

CURRICULUM VITAE- Jeremy Mikhail Kellawan

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Associate Professor, Health and Exercise Science University of Oklahoma, Norman, Oklahoma, USA Department of Health and Exercise Science Director: Human Circulation Research Laboratory	2023-Present
Assistant Professor, Health and Exercise Science University of Oklahoma, Norman, Oklahoma, USA Department of Health and Exercise Science Director: Human Circulation Research Laboratory	2017-2023

Training and Education

Postdoctoral Fellow, Kinesiology (integrative vascular physiology) University of Wisconsin, Madison, Wisconsin, USA Department of Kinesiology, Integrative Exercise Physiology Laboratory Supervisor: Dr. William G. Schrage	2017
Ph.D., Kinesiology (exercise physiology) Queen's University, Kingston, Ontario, Canada School of Kinesiology and Health Studies, Human Vascular Control Laboratory Supervisor: Dr. Michael E. Tschakovsky	2013
M.Sc., Kinesiology (occupational exercise physiology) University of Victoria, Victoria, British Columbia, Canada School of Exercise Science, Physical and Health Education Supervisor: Dr. Lynne Stuart-Hill	2008
B.Sc. Honours (Human Kinetics, exercise physiology) University of Guelph, Guelph, Ontario, Canada Human Biology and Nutritional Sciences (Now, Human Health and Nutritional Sciences) Supervisors: Dr. Jack K. Barclay, Dr. Brian A. Wilson	2005

Research Interests

I am interested in researching the mechanisms and characteristics coupling cardiovascular support to metabolic demand in skeletal muscle and cerebral circulations. Specifically, I investigate vascular control mechanisms in these circulations in response to environmental and exercise stresses. Further, I aim to apply my research by designing physical activity/exercise interventions to improve vascular responses in healthy and disease populations.

Research Support

1. August 1, 2023, John F. Perkins, Jr. Research Career Enhancement Award. American Physiological Society, "Human Microneurography" - \$12,081 - Primary Investigator
2. May 1, 2023, Collaborative Research Faculty Fellowship (CRFF). Dodge Family College of Arts and Sciences, University of Oklahoma – "Nicotinamide Riboside Supplementation in Patients with Intermittent Claudication" - \$25,000 - Primary Investigator
3. May 12, 2021, Strategic Equipment Investment Program (SEIP). The Office of the Vice President for Research and Partnerships (OVRP), University of Oklahoma – "Lower Body Negative Pressure Chamber" - \$10,000 - Primary Investigator
4. April 18, 2018, Junior Faculty Fellowship, College of Arts and Sciences, University of Oklahoma – "Mechanisms of Cerebrovascular Control During Exercise in Hypertensive Humans" - \$7,000 – Primary Investigator
5. May 1, 2015-2017 Wisconsin Alzheimer's Disease Research Center's Pilot Funding – "Mechanisms of

cerebrovascular dysfunction in middle-aged adults with insulin resistance” - ~ \$30,000/yr – Co- investigator, Project leader

6. January 1, 2015-2017 American Heart Association Postdoctoral Fellowship – “*Mechanisms of cerebrovascular control: Acute insulin surges lead to brain hypoperfusion in human metabolic syndrome*” – ~\$ 42,000/yr - Primary Investigator (15POST23100020)
7. July 1, 2014-2017 University of Wisconsin – Madison, Graduate School, “*Insulin Resistance in Children: Neural, Vascular and Cognitive Consequences*” – ~ \$50,000 – Co-investigator, Project leader

Unsuccessful Research Support

1. October 16, 2020, NIH R21, National Center for Complementary and Integrative Health, PA-18-322, “*Effects of Anti-Hypertensive Acupuncture Treatment on Cerebral Blood Flow Response to Exercise in Hypertensive Humans*” - \$ 275,000 – Primary Investigator
2. February 20, 2020, *Does Lifestyle and Behavior Modification Improve Neurovascular Control and Cognition in Humans with Prediabetes?*” Sponsored by OUHSC Office of Vice President for Research and the Harold Hamm Diabetes Center, The University of Oklahoma, \$100,000, - Co- Primary Investigator
3. December 11, 2019, *Junior Faculty Fellowship, Vice President for Research and Partnerships, University of Oklahoma* – “*Effects of Anti-Hypertensive Acupuncture Treatment on Cerebral Blood Flow Response to Exercise*” - \$7,000 – Primary Investigator
4. April 19, 2019, DoD FY18 USSOCOM BAA Award for Extramural Medical Research, W81XWH-17-R-SOC1 (Human Operational Performance – Enhanced Physiological and Mental Performance) “*Physiological Stress Resilience: Optimizing Cognitive Performance During Physical Fatigue*” eBRAP # 1255906, SO# SO170062 - ~ \$700,000 - Co- Primary Investigator
 - Score 1.4 “outstanding” (Rating Scale: 1.0 (highest merit) to 5.0 (lowest merit)) - Unfunded
 - Pre-Application Approved and Invited to Submit, August 27, 2018 - DoD FY18 USSOCOM BAA Award for Extramural Medical Research, W81XWH-17-R-SOC1
5. Submitted June 2, 2019 - Mallinckrodt Foundation Grants Internal Competition - *Mechanisms of Cerebrovascular Control: Consequences of E-Cigarette Use*
6. Submitted April 26, 2019 - Pew Biomedical Scholars Internal Competition - *Mechanisms of Cerebrovascular Control: Consequences of E-Cigarette Use*
7. Submitted November 15, 2017 – Cigna, College of Arts and Sciences, University of Oklahoma – “*Is incentivizing an ounce of prevention worth a pound of cure?*” - \$10,000 – Primary Investigator

Academic Awards and Honors

The Physiological Society Travel Award	2019
American Physiological Society, Environmental and Exercise Physiology Section, Partnership for Clean Competition Postdoctoral Research Award	2017
American Physiological Society and The Physiological Society Joint Meeting Travel Award	2016
American Physiological Society, Environmental and Exercise Physiology Section, Postdoctoral Research Award	2016
American Heart Association Postdoctoral Fellowship	2015
American Physiological Society, Environmental and Exercise Physiology Military Physiology Beginning Investigator Award	2015
American Physiological Society, Nike, Inc. Loren G. Myhre, Environmental and Exercise Physiology Postdoctoral Investigator Award	2014
Ontario Graduate Scholarship	2011-2012
R.S. McLaughlin Fellowship	2010-2012
Ontario Graduate Scholarship in Science and Technology	2008-2010
University of Guelph Employees Scholarship	2001-2005
Dean’s List, College of Biological Sciences, University of Guelph Winter	2005
Dean’s List, College of Biological Sciences, University of Guelph Fall	2004
University of Guelph Entrance Scholarship	2001
Ontario Scholar (OAC)	2001

Scholarly Publications (peer reviewed, chronological order)

Articles

1. Chesbro, G., Owens, C., Reese, M., DeStefano, L., **Kellawan, J.M.**, Larson, D., Wenger, M., Larson, R. (2023) Changes in Brain Activity Immediately Post-Exercise Indicate a Role for Central Fatigue in the Volitional Termination of Exercise. *International Journal of Exercise Science* **in press**
2. Ashley, J.D., Shelley, J.H., Song, J., Sun, J., Larson, R.D., Larson, D.J., Berkowitz., **Kellawan, J.M.** (2023) Cerebral Blood Flow Dynamics: Is There More to the Story at Exercise Onset? *Physiological Reports* 11, 2023. doi: [10.14814/phy2.15735](https://doi.org/10.14814/phy2.15735)
3. Carter, K.J., Ward, A.T., **Kellawan, J.M.**, Harrell, J.W., Peltonen, G.L., Roberts, G., Al-Subu, A., Hagen, S., Serlin, R., Eldridge, M., Wieben, O., Schrage, W.G (2023) Reduced basal macrovascular and microvascular cerebral blood flow in young adults with metabolic syndrome: potential mechanisms. *Journal of Applied Physiology* 135(1): 94–108, 2023. doi: [10.1152/jappphysiol.00688.2022](https://doi.org/10.1152/jappphysiol.00688.2022)
4. Buchanan S.R., Miller R.M., Nguyen M., Black C.D., **Kellawan J.M.**, Bembem M.G., Bembem D.A. (2022). Circulating microRNA responses to acute whole-body vibration and resistance exercise in postmenopausal women. *Frontiers in Endocrinology*, 13, 1038371. doi: [10.3389/fendo.2022.1038371](https://doi.org/10.3389/fendo.2022.1038371)
5. Stone, B.L., Ashley, J.D., Skinner R.M., Polanco, J.P., Walters, M.T., Schilling, B.K., **Kellawan, J. M.** (2022) The Effects of a Short-Term Heat Acclimation Protocol in Elite Amateur Boxers. *Journal of Strength and Conditioning Research*, 36(7), 1966-1971 doi: [10.1519/JSC.0000000000004233](https://doi.org/10.1519/JSC.0000000000004233)
6. Owens, C., Mukli, P., Csipo, T., Lipecz, A., Silva-Palacios, F., Dasari, T., Tarantini, S., Gardner, A., Montgomery, P., Waldstein, S., **Kellawan, J.M.**, Nyul-Toth, A., Balasubramanian, P., Sotonyi, P., Csiszar, A., Ungvari, Z., Yabluchanskiy, A., (2022) Peripheral artery disease exacerbates microvascular endothelial dysfunction and neurovascular uncoupling, contributing to cognitive decline in older adults. *American Journal of Physiology: Heart and Circulatory Physiology*, 322, H924-H935
7. Chow A-M.D., Shin J, Wang H., **Kellawan J.M.**, Pereira H.M. (2022) Influence of Transcranial Direct Current Stimulation Dosage and Associated Therapy on Motor Recovery Post-stroke: A Systematic Review and Meta-Analysis. *Frontiers in Aging Neuroscience* 14: 821915 doi: [10.3389/fnagi.2022.821915](https://doi.org/10.3389/fnagi.2022.821915).
8. Limberg, J.K., Johansson, R.E., Carter, K.J., Peltonen, G.L., Harrell, J.W., **Kellawan, J.M.**, Eldridge, M.W., Sebranek, J.J., Walker, B.J., Schrage, W.G. (2022) Preserved β -adrenergic mediated vasodilation in skeletal muscle of young obese adults despite shifts in cyclooxygenase and nitric oxide synthase. *American Journal of Physiology: Heart and Circulatory Physiology*, 322, H25-H35
9. Carter, K.J., Ward, A.T., **Kellawan, J.M.**, Eldridge, M., Al-Subu, A., Walker, B., Lee, J.W., Wieben, O., Schrage, W.G. (2021) Nitric oxide synthase inhibition in healthy adults reduces regional and total cerebral macrovascular blood flow and microvascular perfusion. *The Journal of Physiology*, 599, 4973-4989.
10. Miller, R.M., Freitas, E.D.S., Heishman, A.D., Peak, K.M., Buchanan, S.R., **Kellawan, J.M.**, Pereira, H.M., Bembem, D.A., Bembem, M.G. (2021) Muscle Performance Changes with Age in Active Women *International Journal of Environmental Research and Public Health*, 18(9):4477. <https://doi.org/10.3390/ijerph18094477>
11. Csipo, T., Lipecz, A., Mukli, P., Bahadli, D., Abdulhusein, O., Owens, C., Tarantini, S., Hand, R.A., Yabluchanska, V., **Kellawan, J.M.**, Sorond, F.A., James, J.A., Csiszar, A., Ungvari, Z., Yabluchanskiy, A. (2021). Increased Cognitive Workload Evokes Greater Neurovascular Coupling Responses in Healthy Young Adults. *PLOS ONE*, 16(5), e0250043. <https://doi.org/10.1371/journal.pone.0250043>
12. Mukli P, Csipo T, Lipecz A, Stylianou O, Racz FS, Owens CD, Perry JW, Tarantini S, Sorond FA, **Kellawan J.M.**, Purebl G, Yang Y, Sonntag WE, Csiszar A, Ungvari ZI & Yabluchanskiy A (2021). Sleep deprivation alters task-related changes in functional connectivity of the frontal cortex: A near-infrared spectroscopy study. *Brain and Behavior* 11, e02135.
13. Csipo, T., Lipecz, A., Owens, C., Mukli, P., Perry, J.W., Tarantini, S., Balasubramanian, P., Nyul-Toth, A., Yabluchanska, V., Sorond, F.A., **Kellawan, J.M.**, Sonntag, W.E., Csiszar, A., Ungvari, Z., Yabluchanskiy, A. (2021). Sleep deprivation impairs cognitive performance, alters task-associated cerebral blood flow and decreases cortical neurovascular coupling-related hemodynamic responses. *Scientific Reports*, 11(1), 20994. doi: [10.1038/s41598-021-00188-8](https://doi.org/10.1038/s41598-021-00188-8). PMID: 34697326.
14. Ashley, J.D., Shelley, J.H., Sun, J., Song, J., Trent, J.A., Ambrosio, L.D., Larson, D.J., Larson, R.D., Yabluchanskiy, A., **Kellawan, J.M.** (2020). Cerebrovascular Responses to Graded Exercise in Young Healthy Males and Females. *Physiological Reports*, 8, e14622, <https://doi.org/10.14814/phy2.14622>
15. Stone, B.L., Beneda-Bender, M., McCollum, D.L., Sun, J., Shelley, J.H., Ashley, J.D., Fuenzalida, E., **Kellawan, J.M.** (2020). Understanding Cognitive Performance During Exercise in Reserved Officers' Training Corps: Establishing the Executive Function-Exercise Intensity Relationship. *Journal of Applied*

16. Gonzales, J.U., Fischer, S.M., Maharaj, A., Vellers, H., Anderson T, Karnjanapiboonwong A, Subbiah S, **Kellawan, J.M.**, Figueroa, A. (2020). Response of exercise-onset vasodilator kinetics to L-citrulline supplementation during different phases of the menstrual cycle. *Physiological Reports* 8, e14536, doi: 10.14814/phy2.14536.
17. **Kellawan, J.M.**, Peltonen, G.L., Harrell, J.W., Roldan-Azate, A., Wieben, O., Schrage, W.G. (2020) Differential contribution of cyclooxygenase to basal cerebral blood flow and hypoxic cerebral vasodilation. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 318, R468-R479
18. Sun, J., Ashley, J., **Kellawan, J.M.**, (2019) Can Acupuncture Treatment of Hypertension Improve Brain Health? A Mini Review *Frontiers in Aging Neuroscience* 11(240), 1-8
19. Rosenberry, R., Tucker, W.J., Haykowsky, M.J., Trojacek, D., Chamseddine, H.H., Arena-Marshall, C.A., Zhu, Y., Wang, J., **Kellawan, J.M.**, Tian, F., Nelson, M.D., (2019) Determinants of skeletal muscle oxygen consumption assessed by near-infrared diffuse correlation spectroscopy during incremental handgrip exercise. *Journal of Applied Physiology* 127, 698-706
20. Tucker, W.J., Rosenberry, R., Trojacek, D., Chamseddine, H.H., Arena-Marshall, C.A., Zhu, Y., Wang, J., **Kellawan, J.M.**, Haykowsky, M., Tian, F., Nelson, M.D. (2019) Studies into the determinants of skeletal muscle oxygen consumption: Novel insight from Near-infrared diffuse correlation spectroscopy *Journal of Physiology* 597 (11), 2887-2901
21. **Kellawan, J.M.**, Limberg, J.K., Scruggs Z.M., Nicholson, W.T., Schrage, W.G., Joyner, M.J., Curry, T.B. (2018) Phosphodiesterase-5 inhibition preserves exercise onset vasodilator kinetics when NOS activity is reduced *Journal of Applied Physiology* 124(2), 276-282
22. Limberg, J.K., Malterer, K.R., **Kellawan, J.M.**, Schrage, W.G., Wilkins, B.W., Nicholson, W.T., Eisenach, J.H., Joyner, M.J., Curry, T.B. (2017) Potentiation of the NO-cGMP pathway and blood flow responses during dynamic exercise in healthy humans. *European Journal of Applied Physiology* 117(2), 237-246
23. Hoscheidt S.M.*, **Kellawan J.M.***, Berman S.E., Rivera-Rivera L.A., Krause R.A., Oh J.M., Beeri M.S., Rowley H.A., Wieben O., Carlsson C.M., Asthana S., Johnson S.C., Schrage W.G., Bendlin B.B. (2017) Insulin resistance is associated with lower arterial blood flow and reduced cortical perfusion in cognitively asymptomatic middle-aged adults. *Journal of Cerebral Blood Flow and Metabolism* 37(6), 2249–2261 (***co-first author**)
24. **Kellawan, J.M.**, Harrell, J.W., Roldan-Azate, A., Wieben, O., Schrage, W.G. (2017) Regional hypoxic cerebral vasodilation facilitated by diameter changes primarily in anterior versus posterior circulation. *Journal of Cerebral Blood Flow and Metabolism* 37(6), 2025-2034
25. **Kellawan, J.M.**, Peltonen, G.L., Schrage, W.G. (2016) To measure diameter or not: experimental design is key: Comments on Crosstalk 30: The middle cerebral artery diameter does/does not change during alterations in arterial blood gases and blood pressure. *Journal of Physiology* 000.0, 1-8
26. Limberg, J.K., Peltonen, G.L., Johansson, R.E., Harrell, J.W., **Kellawan, J.M.**, Eldridge, M.W., Sebranek, J.J., Walker, B.J., Schrage, W.G. (2016) Greater beta-adrenergic receptor mediated vasodilation in women using oral contraceptives. *Frontiers in Physiology* 7(215), 1-8
27. Limberg, J.K., Johansson, R.E., Peltonen, G.L., Harrell, J.W., **Kellawan, J.M.**, Eldridge, M.W., Sebranek, J.J., Schrage, W.G. (2016) β -adrenergic mediated vasodilation in young men and women: Cyclooxygenase restrains nitric oxide synthase. *American Journal of Physiology: Heart and Circulatory Physiology* 310(6), H756-H764
28. **Kellawan, J.M.**, Harrell, J.W., Schrauben, E.M., Hoffman, C.A., Roldan-Alzate, A., Schrage, W.G., Wieben., O. (2016) Quantitative cerebrovascular 4D flow MRI at rest and during hypercapnia challenge. *Magnetic Resonance Imaging* 34, 422-428
29. Walsh, J.J., Scribbans T., Bentley, R.F., **Kellawan, J.M.**, Gurd, B.J., Tschakovsky, M.E. (2016) Neurotrophic growth factor responses to lower body resistance training in older adults. *Applied Physiology, Nutrition, and Metabolism* 41(3), 315-323
30. Owen A.L., **Kellawan, J.M.** (2015) Upstream Stiffness, downstream problems: not all arteries are equal. *Journal of Physiology* 593(20) 4517-4518
31. **Kellawan, J.M.**, Johansson, R.E., Harrell, J.W., Sebranek, J.J., Walker, B.J., Eldridge, M.W., Schrage, W.G. (2015) Greater exercise vasodilation in women: role of nitric oxide synthase and cyclooxygenase *European Journal of Applied Physiology* 115(8), 1735-1746
32. **Kellawan, J.M.**, Bentley, R.F., Bravo, M.F., Moynes, J.S., Tschakovsky, M.E. (2014) Does oxygen delivery explain inter-individual variation in forearm critical impulse? *Physiological Reports* 2(11), e12203

33. Limberg, J.K., **Kellawan, J.M.**, Harrell, J.W., Johansson R.E., Eldridge, M.W., Proctor, L.T., Sebranek, J.J., Schrage, W.G. (2014) Exercise-mediated vasodilation in human obesity and metabolic syndrome: Effect of acute ascorbic acid infusion. *American Journal of Physiology: Heart and Circulatory Physiology* 307(6), H840-H847
34. Bentley, R. F., **Kellawan, J. M.**, Moynes, J. S., Poitras, V. J., Walsh, J. J., Tschakovsky, M. E. (2014) Individual susceptibility to hypoperfusion and reductions in exercise performance when perfusion pressure is reduced: evidence for vasodilator phenotypes. *Journal of Applied Physiology* 117(4), 392- 405
35. **Kellawan, J. M.**, Tschakovsky, M. E. (2014) The Single-Bout Forearm Critical Force Test: A New Method to Establish Forearm Aerobic Metabolic Exercise Intensity and Capacity. *PLoS ONE*, 9(4)
36. Moynes, J., Bentley, R.F., Bravo, M., **Kellawan, J.M.**, Tschakovsky, M.E. (2013). Persistence of functional sympatholysis post-exercise in human skeletal muscle. *Frontiers in Exercise Physiology*, 4(131), 1–15
37. **Kellawan, J.M.**, Stuart-Hill, L.A., Petersen, S.R. (2009) The Effects of Caffeine During Exercise in Fire Protective Ensemble. *Ergonomics* 52(11), 1445-1454

Manuscripts Currently in Preparation (not yet submitted)

1. **Kellawan, J.M.**, Peltonen, G.L., Harrell, J.W., Carter, K.J., Roldan-Azate, A., Wieben, O., Schrage, W.G. Contribution of Cyclooxygenase to Hypoxic Cerebral Vasodilation in Metabolic Syndrome Individuals.
2. Matney, J., Buelow, A., Ashley, J.D., Song, J., Skillett, S.M., Sun, J., **Kellawan, J.M.** Contribution of Cytochrome P450 Pathways to Cerebrovascular Control and Autoregulation during Rest and Mild Hypovolemia in Healthy Men and Women
3. Buelow, A., Matney, J., Ashley, J.D., Song, J., Skillett, S.M., Sun, J., **Kellawan, J.M.** Contribution of Cytochrome P450 Pathways to Exercising Muscle Blood Flow and Sympatholysis

Research abstracts

1. Matney J.E, Buelow A., Skillett S., Ashley J.D., Song J., Mixon C., Black C., Pereira H., Sprick J.D., **Kellawan J.M.** (2024) CYP450 Inhibition on Cerebral Hemodynamics in Healthy, Young Males and Females During Simulated Hypovolemia. *Physiology* **in press**
2. Skillett, S., Song, J., Buelow, A., Matney, J., Mixon, C., Akbari, A., Stanford, M., Larson, D.J., Bembem, D.A., **Kellawan, J.M.** (2024). Effects of acute melatonin supplementation on cardiovascular variables during sympathetic stimuli in healthy young individuals. (2024). *Physiology* **in press**
3. Mixon C., Matney J., Buelow A., Skillett S., Ashley J.D., Song J., Black C., Pereira H., **Kellawan J.M.** Does acute melatonin supplementation affect cerebrovascular reactivity in healthy young adults? (2024). *Physiology* **in press**
4. Buelow A., Matney J., Skillett S., Ashley J.D., Song J., Mixon C., Bembem, D.A., Larson D.J., **Kellawan J.M.** Sex Difference in Reliance on CYP450 Contribution to Functional Sympatholysis in Healthy, Young Adults. (2024) *Physiology* **in press**
5. Akbari Fakhrabadi, A., Buelow, A.A., Matney, J.E., Skillett, S., Mixon, C., Song, J., **Kellawan, J.M.**, Sex differences in the Brachial Flow-Mediated Dilatation and Related Mechanisms: Role of Cytochrome P450-2C9 Signaling. (2024) *International Journal of Exercise Science: Conference Proceedings* **in press**
6. Matney J.E, Buelow A., Skillett S., Ashley J.D., Song J., Mixon C., Black C., Pereira H., Sprick J.D., **Kellawan J.M.** Does inhibition of cytochrome P450 2C9 alter cerebral hemodynamics at rest or during simulated mild hypovolemia? (2023) *Physiology* 38 (s1): <https://doi.org/10.1152/physiol.2023.38.S1.5731470>
7. Song J., Buelow A., Matney J., Skillett S., Ashley J.D., Mixon C., Bembem, D.A., Larson D.J., **Kellawan J.M.** Are observed sex differences in forearm exercise vasodilation mediated through differences in cytochrome P4502C9 signaling? (2023) *Physiology* 38 (s1): <https://doi.org/10.1152/physiol.2023.38.S1.5731489>
8. Buelow A., Matney J., Skillett S., Ashley J.D., Song J., Mixon C., Bembem, D.A., Larson D.J., **Kellawan J.M.** Contribution of cytochrome P450 2C9 pathways to functional sympatholysis in healthy young adults. (2023) *Physiology* 38 (s1): <https://doi.org/10.1152/physiol.2023.38.S1.5731483>
9. Mixon C., Matney J., Buelow A., Skillett S., Ashley J.D., Song J., Black C., Pereira H., **Kellawan J.M.** Do cytochrome P450 2C9 pathways contribute to the cerebrovascular response to small muscle exercise? (2023) *Physiology* 38 (s1): <https://doi.org/10.1152/physiol.2023.38.S1.5795737>
10. Skillett S., Mixon C., Buelow A., Matney J., Ashley J.D., Song J., Sun J, McKenzie N., **Kellawan J.M.** The effects on cytochrome P450 pathway inhibition on reactive hyperemia in healthy young adults (2023) *Physiology* 38 (s1): <https://doi.org/10.1152/physiol.2023.38.S1.5731463>
11. Hubbard C., Curiel A., Larson, R., **Kellawan, J.M.**, Pereira H., Black C. The Role of Oxygen Desaturation

and Mitochondrial Function on Time-to-Task Failure (2023) *International Journal of Exercise Science: Conference Proceedings: Vol. 11: Iss. 10, Article 61*

12. Ashley, J.D., Shelley, J.H., Song, J., Sun, J., Adler, C., **Kellawan, J.M.** Cerebrovascular Dynamics During Light Exercise. (2022) *FASEB Journal*, 36(S1), R5532, <https://doi.org/10.1096/fasebj.2022.36.S1.R5532>
13. Miller, R.M., Heishman, A.D., Freitas, E.D.S., Peak, K.M., Carr, J., Buchanan, S.R., **Kellawan, J.M.**, Pereira, H.M., Bembem, D.A., Bembem, M.G. Midthigh muscle composition across the adult female lifespan (2021) *Medicine & Science in Sports & Exercise*, 53(S), p128
14. Csipo, T., Lipecz, A., Mukli, P., Bahadli, D., Abdulhussein, O., Owens, C., Tarantini, S., Hand, R.A., Yabluchanska, V., **Kellawan, J.M.**, Sorond, F.A., James, J.A., Csiszar, A., Ungvari, Z., Yabluchanskiy, A. (2021). Increased Cognitive Workload Evokes Greater Neurovascular Coupling Responses in Healthy Young Adults. (2021) *fNIRS 2021, Society of fNIRS Virtual Conference 2021*
15. Ashley, J.D., Stone, B.L., Sun, J., Shelley, J.H., Ambrosio, L., Beneda-Bender, M., McCollum, D.L., Fuenzalida, E., **Kellawan, J.M.** High Intensity Exercise Compromises Prefrontal Cortex Oxygenation and Executive Function in Reserved Officer Training Corps Cadets. (2020) *FASEB Journal*, 34(S1)
16. Sun, J., Shelley, J.H., Ashley, J.D., Stone, B.L., Song, J., Trent, J.A., **Kellawan, J.M.** Cerebrovascular Responses to Graded Exercise Between Young Healthy Men and Women. (2020) *FASEB Journal*, 34(S1)
17. Trent, J.A., Stone, B.L., Sun, J., Ashley, J.D., Shelley, J.H., Ambrosio, L., Beneda-Bender, M., McCollum, D.L., Fuenzalida, E., **Kellawan, J.M.** Impacts of Concurrent Cognitive Challenge on Aerobic Performance During Graded Exercise. (2020) *FASEB Journal*, 34(S1)
18. Brubaker, J.M., Carter, K.J., Ward, A.T., **Kellawan, J.M.**, Harrell, J.W., Eldridge, M.W., Roldan, A., Wieben, O., Schrage, W.G. Does Hypoxia Affect Pulse Transit Time in Healthy Controls? (2020) *FASEB Journal*, 34(S1)
19. Muer, J.D., Ward, A.T., Carter, K.J., **Kellawan, J.M.**, Harrell, J.W., Roldan, A., Wieben, O., Eldridge, M.W., Schrage, W.G. Does Insulin Resistance Alter Pulse Transit Time in the Cerebral Circulation? (2020) *FASEB Journal*, 34(S1)
20. Gonzales, J.U., Fischer, S.M., Maharaj, A., **Kellawan, J.M.**, Figueroa, A. L-citrulline Does Not Change Blood Flow Kinetics at The Onset of Exercise in Young Women. (2020) *Medicine & Science in Sports & Exercise*, 52(7S), p 225
21. Buchanan, S., Nguyen, M., Miller, R., **Kellawan, J.M.**, Black, C., Bembem, M., Bembem, D. C-miRNA Expression Responses to Whole-Body Vibration and Resistance Exercise in Postmenopausal Women. (2020) *Medicine & Science in Sports & Exercise*, 52(7S), p 491-492
22. Miller, R.M., Heishman, A.D., Freitas, E.D.S., Buchanan, S.R., Kaur, J., Brown, B.S., Peak, K.M., Norman, J.N., Joniak, K.E., **Kellawan, J.M.**, Pereira, H.M., Bembem, D.A., Bembem, M.G. Critical Ages for Changes in Isometric Force Production in Women Aged 20 To 89 Years. (2020) *Medicine & Science in Sports & Exercise*, 52(7S), p 558
23. Ashley, J.D., Shelley, J.H., Stone, B.L., Sun, J., Ambrosio, L., **Kellawan J. M.** Exercise-Onset-Induced Hypotension Activates Cerebrovascular Response to Exercise (2019) *Physiology 2019 Meeting*, Aberdeen, UK, Proc Physiol Soc (43) PC 125
24. Shelley, J.H., Ashley, J.D., Stone, B.L., Sun, J., Ambrosio, L., **Kellawan J. M.** Cerebrovascular Response to Graded Exercise in Young Men and Women: A Pilot Study (2019), *Physiology 2019 Meeting*, Aberdeen, UK, Proc Physiol Soc (43) PC 126
25. Stone B.L., Ashley, J.D., Skinner R.M., Polanco J.P., Walters M.T., **Kellawan J. M.** The Effects of a Short-Term Heat Acclimation Protocol in Elite Amateur Boxers (2019), *Physiology 2019 Meeting*, Aberdeen, UK, Proc Physiol Soc (43) PC 103
26. Stone, B., Miller, R.M., Heishman, A.D., Campbell, J.A., **Kellawan, J.M.**, (2018) Fitness and Performance to Load Carriage Specific Training in Reserved Officers Training Corps *Exp Biol Meeting, San Diego, CA FASEB Journal*, 32(1 supplement)
27. Ashley, J.D., **Kellawan, J.M.**, Gonzales, J.U., (2018) Effects of L-citrulline on Blood Pressure Response to Exercise in Older and Younger Adults *Exp Biol Meeting, San Diego, CA FASEB Journal*, 32(1 supplement)
28. Carter, K.J., **Kellawan, J.M.**, Ward, A.T., Johansson, R.E., Harrell, J.W., Peltonen., G.L., Sauder, C.J., Eldridge, M.W., Schrage, W.G., (2018) Does Obesity Differentially Impact Male and Female Responses to Skeletal Muscle Vasodilation During Exercise? *Exp Biol Meeting, San Diego, CA FASEB Journal*, 32(1 supplement)
29. Ward, A.T., Carter, K.J., Sauder, C., **Kellawan, J.M.**, Weiben, O., Schrage, W.G., (2018) Cerebrovascular Regulation During an Insulin-Glucose Challenge: Contribution of Nitric Oxide *Exp Biol Meeting, San Diego,*

CA FASEB Journal, 32(1 supplement)

30. **Kellawan, J.M.**, Limberg, J.K., Scruggs Z.M., Nicholson, W.T., Schrage, W.G., Joyner, M.J., Curry, T.B., (2017) Individual and Combined Effects of Phosphodiesterase-5 and Nitric Oxide Synthase Inhibition to Vasodilation During Moderate Exercise *Exp Biol Meeting, Chicago, IL FASEB Journal*
31. Peltonen, G.L., **Kellawan, J.M.**, Ward, A.T., Carter, K.J., Carrel, A.L., Rehm, J.L., Oh, J., M., Bendlin, B.B., and Schrage, W.G. (2017) Oral Glucose Tolerance Test in Insulin Resistant Adolescents Induces Regionally Different Macro- and Microvascular Responses in the Cerebral Circulation *Exp Biol Meeting, Chicago, IL The FASEB Journal*, 31(1 Supplement), 883-25.
32. Carter, K.J., **Kellawan, J.M.**, Peltonen, G.L., Ward, A.T., Carrel, A.L., Wieben, O., Bendlin, B.B., & Schrage, W.G. (2017). Regional Patterns of Pulsatility Index and Wall Shear Stress Across Cerebral Circulation of Adolescents with Insulin Resistance *Exp Biol Meeting, Chicago, IL The FASEB Journal*, 31(1 Supplement), 836-10.
33. Ward, A. T., **Kellawan, J. M.**, Peltonen, G. L., Carter, K. J., Rehm, J. L., Oh, J. M., & Schrage, W. G. (2017). Altered Basal Cerebral Perfusion in Adolescents with Insulin Resistance. *Exp Biol Meeting, Chicago, IL, The FASEB Journal*, 31(1 Supplement), 836-11.
34. **Kellawan, J.M.***, Hoscheidt, S.M*, Berman S.E., Rivera-Rivera L.A., Krause R.A., Oh J.M., Beeri M.S., Rowley H.A., Wieben O., Carlsson C.M., Asthana S., Johnson S.C., Schrage W.G., Bendlin B.B. (2016) Insulin resistance is associated with lower cerebral blood flow and hypoperfusion in cognitively healthy middle-aged adults. *Physiology 2016 (Dublin, Ireland) Proc Physiol Soc 37, PCA356*
35. **Kellawan, J.M.**, Harrell, J.W., Roldan-Alzate, A., Wieben, O., Schrage, W.G. (2016) Hypercapnic responses uncover regional cerebrovascular dysfunction and a varying role of cyclooxygenase in young adults with metabolic syndrome *Exp Biol Meeting, San Diego, CA FASEB Journal*
36. Peltonen GL, Limberg JK, Johansson RE, Harrell JW, **Kellawan JM**, Crain MK, Eldridge MW, Sebranek J, Walker BJ, Schrage WG. (2016). Greater beta-Adrenergic Receptor Mediated Vasodilation in Women Using Oral Contraceptives. *FASEB JOURNAL* 30
37. Aleckson BP, **Kellawan M**, Harrell JW, Schrauben EM, Hoffman CA, Roldan-Alzate A, Wieben O, Schrage WG. (2016). Differential wall shear stress patterns in cerebral circulation of prediabetic adults: Possible evidence for increased stroke risk? *FASEB JOURNAL* 30.
38. **Kellawan, J.M.**, Harrell, J.W., Roldan-Alzate, A., Wieben, O., Schrage, W.G. (2015) Quantitative 4D Flow MRI during Hypoxia Identifies Non-uniform Cerebrovascular Dysfunction in Young Adults with Metabolic Syndrome. *Exp Biol Meeting, Boston, MA, FASEB Journal* 29:994.2
39. Peltonen, G.L., Johansson, R.E., Limberg, J.K., Harrell, J.W., Ernst, B.S., **Kellawan, J.M.**, Crain, M.K., Eldridge, M.W., Sebranek, J.J., Walker, B.J., Schrage, W.G. (2015) Greater β -Adrenergic Vasodilation in Healthy Men Versus Women: Cyclooxygenase Suppresses Nitric Oxide. *Exp Biol Meeting, Boston, MA FASEB Journal* 29:1053.4
40. **Kellawan, J.M.**, Johansson, R.E., Harrell, J.W., Trierweiler J., Sebranek, J.J., Walker, B.W., Eldridge, M.W., Schrage, W.G. (2014) Skeletal muscle vasodilation during exercise in human obesity: contributions of nitric oxide and prostaglandins *CSEP Meeting, St. John's NL Applied Physiology, Nutrition and Metabolism*, 39 S24
41. **Kellawan, J.M.**, Harrell J.W., Roldan-Alzate A., Rousseau, C., Wieben, O., Schrage, W.G. (2014) 4D MRI to quantify cerebral blood flow during environmental challenges. *International Society for Magnetic Resonance in Medicine Joint Annual Meeting, Milan, Italy* abstract number: 1814
42. **Kellawan, J.M.**, Johansson, R.E., Harrell, J.W., Treierweiler J., Crain, M.K., Sebranek, J.J., Walker, B.J., Eldridge, M.W., Schrage, W.G. (2014) Sex differences observed in forearm exercise vasodilation are not mediated through differences in nitric oxide or prostaglandin signaling. *Exp Biol Meeting, San Diego, CA FASEB Journal* 28:1106.3
43. **Kellawan, J.M.**, Bentley, R.F., Walsh J.J., Moynes, J.S., Tschakovsky, M.E. (2013) Sensitivity of forearm critical power to acute manipulation of perfusion pressure *Exp Biol Meeting, Boston, MA FASEB Journal* 27:1125.4
44. Walsh J.J., Scribbans T., Bentley, R.F., **Kellawan, J.M.**, Gurd, B., Tschakovsky, M.E. (2013). Neurotrophic growth factor response to lower body resistance training in older adults. *Exp Biol Meeting, Boston, MA FASEB Journal* 27:934.4
45. **Kellawan, J.M.**, Bravo, M.F., Moynes, J.S., Walsh, J.J., Bentley, R.F., Tschakovsky, M.E. (2012). Inter-Individual differences in rapid vasodilation in older males with and without type 2 diabetes. *Exp Biol Meeting San Diego, CA FASEB Journal* 26: 860.14

46. **Kellawan, J.M.**, Bentley, R.F., Walsh, J.J., Tschakovsky, M.E. (2011). Characterization of the cerebrovascular response to an initial orthostatic hypotension stimulus in young adults. *CSEP meeting, Quebec City, QC Applied Physiology, Nutrition, and Metabolism*. 36:(S2), S330
47. Walsh, J.J., Bentley, R.F., **Kellawan, J.M.**, Tschakovsky, M.E. (2011). Lower limb muscle tensing attenuates reduction in cerebral perfusion upon active standing from squat. *CSEP meeting, Quebec City, QC Applied Physiology, Nutrition, and Metabolism*. 36:(S2), S356.
48. Bentley, R.F., Walsh, J.J., **Kellawan, J.M.**, Tschakovsky, M.E. (2011). Determining the effectiveness of a 5 second bend over manoeuvre in maintaining cerebral blood flow in initial orthostatic hypotension stimulus. *CSEP meeting, Quebec City, QC Applied Physiology, Nutrition, and Metabolism*. 36:(S2), S303
49. Bentley, R.F., Hong, T., Poitras, V., **Kellawan, J.M.**, Pak, M., Jazuli, F., Chung, B., Tschakovsky, M.E. (2011). Challenging O₂ delivery: metabolism coupling in small muscle mass exercise. *Exp Biol Meeting, Washington, DC FASEB Journal*. 25: 1023.4
50. **Kellawan, J.M.**, Bravo, M.F., Moynes, J.S., Bentley, R., Shantz, R., Tschakovsky, M.E. (2011) Inter-individual oxygen delivery differences strongly influence estimated critical power in an all-out exercise test *Exp Biol Meeting, Washington, DC FASEB Journal* 25:1023.3
51. Bravo, M.F., **Kellawan, J.M.**, Moynes, Bentley, J.S., Bentley, R., Shantz, R., Tschakovsky, M.E. (2011) Inter-individual differences in coupling oxygen delivery to demand during a progressive exercise test *Exp Biol Meeting, Washington, DC FASEB Journal* 25:1023.5
52. Walsh, J.J., Moynes, J.S., **Kellawan, J.M.**, Bentley, R., Bravo, M.F., Shantz, R., Tschakovsky, M.E. (2011) Inter-individual differences in coupling oxygen delivery to exercising muscle metabolic demand. *Exp Biol Meeting, Washington, DC FASEB Journal* 25:1023.2
53. **Kellawan, J.M.**, Moylan, D., Nelson, C., Bentley, R., Tschakovsky, M.E. (2010) Determining Critical Power in Forearm Handgrip Exercise: Repeatability of a Single "All-Out" Exercise Test. *ACSM Meeting, Baltimore, MD Medicine & Science in Sport & Exercise* 42(5), S404
54. **Kellawan, J.M.**, Webb, K., O'Donnell, D.E., Tschakovsky, M.E. (2009) Evidence for Impaired Exercising Forearm and Leg Muscle Blood Flow at Higher Exercise Intensity in COPD. *ACSM Meeting, Seattle, WA Medicine & Science in Sport & Exercise* 41(5), 4
55. **Kellawan, J.M.**, Wolski, L.A., (2007). Infrared Ear Thermometers Do Not Accurately Measure Core Temperature in Fire Fighters During Recovery. *ACSM Meeting, New Orleans, LA Medicine & Science in Sport & Exercise* 39(5), S414
56. **Kellawan, J.M.**, Nelson M.D., Wolski, L.A., (2006). The Effects of Utilizing the Valsalva Acceleration Technique on Speed and Power Performance. *ACSM Meeting, Denver, CO Medicine & Science in Sport & Exercise* 38(5), S297
57. Nelson, M.D., **Kellawan, J.M.**, Wolski, L.A., (2006). The Valsalva Maneuver Revisited: A Natural Occurring Phenomenon Leading to Strength Acquisition. *ACSM Meeting, Denver, CO Medicine & Science in Sport & Exercise* 38(5), S284
58. Wilson, B.A., Tkaczyk, T.M., **Kellawan, J.M.** (2005) Effects of Oxygen Breathing on Wingate Test Parameters. *ACSM Meeting, Nashville, TN Medicine & Science in Sport & Exercise* 37(5), S102

Invited Presentations

1. Seminar Speaker, *Going with the Flow: Investigating how Blood Flow is Matched to Metabolic Demand in Human Health and Disease*. **First Friday Seminar Series**, School of Biomedical Sciences, Oklahoma State University - Center for Health Sciences, Tulsa, OK, USA, November 3, 2023
2. Seminar Speaker, *Investigating Vascular Control in Humans*. **Rehabilitation Sciences Research Roundtable**, College of Allied Health. University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA, April 30, 2021
3. Seminar Speaker, *Cerebrovascular Control During Exercise*. **Biochemistry and Cell Biology Seminar Series**, Departments of Biochemistry & Molecular Biology, and Cell Biology. University of Oklahoma Health Sciences Center, Oklahoma City, OK, USA, July 22, 2020
4. Seminar Speaker, *Cerebrovascular responses to graded exercise in young men and women*. **Neuromunch Seminar Series**, Department of Biology, University of Oklahoma, Norman, OK, USA, March 27, 2020
5. Chair for Feature Topic, *Battle of the reflexes: chemo-vs. baroreflexes during physiological stressors, aging, and cardiovascular disease*. Neural Control and Autonomic Regulation Section, APS Annual Meeting at **Experimental Biology 2018**, San Diego, CA, USA, April 21-25, 2018
6. Presenter and Panel member, *Panel Discussion with American Physiological Society (APS) Professionals*,

2018 National Conference on Undergraduate Research (NCUR), University of Central Oklahoma, Edmond, OK, USA, April 4-6, 2018

7. Free Communication, Individual and Combined Effects of Phosphodiesterase-5 and Nitric Oxide Synthase Inhibition to Vasodilation During Moderate Exercise. **Integrative Physiology Laboratory, Department of Kinesiology and Nutrition, University of Illinois at Chicago**. Chicago, IL, April 22, 2017
8. Free Communication, Insulin resistance is associated with lower arterial blood flow and cortical hypoperfusion in cognitively healthy middle-aged adults. **The Early Career Physiologist Symposium, Physiology 2016, Joint meeting of the American Physiological Society and The Physiological Society**. Dublin, IE, July 29-31, 2016
9. Free Communication, *Skeletal muscle vasodilation during exercise in human obesity: Contributions of nitric oxide and prostaglandins*. **Canadian Society for Exercise Physiology 2014 Annual General Meeting: "Science on the Edge of the Continent"**. St. John's, NL, October 22-25, 2014.
10. Free Communication, *Inter-individual oxygen delivery differences strongly influence estimated critical power in an all-out exercise test*. Featured Topic entitled Coupling Blood flow to Metabolic Demand: New Insights and Perspectives. **Experimental Biology 2011**. Washington, DC, April 9-13, 2011
11. Free Communication, Determining Critical Power in Forearm Handgrip Exercise: Repeatability of a Single "All-Out" Exercise Test. **Ontario Exercise Physiology Conference 2010**. Barrie, ON, January 22-24, 2010
12. Free Communication, *The effects of caffeine ingestion on firefighter work tolerance*. **Canadian Society for Exercise Physiology 2008 Annual General Meeting: "Exercise in Health and Disease"**. Banff, AB, October 15-18, 2008.
13. Invited Speaker, *Health and Safety Issues of Caffeine Ingestion for Firefighters*, University of Victoria, **School of Exercise Science, Physical and Health Education's 2nd annual Health Research Symposium**. April 2008
14. Invited Speaker, *Physiological Research and Life as a Graduate student at the University of Victoria*, University of Victoria, School of Exercise Science, Physical and Health Education. September 2007.
15. Invited Speaker, *The Effects of Exercise Training on Insulin Sensitivity*, University of Victoria, **Obesity Mini-Symposium**, School of Exercise Science, Physical and Health Education. October 2005

Pedagogical Training

2010-2011

- Completed a course on teaching and learning in higher education; centered on scholarship of teaching and learning and developing strategies to enhance Post-Secondary educational experience
- Received additional certifications in university teaching and learning in: Foundations of Teaching and Learning, Practical Experience, and Scholarship from the Centre for Teaching and Learning at Queen's University

Teaching interests

I am interested in teaching general human physiology both at the systemic and cellular level especially during exercise. I excel in teaching courses aimed at investigating the physiological factors affecting health, exercise, and occupational performance and tolerance. I am also interested in teaching courses focused on exercise prescription in healthy and diseased populations.

Mentoring Experience

Student Awards

Sarah Skillett - G. Michael Simms Scholarship	2023
John Ashley - Travis Beck Memorial Scholarship	2022
Jacob Matney – G. Michael Simms Scholarship	2022
Brandon Stone – Robberson Research Award, University of Oklahoma	2019

John Ashely – Physiological Society Travel Award	2019
Joe Shelley – Physiological Society Travel Award	2019
Benjamin Aleckson - Barbara A. Horwitz and John M. Horowitz Undergraduate Research Awards – American Physiological Society	2016
<u>Postdoctoral Mentorship</u>	2019
Postdoctoral Supervisor – Jongjoo Sun, KMD, PhD, Department of Health and Exercise Science, University of Oklahoma	2018-2023
<u>Graduate Mentorship</u>	
Predocctoral Supervisor – Brandon Stone, MS, Department of Health and Exercise Science, University of Oklahoma	2017-2019
Predocctoral Supervisor – John Ashley, MS, Department of Health and Exercise Science, University of Oklahoma	2017-2022
Predocctoral Supervisor – Jiwon Song, MS, Department of Health and Exercise Science, University of Oklahoma	2019-2023
Predocctoral Supervisor – Jeonghwa Shin, MS, Department of Health and Exercise Science, University of Oklahoma	2021-2022
Predocctoral Supervisor – Alexander Buelow, Department of Health and Exercise Science, University of Oklahoma	2022-Current
Predocctoral Supervisor – Amir Akbari Fakhrabadi, Department of Health and Exercise Science, University of Oklahoma	2022-Current
Master’s Supervisor – Joe Shelley, Department of Health and Exercise Science, University of Oklahoma	2017-2020
Master’s Supervisor – Jacob Trent, Department of Health and Exercise Science, University of Oklahoma	2019-2020
Master’s Supervisor – Jacob Matney, Department of Health and Exercise Science, University of Oklahoma	2020-2023
Master’s Supervisor – Alexander Buelow, Department of Health and Exercise Science, University of Oklahoma	2020-2022
Master’s Supervisor – Sarah Skillett, Department of Health and Exercise Science, University of Oklahoma	2021-2023
Master’s Supervisor – Chris Mixon, Department of Health and Exercise Science, University of Oklahoma	2022-Current

Master's Supervisor – Matthew Stanford, Department of Health and Exercise Science, University of Oklahoma	2023-Current
Master's Supervisor – Ife Nwafor, Department of Health and Exercise Science, University of Oklahoma	2023-Current
Shapiro Summer Research Program, Mentored Research Supervisor – Aaron Owen, School of Medicine and Public Health, University of Wisconsin – Madison	2015
<u>Undergraduate Mentorship</u>	
Mentored Research Experience HES 3440 – Nathan McKenzie, Department of Health and Exercise Science, University of Oklahoma	2022-2023
Undergraduate Research Experience, non credit – Tylar Lason, Department of Health and Exercise Science, University of Oklahoma	2022-2024
First Year Research Experience (FYRE) University of Oklahoma – Honors College – Adam Hanizeski, Honors College, University of Oklahoma	2022-2023
Honors Research HES 3980 – Courtney Adler, Department of Health and Exercise Science, University of Oklahoma	2021
Honors Research HES 3980 – Chris Mixon, Department of Health and Exercise Science, University of Oklahoma	2021-2022
Mentored Research Experience HES 3440 – Somia Ali, Department of Health and Exercise Science, University of Oklahoma	2021
Mentored Research Experience HES 3440 – Sarah Skillett, Department of Health and Exercise Science, University of Oklahoma	2021
McNair Scholar Supervisor – Luis Ambrosio, Department of Health and Exercise Science, University of Oklahoma	2018-2019
McNair Scholar Supervisor – Otto Orellana, Department of Health and Exercise Science, University of Oklahoma	2018-2019
Undergraduate Student Research Supervisor, HES 4990 – Sarah Skillet, Department of Health and Exercise Science, University of Oklahoma	2020-2021
American Physiological Society Undergraduate Summer Research Program, Mentored Research Supervisor – Benjamin Aleckson, Department of Kinesiology, University of Wisconsin – Madison	2015-2016
Supervisor - Biology 152, Mentored Research, Department of Kinesiology, University of Wisconsin – Madison (1 student per year)	2013-2016
Assistant Supervisor - KNPE 595, Honors Thesis in Kinesiology (2 students), School of Kinesiology and Health Studies, Queen's University	2009-2010

High School Student Mentorship

Research Experience for High School Credit – Abigail Gray, High School Junior,
Norman North High School

2022 - Current

Teaching Experience

Graduate Courses

Course Instructor – HES 5823 Exercise Physiology, Department of Health and Exercise
Science, University of Oklahoma

2023

Course Instructor – HES 6970 Seminar in Health and Exercise Science, Department of
Health and Exercise Science, University of Oklahoma

2022

Course Instructor – HES 6823 Cardiorespiratory Exercise Physiology, Department of Health
and Exercise Science, University of Oklahoma

2017-Current

Course Instructor – HES 5863 Physiology of Aging, Department of Health and Exercise
Science, University of Oklahoma

2018-Current

Guest Lecturer – Kinesiology 615, Laboratory Techniques in Exercise Physiology
Department of Kinesiology, University of Wisconsin – Madison

2013-2017

Undergraduate Courses

Course Instructor – HES 4953 Senior Capstone, Department of Health and Exercise
Science, University of Oklahoma

2020-Current

Course Instructor – HES 3853 Exercise Testing and Prescription, Department of Health
and Exercise Science, University of Oklahoma

2017-Current

Course instructor - KNPE 429, Cardiovascular and Respiratory Control during
Exercise, School of Kinesiology and Health Studies, Queen's University

2011

Laboratory instructor – KNPE 429, Cardiovascular and Respiratory Control during Exercise,
School of Kinesiology and Health Studies, Queen's University

2011

Tutorial Instructor - KNPE 225, Integrative Physiology of Human Movement, School of
Kinesiology and Health Studies, Queen's University

2009-2011

Teaching Assistant - HLTH 102, Physical Determinants of Health, School of Kinesiology and
Health Studies, Queen's University

2010

Teaching Assistant - KNPE 227, Exercise Physiology, School of
Kinesiology and Health Studies, Queen's University

2009

Teaching Assistant - PHED 459, Clinical Exercise Physiology School of
Kinesiology and Health Studies, Queen's University

2009

Teaching Assistant - KNPE 125, Introduction to the physiology of human movement, School
of Kinesiology and Health Studies, Queen's University

2008-2011

Laboratory Instructor - PE 241B, Systemic physiology, University of Victoria, School of Exercise Science Physical and Health Education	2005-2008
Laboratory Instructor - PE 241A, Cellular Physiology, University of Victoria, School of Exercise Science, Physical and Health Education	2006-2008
Laboratory Instructor - PE 360, Exercise Prescription, University of Victoria, School of Exercise Science, Physical and Health Education	2005
<u>High School Course</u>	
Course coordinator and instructor - “Bodies in Motion”, Enrichment Mini Course (EMC) Enrichment studies unit, Queen’s University	2010-2011
<u>Middle School Course</u>	
Course coordinator and Instructor - “Your body is a high-performance machine” and “Exercise is medicine”, Summer Enrichment Experience at Queen’s (SEEQ) Enrichment studies unit, Queen’s University	2011

Scholarly and Professional Service

University of Oklahoma Service

- Pre-dental and Pre-medical committee – member
- University of Oklahoma Fencing Club – Faculty Adviser
- Center for Faculty Excellence – Faculty Writing Coach Hiring Committee (2023) – Member
- Health Promotion Research Center, OUHSC, External Interview of Faculty Candidates (2023)

Dodge Family College of Arts and Science, University of Oklahoma Service

- Internship Liaison - Department of Health and Exercise Science
- DFCAS Research & Dissertation Fellowship Review Committee (Spring and Fall 2023)

Department of Health and Exercise Science, University of Oklahoma Service

- Undergraduate Committee – Chair, 2023
- Sports and Data Analytics Hiring Committee, 2023—2024 (member)
- Exercise Physiology Hiring Committee 2017, 2019, 2020, 2021, 2023-2024 (member), 2022 -2023(chair)
- Health Promotion Hiring Committee - 2021-2022 - member
- Oversight Committee – chair (2019-2022)
- Planning/Speaker Committee – chair, 2019-2020
- Graduate Committee – member
- HES Graduate Student Recruitment Event – Chair, Organizer → *Wrote successful application for the \$2,500 from the Graduate College.*
- Undergraduate Committee – former member 2017-2019

Scholarly and Professional Memberships

- American Physiological Society – Regular member
- Physiological Society – Member
- American Heart Association/American Stroke Association – Early Career member
- American College of Sports Medicine – Member

Journal Reviewer:

- | | |
|---|---|
| • American Journal of Physiology–Regulatory, Integrative and Comparative Physiology | • American Journal of Physiology–Heart and Circulatory Physiology |
| • Journal of Applied Physiology | • Medicine and Science in Sport and Exercise |
| • Frontiers in Physiology | • Microvascular Research |

- European Journal of Sport Sciences
- Physiological Reports
- Journal of Alternative and Complementary Medicine
- GeroScience

Other professional service:

- American Physiological Society Minority Travel Fellowship Award – Meeting Mentor Experimental Biology, San Diego, CA, 2018
- National Institutes of Health – Skeletal Muscle and Exercise Physiology Study Section October 20-21, 2022
- Grant Reviewer – Central States American College of Sports Medicine
- External Dissertation Examiner – Trinity College, Department of Medicine, Dublin, IE, Fall 2020
- American Physiological Society, Exercise and Environmental Physiology Meeting Mentor, “Mentoring on the Go program”- Meeting Mentor - Experimental Biology, San Diego, CA, 2020 – CANCELLED DUE TO COVID 19 PANDEMIC
- American Physiological Society, Exercise and Environmental Physiology Meeting Mentor, Mentoring on the Go program- Meeting Mentor - Experimental Biology, Philadelphia, PA, 2022
- Grant Reviewer – The Physiological Society – Accelerator Fellowship
- American Physiological Society, Exercise and Environmental Physiology Meeting Mentor, Mentoring on the Go program- Meeting Mentor – APS Summit, Long Beach, CA, 2023
- Topic Editor – Frontiers in Sports and Active Living – The Physiology of the Female Athlete – Performance, Health, and Recovery, 2023
- Abstract Reviewer – Central States American College of Sports Medicine, 2024