

*Curriculum Vitae***James R. Bagley, PhD**

Department of Kinesiology
 San Francisco State University
 1600 Holloway Ave. - Gym 101
 San Francisco, CA USA 94132

jrbagley@sfsu.edu · musclephyslab.com

PROFESSIONAL POSITIONS

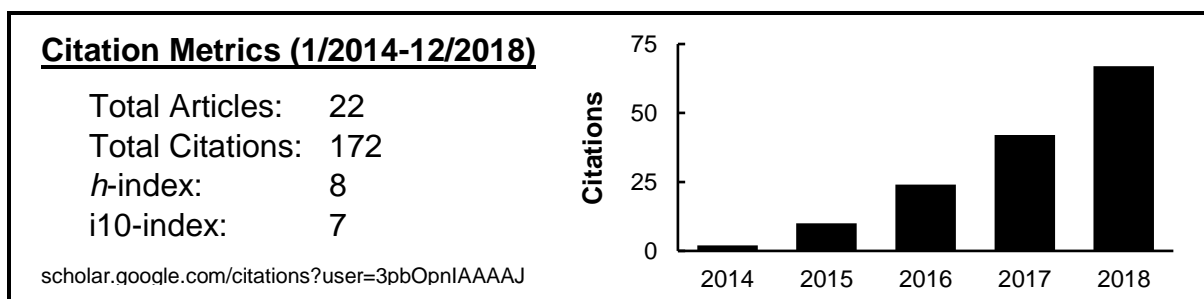
Assistant Professor (<i>Tenure-Track</i>)	2015 - Present
<i>Director</i> , Muscle Physiology Laboratory <i>Co-Director</i> , Exercise Physiology Laboratory <i>Research Director</i> , Strength & Conditioning Laboratory Department of Kinesiology, College of Health & Social Sciences San Francisco State University, San Francisco, CA	
Visiting Research Scholar	2014 - 2015
Biochemistry & Molecular Exercise Physiology Laboratory Center for Sport Performance, Department of Kinesiology California State University, Fullerton, CA	
Doctoral Research Fellow	2010 - 2014
Human Performance Laboratory, College of Applied Sciences & Technology Micro-Imaging Laboratory, Department of Physiology & Health Science Ball State University, Muncie, IN	
Research Assistant & Teaching Associate	2008 - 2010
Exercise Physiology Laboratory Center for Sport Performance, Department of Kinesiology California State University, Fullerton, CA	

EDUCATION

PhD	Human Bioenergetics - Ball State University, Muncie, IN Cognates: Biology & Physiology	2010 - 2015
MS	Kinesiology - California State University, Fullerton, CA Emphasis: Exercise Physiology	2008 - 2010
BS	Kinesiology - California Polytechnic State University, San Luis Obispo, CA Emphasis: Clinical Exercise Science	2006 - 2008
AS	General Studies - Cuesta College, San Luis Obispo, CA Emphasis: Sports Medicine	2004 - 2007

RESEARCH

Publications



Peer-Reviewed Articles

1. Serrano N, Colenso-Semple LM, Lazauskas KK, Siu JW, **Bagley JR**, Lockie RG, Costa PB, and AJ Galpin (2019). Extraordinary Fast-twitch Fiber Abundance in Elite Weightlifters. *PLOS ONE (In Press)*.
2. 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(0), 2097-2110.
3. 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), 310-316.
4. Durk RP, Castillo E, Márquez-Magaña L, Grosicki GJ, Bolter ND, Lee CM, and **JR Bagley** (2018). Relationship between Cardiorespiratory Fitness and Relative Gut Microbiota Composition in Healthy Adults. *International Journal of Sport Nutrition and Exercise Metabolism*, 1-15.
5. Machek S and **JR Bagley** (2018). Creatine monohydrate supplementation: Considerations for cognitive performance in athletes. *Strength and Conditioning Journal*, 40(2), 82-93.
6. 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), pp. 840-849.
7. 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*, Vol. 50(5) pp. 1054-1060.
8. **Bagley JR**, M 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*, Vol. 31 (3) pp. 602-607.
9. Yuen EP and **JR Bagley** Exercise benefits and considerations for individuals with systemic lupus erythematosus (2016). *Strength and Conditioning Journal*, Vol. 38 (6) pp. 69-75.

10. Murach K and **J Bagley** (2016). Skeletal muscle hypertrophy with concurrent exercise training: contrary evidence for an interference effect. *Sports Medicine*, Vol. 46(8) pp. 1029-1039.
11. 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*, Vol. 4 (38) pp. 1-11.
12. 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*, Vol. 37 (1) pp. 1-5.
13. 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*, Vol. 24 (1) pp. 33-38.
14. Marsico MF, Malyszek K, **Bagley JR**, and AJ Galpin (2015). A supplemental aquatic speed training program for NFL combine preparation. *Strength and Conditioning Journal*, Vol. 37 (6) pp. 58-64.
15. **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*, Vol. 43 (6) pp. 403-407.
16. Murach KA and **JR Bagley** (2015). Less is more: the physiological basis for tapering in endurance, strength, and power athletes. *Sports*, Vol. 3 (3) pp. 209-218.
17. 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*, Vol. 26 (3) pp. 359-365
18. **Bagley JR**, Rosengarten JJ, and AJ Galpin (2015). Is blood flow restriction training beneficial for athletes? *Strength and Conditioning Journal*, Vol. 37 (3) pp. 47-53.
19. 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*, Vol. 9 (9): e108547.
20. **Bagley JR**, Murach KA, and SW Trappe (2012). Microgravity-induced fiber type shift in human skeletal muscle. *Gravitational and Space Research*, Vol. 26 pp. 34-40.
21. **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*, Vol. 82 (12) pp.1098-1103.
22. Galpin AJ and **JR Bagley** (2011). Guiding coaches through scientific articles by examining human growth hormone research. *Strength and Conditioning Journal*, Vol. 33 (5) pp.62-66.

Editor Reviewed Articles

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.

Book Chapter

1. Galpin AJ and **JR Bagley** (2015). "Chapter 11: Torso Exercises and Technique". *Strength Training, 2nd Edition*. NSCA-National Strength and Conditioning Association, Lee E. Brown (Editor). Human Kinetics, Champaign, IL (*In Press*)

Lay Articles & eBooks (Non-Peer Reviewed)

1. Machek S, Cronan S, and **JR Bagley**. "The Ultimate Science Based Supplement Guide". Published online (10/2017): <https://lifeready.lpages.co/sciencesupplementguide/>
2. **Bagley J**. "How to boost your performance with tapering". *Barbell Shrugged Daily*. Published Online (9/2015): <http://daily.barbellshrugged.com/how-to-boost-your-performance-with-tapering/>
3. **Bagley J**. "The new science of muscle memory". *Barbell Shrugged Daily*. Published Online (5/2015): <http://daily.barbellshrugged.com/the-new-science-of-muscle-memory/>.
4. **Bagley J**. "You need to squat deep!". *Barbell Shrugged Daily*. Published Online (4/2015): <http://daily.barbellshrugged.com/you-need-to-squat-deep/>
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): <http://daily.barbellshrugged.com/wp-content/uploads/2015/04/DeepSquat-Review-Barbell-Daily-3-27-15.pdf>
6. Galpin A & **J Bagley**. "3 ways to prevent post-exercise soreness". *Breaking Muscle*. Published Online (4/2015): www.breakingmuscle.com/mobility-recovery/3-ways-to-prevent-post-exercise-soreness

Presentations

Invited Lectures & Seminars

1. *Muscle Physiology & Human Performance*. Guest Lecturer. Advanced Exercise Physiology Course, California State University, Fresno, CA (*via Zoom*) 10/2018.
2. *#CareerGoals*, Keynote Lecture - Careers in Kinesiology Conference, Kinesiology Student Association, San Francisco, CA 11/2017
3. *Muscle Physiology in Athletes*. Biology Department, San Francisco State University (Domingo Lab), San Francisco, CA 3/2017
4. *Skeletal Muscle Fiber Types and Human Performance: A Cellular and Molecular Perspective*. Southwest ACSM Annual Meeting (*Invited Symposium*), Costa Mesa, CA 10/2016
5. *Muscle Physiology in Athletes: Exploring the Limits of Human Performance*. VA Palo Alto/Stanford University (Lab of Jonathon Myers, PhD), Palo Alto, CA 6/2016

6. *Skeletal Muscle Phenotype and Performance of an Elite Mixed Martial Artist*. ACSM Combat Sports Interest Group Meeting, Boston, MA 6/2016
7. *Unraveling Fitness Misconceptions with Exercise Physiology*. Fitbit Inc. - Exercise Physiology Lecture Series, San Francisco, CA 5/2016.
8. *Deep Squats and Knee Health*. Seminar at the Dungeon Gym, San Francisco, CA 12/2015.
9. *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.
10. *Skeletal Muscle Physiology & Human Performance*. Guest Lecturer: KIN 795 - Seminar in Kinesiology, San Francisco State University, San Francisco, CA 9/2015.
11. *Physiological Aspects of Aging*. Guest Lecturer: KINE 360 - Physical Activity and Aging, California State University, San Bernardino, CA 7/2014
12. *Rethinking Muscle Memory: Is it in Myonuclei?* CSUF International Coaching Clinic, California State University, Fullerton, CA. 7/2014.
13. *Lifelong Exercise and Healthy Aging*. Exercise Science Club Meeting, Ball State University, Muncie, IN. 4/2013.
14. *Lifelong Endurance Exercise and Skeletal Muscle Health*. National Institute of Education, Nanyang Technological University, Singapore. 1/2013.

Published Abstracts & Conference Presentations (Peer-reviewed)

1. Pardini CE, 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*)
2. Siu 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 composition. SWACSM Annual Meeting. Costa Mesa, CA. October 26-27, 2018. (*Poster Presentation*)
3. Gonzalez-Megia J, Henson LC, Kern M, **Bagley JR**, and ND Bolter. An insight into the efficacy of compression socks in post-exercise recovery. SWACSM Annual Meeting. Costa Mesa, CA. October 26-27, 2018. (*Poster Presentation*)
4. 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*)
5. 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*)

6. **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*)
7. 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*)
8. 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*)
9. 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*)
10. Gomez DH, Bolter N, Lee CM, **Bagley JR**, and M Kern, Metabolic Cost and 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*)
11. 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*)
12. 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*)
13. 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*)
14. 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*)
15. 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*)
16. 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*)

17. 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*)
18. 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*)
19. Tobias IS, **Bagley JR**, Brown LE, and AJ Galpin. AMPK subunit isoform expression differs between human skeletal muscle fiber types. ACSM Annual Meeting. Denver, CO. May 30 - June 3, 2017. (*Poster Presentation*)
20. 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 bioelectrical impedance analysis scale. ACSM Annual Meeting. Denver, CO. May 30 - June 3, 2017. (*Poster Presentation*)
21. 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. ACSM Annual Meeting. Denver, CO. May 30 - June 3, 2017. (*Poster Presentation*)
22. 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. ACSM Annual Meeting. Denver, CO. May 30 - June 3, 2017. (*Poster Presentation*)
23. 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. ACSM Annual Meeting. Denver, CO. (*Poster Presentation*)
24. **Bagley J**, Zapanta K, Cotter J and A Galpin. Women in Space: Studying Simulated Weightlessness on Slow-Twitch Muscle Fibers in Health Females. Annual CHSS Showcase (Theme: *Social Justice*). San Francisco State University, San Francisco, CA. May 4, 2017.
25. 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, 2016. (*Poster Presentation*)
26. 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*)
27. 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 16-17, 2015. (*Poster Presentation*)

28. 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*)
29. 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*)
30. 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*)
31. 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*)
32. **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*)
33. 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*)
34. 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*)
35. **Bagley J**, Marsh K, and A Galpin. Utilizing Technology to Teach Physiology: 3D Printing Human Muscle Cells. Annual CHSS Showcase - *Teaching, Scholarship, and Service*. San Francisco State University, San Francisco, CA. May 5, 2016.
36. **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*)
37. 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*)
38. 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*)

39. 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*)
40. 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*)
41. 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*)
42. **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*)
43. 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*)
44. **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*)
45. 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.
46. **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*)
47. 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*)
48. **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. (*Free-Communication / Slide Presentation*)

49. **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. (*Free-Communication / Slide Presentation*)
50. 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. (*Free-Communication / Slide Presentation*)
51. 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. (*Free-Communication / Slide Presentation*)
52. **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*)
53. 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*)
54. 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*)

Invited Poster Presentations

1. **Bagley JR**. Muscle Physiology Lecture Series: Bridging the Gap between Science and the Community. Annual CHSS Showcase (Theme: *Building Community*). San Francisco State University, San Francisco, CA. April 25, 2018.
2. Lorenz KA and **JR Bagley**. Muscle Physiology Lecture Series: Bridging the Gap between Science and the Community. Annual CHSS Showcase (Theme: *Building Community*). San Francisco State University, San Francisco, CA. April 25, 2018.
3. Curl C and **JR Bagley**. mTOR: The Muscle Hypertrophy Pathway. Kinesiology Research Expo, San Francisco State University, San Francisco, CA. December 7, 2017. (*Award: Best Grad Student Poster*)
4. **Bagley J**, Zapanta K, Cotter J and A Galpin. Women in Space: Studying Simulated Weightlessness on Slow-Twitch Muscle Fibers in Health Females. Annual CHSS Showcase (Theme: *Social Justice*). San Francisco State University, San Francisco, CA. May 4, 2017.
5. Zapanta K, **Bagley JR**, Cotter JA, and AJ Galpin. Effects of Concurrent Exercise during Simulated Microgravity on Soleus Muscle Fiber Myonuclear Content. Graduate Research and Creative Works Showcase. San Francisco State University, San Francisco, CA. April 20, 2017.
6. Steers BM, Farmer J, Kirk-Sorrow J, Lee CM, Kern M, and **JR Bagley**. Effects of Compression Socks on Muscle Recovery in Masters Runners. Graduate Research and Creative Works Showcase. San Francisco State University, San Francisco, CA. April 20, 2017.

7. Steele J and **J Bagley**. Effects of Heat Acclimation on Athletic Performance, Muscle Metabolism, and Physiology. Annual Kinesiology Department Research Expo. San Francisco State University, San Francisco, CA. December 8, 2016.
8. Penacerrada J and **J Bagley**. Effects of Short Term HIIT on Muscle Glucose Sensitivity. Annual Kinesiology Department Research Expo. San Francisco State University, San Francisco, CA. December 8, 2016.
9. Gomez D and **J Bagley**. Active Virtual Reality Games: Are They Really Active? Annual Kinesiology Department Research Expo. San Francisco State University, San Francisco, CA. December 8, 2016.
10. Curl C and **J Bagley**. Effects of Bodyweight Exercise on Excess Post-exercise Oxygen Consumption and Metabolic Expenditure. Annual Kinesiology Department Research Expo. San Francisco State University, San Francisco, CA. December 8, 2016.
11. **Bagley J**, Marsh K, and A Galpin. Utilizing Technology to Teach Physiology: 3D Printing Human Muscle Cells. Annual CHSS Showcase (Theme: *Teaching, Scholarship, and Service*). San Francisco State University, San Francisco, CA. May 5, 2016.

Media Coverage of Research

Television Appearances

1. **Discovery Channel**. *Segment on Daily Planet* (Aired in Canada, Oct. 5, 2017): <http://www.discovery.ca/Shows/Daily-Planet/video?vid=1221240>

Newspapers / News Websites

1. **BarBend.com**. Research shines light on how much genetics really impact fitness. By Jake Boly. August 20, 2018. <https://barbend.com/twin-genetic-research-differences/>
2. **The Globe and Mail**. Nature vs. Nurture: Study on twins shows athletic destiny not set at birth. By Alex Hutchinson. August 19, 2018: www.theglobeandmail.com/amp/life/health-and-fitness/article-nature-vs-nurture-study-on-twins-shows-athletic-destiny-not-set-at
3. **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>
4. **IFL Science!** Identical twins - a truck driver and a triathlete - answer part of the nature-nurture debate. By Tom Hale. July 23, 2018: <http://www.iflscience.com/health-and-medicine/identical-twins-a-truck-driver-and-a-triathlete-answer-part-of-the-nature-nurture-debate/>
5. **Bustle**. Heart health can impact your gut health, according to a new study. By Carolyn De Lorenzo. July 12, 2018: 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
6. **San Francisco Chronicle**. *S.F. State tests benefits of workouts in virtual reality games*. Nanette Asimov. Sept. 5, 2017: <http://www.sfchronicle.com/bayarea/article/S-F-State-tests-benefits-of-workouts-in-virtual-12175034.php>

Magazine Articles

1. **Women's Health Magazine.** *Meet Your New Personal Trainer.* By Kristin Canning (Jan./Feb. 2019).
2. **Runner's World.** *How Does Weight Loss Affect My Running Speed?* By Kiera Carter. Dec. 29, 2019: <https://www.runnersworld.com/beginner/a20843535/how-does-weight-loss-affect-my-running-speed/>
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. **Women's Health Magazine.** *Bot-ify you Bod.* By Marissa Gainsburg (March 2018): <https://www.womenshealthmag.com/fitness/g18736974/best-workout-gadgets-2018/>
5. **Men's Health Magazine.** *Inside the Muscle Cell.* By Lou Shuler (Jan./Feb. 2018).
6. **SF State Magazine.** *Game Theory.* By Matt Reed. Fall/Winter, 2017: <http://magazine.sfsu.edu/fall-17/game-theory>

Podcast Interviews

1. **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>
2. **Life Ready Podcast** *The Science of Muscle with Jimmy Bagley (Interview by Sean Cronan)* Aired: April 24, 2018: <https://itunes.apple.com/us/podcast/life-ready-podcast/id1376961572?mt=2>
3. **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?podcastid=1>
4. **Wellable Podcast** *Dr. Jimmy Bagley on VR Gamin for Employee Wellness.* Aired January 17, 2018: <http://blog.wellable.co/jimmy-bagley-on-vr-gaming-for-employee-wellness>
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=FLnFKV2ljis>
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/>

Research Funding

Funded Grants & Contracts

Office of Research and Sponsored Programs (ORSP), SF State Research and Scholarly Activity Fund Grant - \$10,000.00

San Francisco State University; 7/2018-7/2019

Title: *AMPK Localization in Human Muscle Fibers: Imaging the Cell's Energy Sensor via Confocal Microscopy*

PI: **JR Bagley**

Entrepreneurial Joint Venture Matching Grant - \$14,995.00

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

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

PI: **JR Bagley**

Experiment.com (Crowdfunding Platform for Scientific Research) - \$17,500.00

The Bill and Melinda Gates Foundation; 11/2016

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

Co-PIs: AJ Galpin, **JR Bagley**, I Tobias

Office of Research and Sponsored Programs (ORSP), Small Grant - \$14,000.00

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

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

PI: **JR Bagley**, Co-Investigators: J Cotter, AJ Galpin

Rossi Family Foundation, Traditional Grant Program - \$7,500.00

Project: *Muscle Physiology Lecture Series*

Period: 5/2016 - 4/2019

PI: **JR Bagley**

Development of Research and Creativity (DRC) Grant - \$8,000.00

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

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

PI: **JR Bagley**

Faculty Travel Award (to **JR Bagley**) - \$1,500.00

Department of Kinesiology, San Francisco State University; 9/2015

Teagle Foundation Grant for Curriculum Redesign Initiative

Doctoral Research Fellowship (to **JR Bagley**)

Graduate School, Ball State University, Period: 8/2010-12/2014

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

TEACHING

Full Courses Taught
San Francisco State University

KIN 355 - Science, Sport, and Fitness (Units: 3) 2016-18

Physiological and mechanical principles of sport and fitness. Evaluation of myths and truths about sport science, nutrition, injury prevention, physiology of exercise, sport, and individualizing training programs.

KIN 482 - Exercise Physiology (Units: 3) 2016-18

Examination of the acute physiological responses to exercise and the adaptations that occur with systemic exercise training.

KIN 555 - Exercise Testing and Prescription (Units: 3) 2015-18

Principles and practices of prescribing exercise to healthy individuals, and individuals with conditions such as cardiac problems, asthma, diabetes, pregnancy, and physical disabilities. Assists in preparation for ACSM certification. (Classwork, 2 units; laboratory, 1 unit)

KIN 681/781 - Muscle Mechanics (Units: 3) 2015-18

Basic and applied physiological properties of skeletal muscles, tendons and ligaments, in the context of the physiological adaptations from disuse, injury, and training.

KIN 683 - Applied Exercise Physiology (Units: 3) 2017

Application of basic exercise physiology principles to the enhancement of energy capacity, work tolerance under environmental stress, metabolic basis for weight and body composition control, and aging/health-related aspects of exercise.

KIN 699/899 - Independent Study (Units: 1-3) 2016-18

Intensive study of a particular problem under the direction of an instructor of the department. May be repeated for a total of six units.

KIN 897 - Independent Research in Kinesiology (Units: 3) 2016-18

Independent, original research investigation supervised by a graduate adviser. For students who selected the thesis culminating experience.

KIN 898 - Master's Thesis (Units: 3) 2016-18

Ball State University

EXSC 293 - Foundations of Physiology and Exercise (Units 3) 2014

Presents an introduction to exercise physiology by providing a basic overview of systems physiology at rest, along with the acute responses and chronic adaptations in these systems that are brought about by exercise.

California State University, Fullerton

KNES 100 - Physical Conditioning (1 Unit) 2009-10

KNES 348L - Physiology of Exercise Laboratory 2009-10
Laboratory techniques in physiology of exercise. (3 hours laboratory; 1 Unit)

Curricular Innovations**Curriculum Redesign**

Fall 2017: Designed and implemented Student Personal Training program (*KIN 555: Exercise Testing & Prescription*) in collaboration with FitPlus (Faculty-Staff Wellness Program).

Online Learning and Teaching

Summer 2016: Transformed traditional face-to-face course (*KIN 355: Science, Sport, and Fitness*) into fully online course

Mentoring**SF State Student Trainees**

Student Trainee	Years	Project	Current Position (Subsequent Education)
Steven Machek, BS*	2016-18	Muscle Plasticity with Powerlifting	<i>Doctoral Student, Baylor University, TX</i>
Donny Gregg, BS*	2016-18	Muscle Plasticity with Kidney Failure	<i>Lecturer, San Francisco State University, CA</i>
Andrew Kubiak, BS*	2016-18	BFR Training	<i>Personal Trainer, CA</i>
Ryan Durk, MS* #	2015-17	Gut Microbiota and Health	<i>Lecturer, San Francisco State University, CA</i>
Kaylie Zapanta, MS* #	2015-17	Muscle Plasticity with Unloading	<i>Doctoral Student, University of Southern California, CA</i>
Dulce Gomez, MS	2015-17	Active Virtual Realty Gaming	<i>Doctoral Student, Auburn University, AL</i>
Brittany Steers, MS	2015-17	Compression for Muscle Recovery	<i>Program Manager, EXOS, CA</i>
Kelly Hood, MS* #	2015-17	Body Composition Technology	<i>Medical Student, Western University of Health Sciences, CA</i>
Wes Turner, BS [†]	2015-16	EIM on Campus Club (<i>Founder</i>)	<i>Medical Student, University of Michigan, MI</i>
Elizabeth Yuen, BS [†]	2015-16	Exercise Benefits for Lupus Patients	<i>Medical Student, Rocky Vista University, CO</i>

Trainee Level: * Master's, # Post-Graduate, [†] Undergraduate

SERVICE

University Committees & Assignments

University Level - San Francisco State University

<i>Campus Security Authority, Student Affairs</i>	2016 - Present
<i>Faculty Advisor, Exercise is Medicine at SF State (Club)</i> - ACSM Exercise is Medicine on Campus (EIM-OC) Program	2015 - Present
<i>Faculty Marshal, Graduation Commencement at AT&T Park</i>	2016 - 2018
<i>Member, Lower Division Certification Committee (LDCC)</i>	2015 - 2017
<i>Member, Biosafety Committee</i>	2016 - Present

College Level - College of Health and Social Sciences

<i>Faculty Ambassador, Undergraduate Education and Academic Planning (CHSS Representative)</i>	2016 - 2018
<i>Faculty Representative, Graduate Recognition Ceremony</i>	2017 - 2018

Departmental Level - Department of Kinesiology

<i>Faculty Host, Alumni & Friends Gathering</i>	2016 - 2018
<i>Co-Master of Ceremonies, Kinesiology Department Recognition Ceremony, San Francisco State University</i>	May 2016
<i>Faculty Host, Exercise Physiology Laboratory, Sneak Preview</i>	2016 - 2018
<i>Founder/Organizer, Barbell Basics Workshop: Olympic Weightlifting</i>	2016 - 2018
<i>Founder/Organizer, Muscle Physiology Lecture Series</i>	2015 - Present
- Fall 2015 Guest Lecturer: Dr. Andy Galpin (CSU-Fullerton)	
- Spring 2016 Guest Lecturer: Dr. Kevin Murach (Univ. of Kentucky)	
- Fall 2016 Guest Lecturer: Dr. Ricardo Lima (Stanford Univ./VA Palo Alto)	
- Spring 2017 Guest Lecturers: Drs. Andy Galpin & Irene Tobias	
- Fall 2017 Guest Lecturer: Dr. George Brooks (UC-Berkeley)	
- Spring 2018 <i>Guest Lecturer</i> : Dr. Brandi Wright (Kaiser Permanente)	
- Spring 2018 <i>Guest Lecturer</i> : Dr. Nick Aguirre (Buck Institute)	
<i>Member, Alumni Events Committee</i>	2015 - 2017
<i>Member, Graduate Program Committee</i>	2018 - Present
<i>Member, Hiring Committee - Biomechanics Faculty</i>	2017 - 2018
<i>Member, Hiring Committee – Fitness & Wellness Coordinator</i>	2018

Professional Organizations

Memberships

American College of Sports Medicine (ACSM)	2007 - Present
Midwest Chapter - ACSM	2010 - 2015
Southwest Chapter - ACSM	2007 - 2010, 2015 - Present

Symposium Organizer, SWACSM Annual Meeting 10/2016
 - Title: *Skeletal Muscle Fiber Types and Human Performance: A Cellular and Molecular Perspective*

American Physiological Society (APS) 2009 - Present
 Environmental & Exercise Physiology Section 2009 - Present

National Strength and Conditioning Association (NSCA) 2007 - Present

Ad Hoc Journal Peer-Reviewer

Retrieved Metrics (8/2015-1/2019): <https://publons.com/author/1237751>

Total Reviews: 31 Articles

<i>Aerospace Medicine and Human Performance</i>	2015 - Present
<i>Experimental Physiology</i>	2016 - Present
<i>Gravitational and Space Research</i>	2012 - Present
<i>Frontiers in Physiology</i>	2018 - Present
<i>Journal of Applied Physiology</i>	2017 - Present
<i>Journal of Biological Engineering</i>	2016 - Present
<i>Journal of Strength and Conditioning Research</i>	2014 - Present
<i>Journal of Sports Sciences</i>	2016 - Present
<i>Medicine & Science in Sport & Exercise</i>	2018 - Present
<i>Muscle and Nerve</i>	2015 - Present
<i>PLOS One</i>	2018 - Present
<i>Strength and Conditioning Journal</i>	2016 - Present
<i>The Open Sports Sciences Journal</i>	2015 - Present

Grant Reviewer

Technical Reviewer - Student-Athlete Health & Well-Being Grant, NCAA Pac-12 Conference, 2018.

Certifications

Advanced Open Water Diver (SCUBA): PADI
 Basic Biomedical Research: Collaborative Institutional Training Initiative (CITI)
 Basic Life Support (CPR): American Health Association (AHA)
 Defensive Driving Training - DGS: The California State University
 Limited Phlebotomy Technician Certification: California Department of Public Health
 Protecting Human Research Participants: National Institutes of Health (NIH)
 Open Water Lifesaving: United States Lifesaving Association (USLA)
 OSHA Hazmat First Responder Operations: California Specialized Training Institute

HONORS AND AWARDS

Presidential Award for Professional Development of Probationary Faculty (<i>Early Sabbatical</i>) <i>Office of the President, San Francisco State University</i>	Spring 2016
Faculty-Undergraduate Student Research Collaboration Award <i>College of Health and Social Sciences, San Francisco State University</i>	2016
Honor Society Member <i>Sigma Xi, the Scientific Research Society</i>	2011 - 2015
Graduate Student Travel Award <i>ASPiRE Grant Program, Ball State University</i>	5/2011, 1/2013
Giles T. Brown Outstanding Thesis Award (Nominee) <i>College of Health & Human Development, California State University, Fullerton</i>	2011
Research Travel Award <i>Department of Kinesiology, California State University, Fullerton</i>	5/2010
Honor Society Member <i>Kappa Omicron Nu (KON) Honor Society - Human Sciences</i>	2009 - 2010
President's Honors List <i>California Polytechnic State University, San Luis Obispo</i>	2007 - 2008
Scholar Athlete <i>Western State Conference, Swimming & Water Polo</i>	2004 - 2005
Governor's Scholar Award <i>Governor's Scholarship Program, State of California</i>	2002