./Feb. 2018): <https://www.scribd.com/article/367923277/Inside-The-Muscle-Cell>
8. **SF State News**. *Breakthrough for SF State kinesiologists studying metabolic protein*. By Lisa Owens Viani. April 27, 2018: <https://news.sfsu.edu/news-story/breakthrough-sf-state-kinesiologists-studying-metabolic-protein>
9. **The University Network**. *San Francisco State University Graduate Student Studies Female Musculature for Space Travel*. By Vanessa Sewell. June 2017: <https://www.tun.com/blog/san-francisco-state-female-musculature-space/>

Virtual Reality (VR) & Fitness Technology Research

1. **Seattle University's Redhawk Squawk Podcast**. *Virtual Reality Research with Dr. Jimmy Bagley*. Aired March 23, 2021: <https://www.seattleu.edu/artsci/departments/kinesiology/about-us/events/podcast/>
2. **NBC 5, Dallas-Fort Worth Texas**. *Local News Segment (Aired in Texas on February 26, 2020)*: <https://www.nbcdfw.com/news/health/could-virtual-reality-be-the-future-of-fitness/2320138/>
3. **NHK World Japan**. *International TV News Segment (Aired September 24, 2019)*: VR Exercise Gaming and Health interview with Fumio Sugaya.
4. **50% Facts Podcast** *Are Virtual Reality Games the Future of Fitness? With Dr. Jimmy Bagley*. Aired June 19, 2019: <http://thepowercast.libsyn.com/are-virtual-reality-games-the-future-of-fitness-wdr-jimmy-bagley>
5. **CNN**. *Segment on CNN News about Immersive Fitness* (Aired in US, Jan. 6, 2019)

MEDIA COVERAGE



MEDIA COVERAGE OF RESEARCH (Continued)

6. **Discovery Channel.** *Segment on Daily Planet* (Aired in Canada, Oct. 5, 2017): <http://www.discovery.ca/Shows/Daily-Planet/video?vid=1221240>
7. **San Francisco Chronicle.** *S.F. State tests benefits of workouts in virtual reality games.* By Nanette Asimov. Sept. 5, 2017: <http://www.sfchronicle.com/bayarea/article/S-F-State-tests-benefits-of-workouts-in-virtual-12175034.php>
8. **Women's Health Magazine (Print Edition).** *Bot-ify your Bod.* By Marissa Gainsburg (March 2018): <https://www.womenshealthmag.com/fitness/g1873697-4/best-workout-gadgets-2018/>
9. **Wellable Podcast** *Jimmy Bagley on VR Gamin for Employee Wellness.* Aired January 17, 2018: <http://blog.wellable.co/jimmy-bagley-on-vr-gaming-for-employee-wellness>
10. **SF State Magazine.** *Game Theory.* By Matt Reed. Fall/Winter, 2017: <http://magazine.sfsu.edu/fall-17/game-theory>

Identical Twin Research

1. **DNA Science Blog: Genetics in Context (PLOS.org Blogs).** Identical twins, physical fitness, and transgender identity. By Ricki Lewis: <http://blogs.plos.org/dnascience/2018/07/26/identical-twins-physical-fitness-and-transgender-identity-in-the-news/>
2. **BarBend.** Research shines light on how much genetics really impacts fitness. By Jake Boly (August 20, 2018): <https://barbend.com/twin-genetic-research-differences/>
3. **The Globe and Mail.** Nature vs. Nurture. Study on twins shows athletic destiny not set at birth. By Alex Hutchinson (August 17, 2018): <https://www.theglobeandmail.com/life/health-and-fitness/article-nature-vs-nurture-study-on-twins-shows-athletic-destiny-not-set-at/>
4. **Inverse.** Oddly lopsided identical twins suggest diminished role of fitness genes. By Emma Betuel (July 23, 2018): <https://www.inverse.com/article/47336-twins-gene-study-fitness-nature-versus-nurture>
5. **IFL Science!** Identical twins answer part of the nature-nurture debate. By Tom Hale (July 23, 2018): <https://www.iflscience.com/health-and-medicine/identical-twins-a-truck-driver-and-a-triathlete-answer-part-of-the-nature-nurture-debate/>
6. **SF State News.** SF State study compared athlete and truck driver, identical twins: Findings indicate genes are not the sole determiner of fitness. By Lisa Owens Viani. July 20, 2018: <https://news.sfsu.edu/news-story/sf-state-study-compares-athlete-and-truck-driver-identical-twins>

Microbiome & Exercise Performance Research

1. **50% Facts Podcast** *Does Your Gut Microbiome Affect Your Fitness? With Dr. Jimmy Bagley.* Aired July 17, 2019: <http://thepowercast.libsyn.com/does-your-gut-microbiome-affect-your-fitness-wdr-jimmy-bagley>
2. **Barbell Shrugged Podcast #406** *Science, Strength, and the Gut Biome with Dr. Jimmy Bagley.* Aired June 27, 2019: <https://shruggedcollective.com/bbs-bagley/>
3. **Australian Men's Health.** Researchers discover a surprising way to boost your gut health. By Scott Henderson July 12, 2018: <https://www.menshealth.com.au/cardiovascular-fitness-and-gut-health-are-linked>
4. **Bustle.** Heart health can impact your gut health, according to a new study. By Carolyn De Lorenzo. July 12, 2018: <https://www.bustle.com/p/heart-health-can-impact-your-gut-health-according-to-a-new-study-that-can-affect-the-rest-of-your-body-too-9742181>
5. **SF State News.** Healthier hearts equal healthier guts: SF State study finds gut microbiome related to cardiovascular fitness. By Lisa Owens Viani. Jul 11, 2018: <https://news.sfsu.edu/news-story/healthier-hearts-equal-healthier-guts>

MEDIA COVERAGE OF RESEARCH (*Continued*)

General Exercise Physiology

1. **The Lab Report Podcast.** Exercise is Medicine With Dr. Jimmy Bagley. Aired May 15, 2020: <https://www.listennotes.com/podcasts/the-lab-report/exercise-is-medicine-with-dr-l3bT2N-4zoA/>
2. **Runner's World.** 9 Benefits of Jumping Rope for Runners (Plus 3 Workouts to Try). By Kiera Carter. January 16th, 2020: <https://www.runnersworld.com/training/a26653683/jump-rope-exercises/>
3. **Runner's World.** Weight Loss and Running Speed: How Exactly Are the Two Connected. By Kiera Carter. November 15, 2019: <https://www.runnersworld.com/beginner/a20843535/how-does-weight-loss-affect-my-running-speed/>
4. **Runner's World.** Jump Rope Exercises That Boost Your Cardio When You Can't Run. By Kiera Carter. March 5, 2019: <https://www.runnersblueprint.com/jump-rope-workout-runners/>
5. **Second Shift Live Episode XIII Live Q&A with Dr. Jimmy Bagley and Dr. Andy Galpin.** Aired September 12, 2016: <https://www.youtube.com/watch?v=FLnFKV2ljjs>
6. **Alpha Movement Podcast Episode #53 How to Get Fitter Without Losing Strength, with Dr. Andy Galpin and Dr. Jimmy Bagley.** Aired August 23, 2016: <http://alphamovement.co/2016/08/23/muscle/>
7. **Life Ready Podcast with Sean Cronan Episode #1. The science of muscle with Dr. Jimmy Bagley:** <https://podcasts.apple.com/us/podcast/001-the-science-of-muscle-with-dr-jimmy-bagley/id1376961572?i=1000424238374>
8. **Strength & Conditioning Journal Podcast. Creatine Supplementation with Dr. James Bagley (Interview by Ben Reuter).** Aired April 4, 2018: <https://journals.lww.com/nsca-scj/pages/podcastepisodes.aspx?podcasti>

FUNDING

GRANTS & CONTRACTS

CURRENT RESEARCH FUNDING

New Investigator Grant

California State University Program for Education and Research in Biotechnology (CSUPERB); 8/2019-11/2022

Title: *Muscle Fiber Size and Intermittent Fasting*

Principal Investigator: JR Bagley

Traditional Grant Program, **Rossi Family Foundation**

Project: *Cryopreservation of Human Muscles*

Principal Investigator: JR Bagley

MRI: Major Research Instrumentation

National Science Foundation (NSF)

Title: *Acquisition of a Super-Resolution Confocal Microscope to Advance Research and Research Training Opportunities at San Francisco State University*

Principal Investigators: D Chu, B Riggs; Collaborator (*Minor User*): JR Bagley

PAST RESEARCH FUNDING

Entrepreneurial Joint Venture Matching Grant

California State University Program for Education and Research in Biotechnology (CSUPERB); 8/2018-11/2019

Title: *Virtual Reality (VR) Exer-gaming to Promote Physical Activity & Health*

Principal Investigator: JR Bagley Collaborator: VR Institute of Health and Exercise

Presidential Award for Early Sabbatical (to JR Bagley)

Office of the President, San Francisco State University; 2018

Traditional Grant Program, **Rossi Family Foundation**

Project: Muscle Physiology Lecture Series Period: 5/2016 - 4/2020

Principal Investigator: JR Bagley

Experiment.com (Crowdfunding Platform for Scientific Research)

The Bill and Melinda Gates Foundation; 11/2016

Title: *How do muscle myonuclei regulate adaptations in fast vs slow-twitch muscle?*

Co-Principal Investigators: AJ Galpin, JR Bagley, I Tobias

Faculty Travel Award (to JR Bagley)

Department of Kinesiology, San Francisco State University; 10/2016

Office of Research and Sponsored Programs (ORSP), Small Grant

San Francisco State University; 7/2016 - 6/2017

Title: *Effects of exercise during simulated microgravity on myonuclear content in human skeletal muscle* Principal Investigator: JR Bagley

Development of Research and Creativity (DRC) Grant

California State University (CSU) Chancellor's Office; 12/2015 - 8/2016

Title: *Fiber type-specific myonuclear morphology in human skeletal muscle*

Principal Investigator: JR Bagley

Faculty Travel Award (to JR Bagley)

Department of Kinesiology, San Francisco State University; 9/2015 Teagle Foundation Grant for Curriculum Redesign Initiative

TEACHING

Teaching Overview

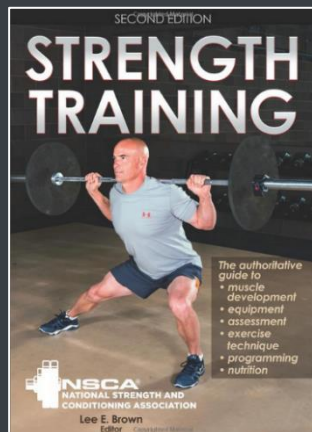
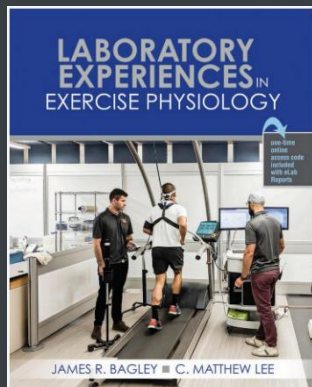
Separate Courses:
11

Total Sections: 49

Total Students Taught: ~1,100

Mentoring Overview

- Academic advising >80 students/year.
- Mentored ~30 MS and ~50 undergrad student research projects.
- Lab alumni have gone onto successful careers and graduate programs (PhD, MD/DO, DPT, etc.).



UNIVERSITY COURSES TAUGHT

San Francisco State University

KIN 355 - Science, Sport, and Fitness (Units: 3)	2016-21
KIN 482 - Exercise Physiology (Units: 3)	2016-21
KIN 555 - Exercise Testing and Prescription (Units: 3)	2015-21
KIN 681/781 - Muscle Physiology (Units: 3)	2015-21
KIN 683 - Advanced Exercise Physiology (Units: 3)	2017-21
KIN 699/899 - Independent Study (Units: 1-3)	2016-21
KIN 897 - Independent Research in Kinesiology (Units: 3)	2016-21
KIN 898 - Master's Thesis (Units: 3)	2016-21

Ball State University

EXSC 293 - Foundations of Physiology and Exercise (Units 3)	2014
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California State University, Fullerton

KNES 100 - Physical Conditioning (1 Unit)	2009-10
KNES 348L - Physiology of Exercise Laboratory (1 Unit)	2009-10

CURRICULAR INNOVATIONS

PUBLISHED TEXTBOOKS (Author/Co-Author)

1. **Bagley JR** and CM Lee (2020). *Laboratory Experiences in Exercise Physiology* (1st Ed.). Kendall-Hunt Publishing, Dubuque, IA.
2. Galpin AJ and **JR Bagley** (2016). "Chapter 11: Torso Exercises". *Strength Training*, (2nd Ed.). NSCA-National Strength and Conditioning Association, Lee E. Brown (Editor). Human Kinetics, Champaign, IL. Pages 241-266.

SERVICE

SERVICE TO THE CAMPUS COMMUNITY

SF State Committees and Assignments

Chair, Professional Development Council (PDC), 2019 - 2021

Coordinator, SF State Scholars Program (Kinesiology), 2020 - Present

Member, Biosafety Committee, Environmental Health & Safety, 2016 - Present

Member, Lower Division Certification Committee (LDCC), 2015 - 2016

Faculty Marshal, Graduation Commencement, 2016 - 2019

Faculty Ambassador, Undergraduate Education and Academic Planning (CHSS Representative), 2016 - 2019

Faculty Representative, Graduate Recognition Ceremony, 2017 - 2020

Member, Hiring Committee - Biomechanics Faculty, 2018

Member, Hiring Committee - Fitness & Wellness Specialist, 2018

SERVICE TO THE FIELD

PROFESSIONAL ORGANIZATIONS

Founding Member: Healthy Living for Pandemic Event Protection (HL-PIVOT) Network, 2020

American College of Sports Medicine (ACSM), Member: 2007 - Present

Textbook Reviewer, ACSM's Foundations for Strength Training and Conditioning

Symposium Organizer, SWACSM Annual Meeting 10/2016

Title: *Skeletal Muscle Fiber Types and Human Performance*

Key Contact, Indiana's 6th Congressional District, 2012-2014

Judge, Student Research Competition, SWACSM Annual Meeting 2017-2019

American Physiological Society (APS), Member: 2010 - Present

National Strength & Conditioning Association (NSCA), Member: 2009 – Present

EXPERT REVIEWER

Journal Peer-Reviewer (Total Reviews: 38 Articles)

Aerospace Medicine and Human Performance

Experimental Physiology

Gravitational and Space Research

Frontiers in Physiology

Journal of Applied Physiology

Journal of Biological Engineering

Journal of Strength and Conditioning Research

Journal of Sports Sciences

Muscle and Nerve

PLOS One

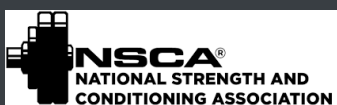
Strength and Conditioning Journal

The Open Sports Sciences Journal

Grant Reviewer

Technical Grant Reviewer - Student-Athlete Health & Well-Being Grant, Pac-12 Conference National Collegiate Athletic Association (NCAA), 2018

Grant Reviewer - California State University Program for Education and Research in Biotechnology (CSUPERB) Seed Grants, 2019, 2021



CERTIFICATIONS & CONTINUING EDUCATION

Advanced Open Water Diver (SCUBA): PADI
 Basic Biomedical Research: Collaborative Institutional Training Initiative (CITI)
 Basic Life Support (BSL Provider): American Health Association (AHA)
 Blood Borne Pathogens Training: Environmental Health & Safety (SFSU)
 Confocal Microscopy Training: Cellular and Molecular Imaging Center (SFSU)
 Confocal Microscopy Course: Biology Department, University of York, England (2018)
 Defensive Driving Training - DGS: The California State University
 EDU: Eliminate Campus Sexual Misconduct: California State University
 Open Water Lifesaving: United States Lifesaving Association (USLA)
 OSHA Hazmat First Responder Operations: California Specialized Training Institute
 Limited Phlebotomy Certification, California Department of Public Health (CDPH) (2018)
 Protecting Human Research Participants: National Institutes of Health (NIH)
 Working Safely during the COVID-19 Pandemic (SFSU)

COLLABORATIONS

RESEARCH COLLABORATORS

Gwen Begue, PhD - Department of Kinesiology, California State University, Sacramento

Josh Cotter, PhD - Physiology of Sport & Exercise Laboratory, Department of Kinesiology, California State University, Long Beach

Ryan Durk, MS - San Francisco State University

Andy Galpin, PhD - Biochemistry & Molecular Exercise Physiology Laboratory, Center for Sport Performance, California State University, Fullerton

Greg Grosicki, PhD - Biodynamics & Human Performance Center, Georgia Southern University, Savannah, Georgia

Eddie Jo, PhD - Human Performance Research Laboratory, Department of Kinesiology & Health Promotion, California State Polytechnic University, Pomona

Marialice Kern, PhD - Department of Kinesiology, College of Health & Social Sciences, San Francisco State University

Matt Lee, PhD - Department of Kinesiology, College of Health & Social Sciences, San Francisco State University

Kent Lorenz, PhD - Department of Kinesiology, College of Health & Social Sciences, San Francisco State University

Steven Machek, MS - Baylor University

Kevin Murach, PhD - University of Arkansas

Jon Myers, PhD - Palo Alto VA Hospital and Stanford Medicine

Taylor Valentino, MS - University of Kentucky

Kaylie Zapanta, MS - University of Southern California