

Guillaume Spielmann, BSc (*Hons*), MS, PhD

CONTACT INFORMATION

Louisiana State University
School of Kinesiology
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Baton Rouge, LA 70806
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Email: gspielmann@lsu.edu

CURRENT ACADEMIC RANK AND POSITION

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| 2021- present | Associate Professor, Exercise Physiology/Immunology, School of Kinesiology, Louisiana State University, Baton Rouge, LA, USA. |
| 2021-present | Associate Professor, Adjunct, Pennington Biomedical Research Center, Baton Rouge, LA, USA. |
| 2015- present | Assistant Professor, Exercise Physiology/Immunology, School of Kinesiology, Louisiana State University, Baton Rouge, LA, USA. |
| 2015-present | Assistant Professor, Adjunct, Pennington Biomedical Research Center, Baton Rouge, LA, USA. |

EDUCATION

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| 04/2012 - 06/2015 | Postdoctoral Fellow in Space Immunology, Department of Health and Human Performance, University of Houston/NASA. |
| 12/2007- 01/2012 | PhD Exercise Immunology, School of Life Sciences, Edinburgh Napier University, Edinburgh, Scotland, UK. |
| 07/2009 - 10/2010 | MS in Exercise Science*, Department of Health and Human Performance, University of Houston, Houston, TX, USA. |

*Intercalated Master degree

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| 2005 - 2007 | BSc (<i>Hons</i>) in Immunology and Toxicology, School of Life Sciences, Edinburgh Napier University, Edinburgh, Scotland, UK. |
| 2003 - 2005 | DUT in Biological Engineering, IUT Louis Pasteur, Louis Pasteur University, Strasbourg, FRANCE. |

PREVIOUS PROFESSIONAL POSITIONS

University of Houston/NASA, Houston, TX, USA

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| 2009 - 2010 | Research Assistant in Health and Human Performance, University of |
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Houston.

2007 - 2009

Research Assistant in Exercise Immunology, Edinburgh Napier University, Edinburgh, Scotland, UK.

PUBLICATIONS

Peer-Reviewed Journal Articles.

1. Theall, B., Stampley, J., Cho, E., Granger, J., Johannsen, N., Irving, B.A., **Spielmann, G.*** (2021). Impact of acute exercise on peripheral blood mononuclear cells nutrient sensing and mitochondrial oxidative capacity in healthy young adults. *Physiological Reports*.
2. Wang, H., Martone, M., Owens, M.E., Lemoine, N.P., Marucci, J., Calvert, D., Mullenix, S., Church, T.S., Rood, J., Harrell, B., Irving, B.A., **Spielmann G.**, Johannsen, N. (2021) NCAA Division I American football players with sickle cell trait have altered hematological responses and hydration status. *Scientific Reports*, 11(1): 1844.
3. Vincelle, C.M., Losso J., Early K., **Spielmann G.**, Irving B.A., Allerton T.D. (2021). Supplemental watermelon juice attenuates acute hypoglycemia-induced macro- and microvascular dysfunction in healthy adults. *Journal of Nutrition*.151(11): 3450-3458.
4. Zunica E.R.M., Axelrod C.L., Cho E., **Spielmann G.**, Davuluri G., Alexopoulos S.J., Beretta M., Hoehn K.L., Dantas W.S., Stadler K., King W.T., Pergola K., Irving B.A., Langohr I.M., Yang S., Hoppel C.L., Gilmore L.A., Kirwan J.P. Breast cancer growth and proliferation is suppressed by the mitochondrial targeted furazano[3,4-b]pyrazine BAM15. (2021). *Cancer Metabolism*, 9(1): 36.
5. Cho E., Theall B., Sampley J., Granger J., Johannsen J.M., Irving B.A., **Spielmann G.*** (2021). Cytomegalovirus infection impairs the mobilization of tissue-resident innate lymphoid cells into the peripheral blood compartment in response to acute exercise. *Viruses* 13(8):1535.
6. Hanson, E.R., Sakkal, S., Que, S., Cho, E., **Spielmann, G.**, Kadife, E., Vilet, J., Battaglini, C., Stoner, L., Bartlett, D.B., McConel, G., Hayes, A. (2020) Natural Killer Cell mobilization and egress following acute exercise during prostate cancer. *Experimental Physiology*. 105(9): 1524-1539
7. Bartlett, D.N., Slentz, C.A., Willis, L.H., Hoselton, A., Huebner, J.L., Kraus, V.B., Moss, J., Muehlbauer, M.J., **Spielmann, G.**, Muoio, D.M., Koves, T.R., Wu, H., Huffman, K.M., Lord, J.M., Kraus, W.E. (2020). Rejuvenation of Neutrophil functions in association with reduced diabetes risk following ten weeks of Low-Volume High Intensity Interval walking in older adults with prediabetes – A pilot study. *Frontiers of Immunology*, 11:729.
8. Lowe, A.C., **Spielmann, G.**, Reed, I., Marucci, J., Mullenix, S., Lind, E., Johannsen, N. Harris, M.N. (2020). Sampling salivary cortisol from the sidelines: Considerations for applied research. *Sage Research Methods*.
9. Agha, N. H., Baker, F.K., Kunz, H.E., **Spielmann, G.**, Mylabathula, P. L., Rooney, B. V., Mehta, S. K., Pierson, D. L., Laughlin, M. S., Markofski, M. M., Crucian, B. E, Simpson, R. J. (2020). Salivary antimicrobial proteins and stress biomarkers are elevated during a 6-month mission to the International Space Station. *Journal of applied physiology*, 128(2): 264-275.
10. Theall, B., Wang, H., Kuremsky, C. A., Cho, E., Hardin, K., Robelot, L., Marucci, J. Mullenix, S., Lemoine, Jr, N., Johannsen, N., Irving, B. A., **Spielmann, G.*** (2020). Allostatic stress load and CMV serostatus impact immune response to maximal exercise in collegiate swimmers. *Journal of applied physiology*, 128(1): 178-188.

11. Allerton, T. D., Irving, B. A., **Spielmann, G.**, Primeaux, S., Landin, D. K., Nelson, A. G., Johannsen, N. (2019). Metabolic flexibility is impaired in response to acute exercise in the young offspring of mothers with type 2 diabetes. *Physiological reports*, 7(17): e14189.
12. **Spielmann G.***, Agha N.H., Kunz H.E., Simpson R.J., Crucian B.E., Mehta S.K., Laughlin M., Campbell J. (2019). B-cell homeostasis is maintained during long duration spaceflight. *Journal of Applied Physiology*. 126(2):469-476.
13. Ross R., Goodpaster B.H., Koch L.G., Sarzynski M.A., Kohrt W.M., Johannsen N.M., Skinner J.S., Castro A., Irving B.A., Noland R.C., Sparks L.M., **Spielmann G.**, Day A.G., Pitsch W., Hopkins W.G., Bouchard, C. (2019). Precision exercise medicine: understanding exercise response variability. *British Journal of Sports Medicine*. Epub ahead of print.
14. Bigley A.B., Agha N.H., Baker F.L., **Spielmann G.**, Kunz H.E., Mylabathula P.L., Rooney B., Laughlin M.S., Pierson D.L., Mehta S.K., Cruian B.E., Simpson R.J. (2019). NK-cell function is impaired during long duration spaceflight. *Journal of Applied Physiology*. 126(4):842-853.
15. **Spielmann G.***, Laughlin M.S., Kunz H., Crucian B.E., Quiariarte H.D., Mehta S.K., Pierson D.L., Simpson R.J. (2018). Latent viral reactivation is associated with changes in plasma antimicrobial protein concentrations during long-duration spaceflight. *Acta Astronautica*. 146: 111-116.
16. Allerton T., Proctor D.N., Stephens J.M., Dugas T.R., **Spielmann G.**, Irving B.A. (2018). L-Citrulline supplementation: Impact on cardiometabolic health. *Nutrients* 10(7)
17. Bartlett D.B., Willis L.H., Slentz C.A., Hoselton A., Kelly L., Huebner J.L., Kraus V.B., Moss J., Muehlbauer M.J., **Spielmann G.**, Kraus W.E., Lord J.M., Huffmann K.M. (2018). Ten weeks of high-intensity interval walk training is associated with reduced disease activity and improved innate immune in older adults with rheumatoid arthritis: a pilot study. *Arthritis Research and Therapy* 20(1): 127.
18. Kunz H.E., **Spielmann G.**, Agha N.H., O'Connor D.P., Bollard C.M., Simpson R.J. (2018). A single exercise bout augments adenovirus-specific T-cell mobilization and function. *Physiology and Behavior*. 194: 56-65
19. †Turner J.E., †**Spielmann G.**, Wadley A.J., Aldred S., Simpson R.J., Campbell J.P. (2016) Exercise-Induced B-lymphocyte mobilization: Preliminary evidence for an influx of immature cells into the bloodstream. *Physiology and Behavior*. 164 (Pt A): 376-382. †**Co-First authors contributed equally to this manuscript.**
20. Irving, B. **Spielmann G.** (2016). Does Citrulline sit at the Nexus of Metformin's Pleiotropic Effects on Metabolism and Mediate its Salutatory effects in Individuals with Type 2 Diabetes. *Diabetes*. 65(12): 3537-3540.
21. **Spielmann G.**, Bollard C., Kunz H., Hanley P., Simpson R.J. (2016) A single exercise bout enhances the manufacture of viral-specific T-cells from healthy donors: implications for allogeneic adoptive transfer immunotherapy. *Scientific Reports*. 6:25852.
22. Bigley A.B., **Spielmann G.**, Agha N., O'Connor D.P., Simpson R.J. (2016). Dichotomous effects of latent CMV infection on the phenotype and functional properties of CD8+ T-cells and NK-cells. *Cell Immunology*. 300: 26-32.
23. Simpson R.J., Bigley A.B., **Spielmann G.**, LaVoy E.C., Kunz H., Bollard C.M. (2016). Human cytomegalovirus infection and the immune response to exercise. *Exercise Immunology Review*. 22: 8-27.
24. Bigley AB., **Spielmann G.**, Agha N., Simpson R.J. (2015). The effects of age and latent cytomegalovirus infection on NK-cell phenotype and exercise responsiveness in man. *Oxidative Medicine and Cellular Longevity*. 2015:979645
25. Kunz H., Bishop N.C., **Spielmann G.**, Pistillo M., Reed J., Ograjsek T., Park Y., Mehta S.K.,

- Pierson D.L., Simpson R.J. (2015). Fitness level impacts salivary antimicrobial protein responses to a single bout of cycling exercise. *European Journal of Applied Physiology*. 115(5): 1015-27.
26. **Spielmann G.***, Johnston C., O'Connor D.P., Foreyt J.P., Simpson R.J. (2014). Excess body mass is associated with T-cell differentiation indicative of immune aging in children. *Clinical and Experimental Immunology*. 176(2): 246-254.
 27. LaVoy E.C., Bigley A.B., **Spielmann G.**, Rector J.L., Morrison M.R., O'Connor D.P., Simpson R.J. (2014). CMV amplifies T-cell redeployment to acute exercise independently of HSV-1 Serostatus. *Medicine and Science in Sports Exercise*. 46(2): 257-267.
 28. **Spielmann G.***, Bollard C.M., Bigley A.B., Hanley P.J., Blainey J.W., LaVoy E.C.P., Pircher H., Simpson R.J. (2013). The effect of age and latent cytomegalovirus infection on the redeployment of CD8+ T-cell subsets in response to acute exercise in humans. *Brain Behavior and Immunity*. 39: 142-151.
 29. Pistillo M., Bigley A.B., **Spielmann G.**, LaVoy E.C.P., Morrison M.R., Kunz H., Simpson R.J. (2013). The effect of age and viral serology on $\gamma\delta$ T-cell numbers and exercise responsiveness in humans. *Cellular Immunology*. 284(1-2): 91-97.
 30. Bigley A.B., **Spielmann G.**, LaVoy E.C.P., Simpson R.J. (2013). Can exercise-related improvements in immunity influence cancer prevention and prognosis in the elderly? *Maturitas*. 76(1): 51-56.
 31. Simpson, R. J., Lowder T.W., **Spielmann G.**, Bigley A.B., LaVoy E.C., Kunz, H. (2012) Exercise and the aging immune system. *Ageing Research Reviews*. 11(3): 404-420.
 32. Bigley A.B., Lowder T.W., **Spielmann G.**, Rector J.L., Pircher H., Simpson R.J. (2012). Latent cytomegalovirus infection alters NK-cell phenotypes and blunts their mobilization in response to acute exercise. *Brain, Behavior & Immunity*. 26(1): 177-186.
 33. Cosgrove C., Galloway S.D., Neal C., Hunter A.M., McFarlin B.K., **Spielmann G.**, Simpson R.J. (2012). The impact of 6-month training preparation for an Ironman on the proportions of naïve, memory and senescent T-cells in resting blood. *European Journal of Applied Physiology*. 112(8): 2989-2998
 34. **Spielmann G.***, McFarlin. B.K., O'Connor D.P., Smith P.J.W., Pircher H., Simpson R.J. (2011). Aerobic fitness is associated with lower proportions of senescent blood T-cells in man. *Brain Behavior and Immunity*. 25(8): 1521-1529.

This manuscript was selected for a brief commentary in this issue of the journal:

Hong S. (2011). Can we jog our way to a younger-looking immune system? *Brain Behavior and Immunity*. 25(8): 1519-1520.

35. Simpson, R. J., Cosgrove C., Chee M.M., McFarlin B.K., Bartlett D.B., **Spielmann G.**, O'Connor D.P., Pircher H., Shiels P.G. (2010). Senescent phenotypes and telomere lengths of peripheral blood T-cells mobilized by acute exercise in humans. *Exercise Immunology Review*. 16: 40-55.
36. Booth S., Flouda-James G.O., McFarlin B.K., **Spielmann G.**, O'Connor D.P., Simpson R.J. (2010). The impact of acute strenuous exercise on TLR2, TLR4 and HLADR expression on human blood monocytes induced by autologous serum. *European Journal of Applied Physiology*. 110(6): 1259-1268.
37. Simpson R.J., McFarlin B.K., McSparran C., **Spielmann G.**, O'Hartaigh B., Guy K. (2009). Toll-like receptor expression on classical and pro-inflammatory monocytes after acute exercise in humans. *Brain, Behavior and Immunity*, 23(2): 232-239.

* Lead Author/Corresponding Author

Textbook Contributions

1. **Spielmann G.**, Bigley A.B., LaVoy E.C., Simpson R.J. (2014). Ageing Immunity and the impact of physical exercise. In: *Immunology of Aging*. 369-397. (Editors: Massoud A. and Rezaei N.) Springer, NY, USA.
2. Bigley A., Baker F., **Spielmann G.**, Simpson R.J. Ageing Immunity and the Impact of Physical Exercise - 2017. In *Handbook of Immunosenescence: Basic Understanding and Clinical Applications*
3. Simpson, R.J. & **G. Spielmann** (2013). Exercise and Immunosenescence. In: *Immunosenescence: behavioral and psychosocial determinants*. 159-178. (Editors: Bosch J.A., Phillips A.C. and Lord J.M.) Springer, NY, USA.

Published Communications

1. **Spielmann G.**, Crucian B.E., Metha S.K., Kunz H., Pierson D.L., Simpson R.J. (2013). The impact of long duration Spaceflight on plasma Antimicrobial Proteins. *International Journal of Exercise Science: Conference Proceedings*.
2. **Spielmann G.**, Bollard C.M., Bigley A.B., Hanley P.J., Blainey J.W., LaVoy E.C.P., Pircher H., Simpson R.J. (2013). CMV-specific T-cells Mobilized with Exercise have Broad Epitope Specificity and a High-Differentiated Effector Memory Phenotype. *International Journal of Exercise Science: Conference Abstract Submissions*.
3. **Spielmann G.**, Johnston C.A., Simpson R.J., McFarlin B.K., Foreyt J.P. (2010) No impact of CMV or EBV seropositivity on the frequency of highly differentiated T-cells in Mexican-American adolescents. *International Journal of Exercise Science: Conference Abstract Submissions*. **2(2)**: 39
4. **Spielmann G.**, McFarlin. B.K., Cosgrove C., Guy K., Smith P.J.W., Simpson R.J. (2009). A greater VO2max is associated with a reduced frequency of senescent blood T-cells in middle-aged men but not younger men. *Medicine and Science in Sport and Exercise*. **41(5)**: 277.
5. Bartlett, D.B., Cosgrove, C., **Spielmann, G.**, Guy, K. and Simpson, R.J. (2009). Exercise-induced T-cell activation in human subjects is affected by the mobilization of KLRG1+ T-lymphocytes into the peripheral blood. *Medicine & Science in Sports and Exercise*. **41**:5.
6. **Spielmann G.**, Campbell M.L., Guy K., Cosgrove C., McFarlin B.K., Smith P.J.W., Simpson R. (2008). A reduced frequency of senescent T-lymphocytes is associated with a greater maximal aerobic capacity in middle-aged men: a pilot study. *Journal of Sports Sciences*. **26(S1)**: 148-149.

PRESENTATIONS

International Conferences

1. **Spielmann G.**, Presenter. A single bout of exercise enhances the ex vivo manufacture of CMV and EBV-specific T-cells from healthy donors: implications for adoptive transfer immunotherapy. *International Society of Exercise and Immunology*, Vienna, Austria, July 2015. **Invited Presentation.**
2. **Spielmann G.**, Presenter. The impact of long duration Spaceflight on plasma Antimicrobial Proteins. *International Society of Exercise and Immunology*, Newcastle, Australia, September 2013. **Poster Presentation.**
3. **Spielmann G.**, Presenter. CMV-specific T-cells mobilized with exercise have broad epitope specificity and a high-differentiated effector memory phenotype. *International Society of Exercise and Immunology*, Newcastle, Australia, September 2013. **Oral Presentation.**
4. **Spielmann G.**, Presenter. The impact of latent CMV and EBV infections on the mobilization of viral-specific and senescent T-cells with acute exercise. *International Society of Exercise and Immunology*, Oxford, UK, July 2011. **Poster Presentation.**
5. **Spielmann G.**, Presenter. Vo2max is correlated with the frequency of differentiated T-cells throughout the lifespan. *Societe Francaise d'Immunologie*, Marseille, France, September 2010.

Poster Presentation.

6. **Spielmann G.**, Presenter. VO₂max is associated with a reduced frequency of senescent T-lymphocytes in middle-aged men. *International Society of Exercise and Immunology*, Tubingen, Germany, September 2009. **Poster Presentation.**
7. **Spielmann G.**, Presenter. Greater physical activity level in middle-aged men reduces the frequency of senescent T-lymphocytes. *Edinburgh Napier University PG conference*, Edinburgh, Scotland May 2009. **Poster Presentation.**
8. **Spielmann G.**, Presenter. The role of leptin and physical inactivity in the premature senescence of T-cells in obesity. *Edinburgh Napier University PG conference*, Edinburgh, Scotland May 2008. **Oral Presentation.**

National Conferences

1. **Spielmann, G.** Presenter, Irving, B. A., Little, J., Bartlett, D., Huffman, K. Optimizing exercise to enhance immune cell function and bioenergetics in age- and cardiometabolic related disorders. *American College of Sports Medicine*, Denver, CO, United States. May 2019. **Oral Presentation – Symposium.**
2. **Spielmann, G.** Presenter. The use of Biologics in Collegiate Football. *Andrew's Institute*, Dallas, TX, United States. May 2019. **Oral Presentation**
3. **Spielmann, G.** Presenter, Campbell, J., Crucian, B. E., Laughlin, M., Simpson, R. The impact of long duration spaceflight on the function of plasma cells, *American College of Sports Medicine*, Minneapolis, MN, United States. June 2018. **Poster Presentation.**
4. **Spielmann, G.** Presenter, Campbell, J. Crucian, B. E., Laughlin, M., Simpson, R. J. The impact of long duration spaceflight on the function of plasma cells. *American College of Sports Medicine*, Denver, CO, United States. May 2017. **Poster Presentation.**
5. **Spielmann, G.** Presenter. The impact of Long Duration Spaceflight on the Function of B-cells and Biomarkers of Inflammation. *NASA Human Research Program 2018 Workshop*, Galveston, TX, United States. January 2018. **Poster Presentation.**
6. **Spielmann, G.** Presenter, Campbell J., Crucian B.E., Laughlin M., Simpson R.J. The impact of Long Duration Spaceflight on the Function of B-cells and Biomarkers of Inflammation. *NASA Human Research Program 2017 Workshop*, Galveston, TX, United States. January 2018. **Poster Presentation.**
7. **Spielmann G.** Presenter, Campbell J., Crucian B.E., Laughlin M., Simpson R.J. The impact of Long Duration Spaceflight on the Function of B-cells and Biomarkers of Inflammation. *NASA Human Research Program Investigators' Workshop*, Galveston, TX, USA, January 2017. **Poster Presentation.**
8. Simpson R., Bigley A. Presenter, **Spielmann G.**, Kunz H., Agha N., Baker F., Rooney B., Mylabathula P., Graff R., Laughlin M., Mehta S., Pierson D., Crucian B. Long duration spaceflight impairs NK-cell function in ISS crewmembers: findings from the “Salivary Markers” Project. *NASA 2017 Human Research Program Investigator's Workshop*, Galveston, TX, USA, January 2017. **Oral Presentation.**
9. **Spielmann, G.** Presenter. Long-duration Spaceflight And Latent Viral Reactivation Alter Plasma Antimicrobial Protein Concentrations. *American College of Sports Medicine*, Denver, CO, United States. May 2017. *Medicine and Science in Sports Exercise* 49: 289. **Poster Presentation.**
10. **Spielmann G.** Presenter, Bollard C., Kunz H., Hanley P.J., Simpson R.J. A single bout of exercise enhances the ex vivo manufacture of viral-specific T-cells. *American College of Sports Medicine*, Boston, MA, May 2016. *Medicine and Science in Sports Exercise* 48 (5 suppl 1): 85. **Poster Presentation.**
11. Simpson R.J. Presenter, Bigley A.B., **Spielmann G.**, Kunz H.E., Agha N., Baker F., Rooney B., Mylabathula P.L., Graff R.M., Crucian B.E., Laughlin M., Mehta S.K., Pierson D.L. Long Duration Spaceflight Impairs NK-cell Function in Astronauts. *American College of Sports*

- Medicine*, Boston, MA, May 2016. *Medicine and Science in Sports Exercise* 48 (5 suppl 1): 87. **Poster Presentation.**
12. Kunz H. Presenter, **Spielmann G.**, LaVoy E.C., Agha N., Graff R.M, Bollard C.M., Simpson R.J. Enhancing the Generation of Adenovirus-Specific T-cells with Exercise for Immunotherapy. *American College of Sports Medicine*, Boston, MA, May 2016. *Medicine and Science in Sports Exercise* 48 (5 suppl 1): 86-87. **Poster Presentation.**
 13. Agha N. Presenter, Baker F.L., **Spielmann G.**, Bigley A.B., Simpson R.J. Can a single Exercise Bout Increase the Yield of Hematopoietic Stem Cells From Peripheral Blood? *American College of Sports Medicine*, Boston, MA, May 2016. *Medicine and Science in Sports Exercise* 48 (5 suppl 1): 86. **Poster Presentation.**
 14. Simpson, R., **Spielmann G.**, Bigley A.B., Kunz H., Agha N., Baker F., Rooney B., Mylabathula P., Graff R., Crucian B.E., Laughlin M., Mehta S.K., Pierson D.L. An ISS mission impairs NK-cell function and evokes anti-viral T-cell responses in astronauts. *NASA Human Research Program Investigators' Workshop*, Galveston, TX, USA, February 2016. **Poster Presentation.**
 15. **Spielmann G.**, Presenter. The impact of long duration spaceflight on the immune system: an ongoing project. *NASA Human Research Program Investigators' Workshop*, Galveston, TX, USA, February 2015. **Oral Presentation.**
 16. **Spielmann G.**, Presenter. *NASA Human Research Program Investigators' Workshop*, Galveston, TX, USA, February 2015. **Expert Panel Discussion.**
 17. **Spielmann G.**, Presenter. The impact of long duration spaceflight on plasma Antimicrobial proteins. *NASA Human Research Program Investigators' Workshop*, Galveston, USA, February 2014. **Oral Presentation.**
 18. **Spielmann G.**, Presenter. Pre-flight differences in immune function between astronauts and non-flying control subjects at 5 months prior to a 6-month mission to the International Space Station *Psychoneuroimmunology Research Society*, Philadelphia, USA, May 2014. **Poster Presentation.**
 19. **Spielmann G.**, Presenter. Salivary Markers of immune function during Spaceflight. *NASA 37 and 38 Science Symposium*, Clear-lake, USA, May 2013. **Oral Presentation.**
 20. **Spielmann G.**, Presenter. Validation and stability of saliva and blood assays to monitor in-flight changes in innate immunity during long duration spaceflight. *NASA Human Research Program Investigators' Workshop*, Galveston, USA, February 2013. **Oral Presentation.**
 21. **Spielmann G.**, Presenter. A greater Vo₂max is associated with a lower frequency of senescent T-lymphocytes in middle-aged but not younger men. *American College of Sport and Medicine*, Seattle, USA, June 2009. **Poster Presentation.**

Regional Conferences

7. **Spielmann G.**, Presenter. Excess Body Mass is associated with T-cell differentiation indicative of immune ageing in Children. *Texas Obesity Research Center Conference*, Houston, USA, November 2012. **Invited Oral Presentation.**
8. **Spielmann G.**, Presenter. No impact of CMV or EBV seropositivity on the frequency of highly differentiated T-cells in Mexican-American adolescents. *Texas ACSM Conference*, Houston, USA, June 2010. **Poster Presentation.**
9. **Spielmann G.**, Presenter. The role of leptin in the premature senescence of T-lymphocytes in obesity. *Texas Obesity Research Center Conference*, Houston, USA, November 2010. **Oral Presentation.**
10. **Spielmann G.**, Presenter. Greater physical activity level in middle-aged men reduces the frequency of senescent T-cells. *Texas ACSM Conference*, Houston, USA, November 2009. **Poster Presentation.**

AWARDS

- LSU Tiger Athletics Foundation Undergraduate Teacher’s Award 2019.
- LSU Alumni Rising Faculty Research Award 2019.
- LSU CHSE Early Career Research Award 2018.
- International Society of Exercise and Immunology 2013, **Early Career Research Award: Best Oral Presentation.**
- International Society of Exercise and Immunology 2013, **Early Career Research Award: Best Poster Presentation**
- TACSM student research development award 2010.
- Edinburgh Napier University, **Best poster presentation award (2009).**

GRANT APPLICATIONS

External Grant Funded:

1. **NASA Human Research Program (NNJ10ZSA003N):** “Effects of Long-Term Exposure to Microgravity on Salivary Markers of Innate Immunity” (2011-2015) Direct Costs: \$660,043. Indirect Costs: \$220,655. Role: **Co-I.** (PI: Richard Simpson) Effort: 10%. Funded – NCE approved.
2. **NASA Human Research Program (NNJ14ZSA001N):** The impact of an ISS mission on the anti-viral and functional properties of NK-cells, T-cells, B-cells and dendritic cells”. 2015-2018 (\$ 225,000) Role: **Co-I** Effort: 5%. (PI: Richard Simpson). Funded – NCE approved.
3. **National Institute of Health-NIA R21:** Resistance Exercise and Low-Intensity Physical Activity Breaks in Sedentary to Improve Skeletal Muscle and Cardiometabolic Health in Older Adults - REALPA Breaks in Sedentary Time Pilot Study (\$ 419,000). Role: **Co-I: 25% Effort (PI : Brian Irving).** Funded – On-going.
4. **NASA Human Exploration Program:** Characterizing the Baselines of Sleep Quality, Cognitive Performance, Immune Function and Intracranial Fluids for Deep Space Expeditions. (\$1,574,990) Role: **Co-I/Institutional PI: 25% Effort (PI: Zang, Quan, Harvard University).** Funded – On-going.
5. **American College Sports Medicine – PhD Student Grant:** The Effect of Acute Exercise and Hypoxia on Natural Killer Cell Bioenergetics and Cytotoxic Function in Older Adults (\$4,890) Role: **PI/Student Advisor.** Effort: 0%. Funded – Scheduled to start on 07/01/2020.
6. **Foy Health – Industry Grant:** Impact of Cannabidiol supplementation on sleep, metabolic and cognitive-motor function – a randomized double-blind pilot study (\$4,900). Role: **PI.** Effort: 15%. Funded – Scheduled to start on 09/01/2020.

Travel Funding:

1. **Louisiana State University Office of Research and Economic Development Faculty Travel Grant Program:** Funding to attend the 2016 ACSM meeting in Boston, MA. 2016 (\$ 750). Funded.
2. **Louisiana State University Office of Research and Economic Development Faculty Travel Grant Program:** Funding to attend the 2017 ACSM meeting in Denver, CO. 2017 (\$ 750). Funded.
3. **Louisiana State University CHSE Dean's Auxiliary Faculty and Research Travel Grant Program:** Funding to attend the 2017 ACSM meeting in Denver, CO. 2017 (\$600). Funded.
4. **Louisiana State University CHSE Dean's Auxiliary Faculty and Research Travel Grant Program:** Funding to attend the 2018 ACSM meeting in Minneapolis, MN. 2018 (\$1,000). Funded.
5. **Louisiana State University CHSE Dean's Auxiliary Faculty and Research Travel Grant Program:** Funding to attend the 2019 ACSM meeting in Orlando, FL. 2019 (\$1,000). Funded.

6. **Louisiana State University CHSE Peabody Society Dean' Circle Grant** : The impact of herpesvirus infection on immune metabolism. 2019-2020. (\$4,200). Funded.

External Grant Completed:

1. **NASA Human Research Program Omnibus Opportunity (NNJ15ZSA001N-Omnibus)**: The impact of long duration spaceflight on the function of B-cells and biomarkers of inflammation. 2016-2017 (\$ 99,971) Role: **PI**. Completed.

Internal Grant Completed:

1. **Faculty mentor for Manjot Singh as part of the LSU Discover Undergraduate Research Stipend**: Fall 2017 and Spring 2018. Completed.
2. **Louisiana State University Faculty Research Grant Program**: Does age related decline in T-cells mitochondrial respiratory function associates with immunosenescence in active postmenopausal women. 2016-2017 (\$ 10,000) Role: **Co-PI** (other Co-PI: Brian Irving). Completed
3. **Louisiana State University Dean's Internationalization and Auxiliary Research and Travel Program**: The impact of an exercise intervention training on biomarkers of B-cell function. 2016-2017 (\$ 9,477). Role: **PI**. Completed.

UNIVERSITY TEACHING EXPERIENCE

Undergraduate classes

1. KIN 3515: Physiological Basis for Physical Activity, Fall 2015. 3.0 credit hours. 49 enrolled
2. KIN 4900: Independent Study, Fall 2015. 1 enrolled
3. KIN 3515: Physiological Basis for Physical Activity, Spring 2016. 3.0 credit hours. 49 enrolled
4. KIN 3515: Physiological Basis for Physical Activity, Summer 2016. 3.0 credit hours. 42 enrolled
5. KIN 3515: Physiological Basis for Physical Activity, Fall 2016. 3.0 credit hours. 41 enrolled
6. KIN 3515: Physiological Basis for Physical Activity, Spring 2017. 3.0 credit hours. 28 enrolled
7. KIN 4900: Independent Study, Spring 2017. 2 enrolled
8. KIN 3515: Physiological Basis for Physical Activity, Fall 2017. 3.0 credit hours. 46 enrolled
9. KIN 4900: Independent Study, Fall 2017. 1 enrolled
10. KIN 3515: Physiological Basis for Physical Activity, Spring 2018. 3.0 credit hours. 37 enrolled
11. KIN 3515: Physiological Basis for Physical Activity section 2, Spring 2018. 3.0 credit hours. 40 enrolled
12. KIN 3515: Physiological Basis for Physical Activity, Fall 2018. 3.0 credit hours. 46 enrolled
13. KIN 3515: Physiological Basis for Physical Activity, Spring 2019. 3.0 credit hours. 37 enrolled
14. KIN 4900: Independent Study, Spring 2019. 1 enrolled
15. KIN 4000: Undergraduate Thesis, Spring 2019. 2 enrolled
16. KIN 3515: Physiological Basis for Physical Activity, Fall 2019. 3.0 credit hours. 40 enrolled
17. KIN 3515: Physiological Basis for Physical Activity, Spring 2020. 3.0 credit hours. 43 enrolled

Graduate classes

1. KIN 7539: Laboratory Techniques in Exercise Physiology, Fall 2016. 3.0 credit hours. 7 enrolled
2. KIN 7547: Physical and Physiological stressors and Immune Function, Spring 2017. 3.0 credit hours. 6 enrolled.

3. KIN 7530: Exercise Physiology, Fall 2017. 3.0 credit hours. 14 enrolled
4. KIN 7539: Laboratory Techniques in Exercise Physiology, Fall 2018. 3.0 credit hours. 16 enrolled
5. KIN 7547: Physical and Physiological stressors and Immune Function, Spring 2019. 3.0 credit hours. 17 enrolled.
6. KIN 7530: Exercise Physiology, Fall 2019. 3.0 credit hours. 9 enrolled
7. KIN 7539: Laboratory Techniques in Exercise Physiology, Spring 2020. 3.0 credit hours. 9 enrolled

DIRECTED STUDENT LEARNING

Completed

1. Undergraduate Honors Thesis Chair – “Impact of Aerobic and Resistance Exercise on biomarker of inflammation in Type 2 Diabetics”
Advised: Manjot Singh
2. Undergraduate Honors Thesis Chair – “Changes in salivary antimicrobial proteins concentration in response to maximal exercise in collegiate swimmers”
Advised: Katelin Hardin
3. Undergraduate Honors Thesis Chair – “Biomarkers of mild traumatic brain injury in collegiate footballs”
Advised: Amy Turner
4. Master’s Thesis Committee Chair – “Impact of psychological and physical stressors on the exercise-induced immune response in collegiate swimmers”
Advised: Connor Kuremsky
5. Master’s Thesis Committee Chair – “Influence of Hydration status on running performance and markers of psychological stressors in high school cross country runners”
Advised: Joshua Granger
6. Master’s Thesis Committee Member – “Physiological and psychological well-being during the spring season in Female Soccer Players”
Advised: Adam Lowe
7. Master’s Thesis Committee Member – “Within season hematological changes in college-athletes with sickle cell traits”
Advised: Michael Houston Owens
8. Master’s Thesis Committee Member – “The effects watermelon juice on post prandial vascular endothelial function and blood flow during hyperglycemia”
Advised: Cullen Vincellette
9. Master’s Non-Thesis Committee Member
Advised: Zadie Franklin
10. Master’s Non-Thesis Committee Member
Advised: Jacob Thornberry
11. Master’s Non-Thesis Committee Member
Advised: Travis Weisbrod
12. Master’s Non-Thesis Committee Member
Advised: Peter Currier
13. Master’s Non-Thesis Committee Member
Advised: Jessica Savona
14. Master’s Non-Thesis Committee Member
Advised: Jessica Savona
15. Master’s Non-Thesis Committee Member
Advised: Yvonne Cheng

16. Master's Non-Thesis Committee Member
Advised: Carlante Emerson
17. Dean's representative on Dissertation Defense Committee
Advised: Erin Lovett
18. Dissertation Defense Committee Member "The immediate and extended effect of diet and exercise on metabolic flexibility"
Advised: Timothy Allerton
19. Doctoral Advisory Committee, Member "Exercise performance in the heat and cooling interventions on hyperthermia and cardiovascular stress"
Advised: Haoyan Wang

In-progress

1. Doctoral Advisory Committee, Chair
Advised: Bailey Theall
2. Doctoral Advisory Committee, Chair
Advised: Eunhan Cho
3. Doctoral Advisory Committee, Chair
Advised: Joshua Granger
4. Doctoral Advisory Committee, Chair
Advised: Jessica Savona
5. Doctoral Advisory Committee, Dean's representative
Advised: Alyssa DeVito
6. Doctoral Advisory Committee, Member
Advised: Junhai Xu
7. Doctoral Advisory Committee, Member
Advised: Brett Davis
8. Doctoral Advisory Committee, Member
Advised: James Stampley
9. Doctoral Advisory Committee, Member
Advised: Matthew Martone
10. Doctoral Advisory Committee, Member
Advised: Jason Soileau
11. Doctoral Advisory Committee, Member
Advised: Rachel Matthews
12. Doctoral Advisory Committee, Member
Advised: Nathan Lemoine
13. Doctoral Advisory Committee, Member
Advised: Adam Lowe
14. Doctoral Advisory Committee, Member
Advised: Lyle Robelot
20. Master's Non-Thesis Committee Chair
Advised: Adam Morales
21. Master's Non-Thesis Committee Member
Advised: Olivia Polk
22. Master's Non-Thesis Committee Member
Advised: Hugh Ngo
23. Master's Non-Thesis Committee Member
Advised: Samantha Charcon
24. Master's Non-Thesis Committee Member
Advised: Keet Dailey

25. Master's Non-Thesis Committee Member
Advised: Blake Esh

REVIEWS

Ad-Hoc Manuscript Reviewer

2011-present	Brain, Behavior and Immunity
2012-present	Journal of Applied Physiology
2012-present	European Journal of Applied Physiology
2012-present	Medicine and Science in Sports and Exercise
2013-present	Human Immunology
2015-present	Exercise Immunology Review
2016-present	Journal of Sports and Health Science
2016-present	Journal of Acquired Immune Deficiency Syndromes
2016-present	Obesity Science and Practice
2016-present	Journal of Sport and Health Science
2016-present	Sports
2018-present	Physiology and Behavior
2018-present	Leukocyte Biology
2019-present	International Journal of Sports Medicine
2019-present	Games for Health Journal
2019-present	Medicina
2019-present	Frontiers in Immunology
2019-present	Scientific Reports
2019-present	Frontiers of Physiology

Grant Reviewer

Medical Doctorate Research Grants, **National Children's Research Centre (Ireland)**
HERO research grants, **NASA**