# Orlando Laitano, Ph.D.

CURRICULUM VITAE

**<u>Current Position:</u>** Assistant Professor (tenure-track).

# Date and Place of Birth:

January 11, 1981. Porto Alegre/RS, Brazil.

# **Current Address and Phone Number:**

University of Florida College of Health and Human Performance Department of Applied Physiology and Kinesiology 1864 Stadium Road Gainesville FL, 32611

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Research Gate: https://www.researchgate.net/profile/Orlando Laitano

Twitter: @olaitano

#### **EDUCATION/TRAINING**

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Lutheran University of Brazil, Canoas, Brazil	Bach	1999-2003	Physical Education
Federal University of Rio Grande do Sul, Porto Alegre, Brazil	MSC	2005-2007	Human Movement Sciences
Federal University of Rio Grande do Sul, Porto Alegre, Brazil	PhD	2007-2010	Human Movement Sciences
University of Florida, Gainesville, USA	Postdoc	2016-2018	Applied Physiology and Kinesiology

#### PROFESSIONAL EXPERIENCE

2022- current Assistant Professor (tenure-track), Department of Applied Physiology and Kinesiology, University of Florida.

2020-2022 Assistant Professor (tenure-track), Department of Nutrition and Integrative Physiology, Florida State University.

2019-20 Assistant Professor (research-track), Department of Applied and Kinesiology, University of Florida.

- 2016-19 Postdoctoral Research Scholar (Advisor: Dr Thomas L. Clanton), Department of Applied Physiology and Kinesiology, University of Florida.
- 2014-15 Visiting Faculty, Department of Applied Physiology and Kinesiology, University of Florida (\*\*Sabbatical leave).
- 2013-14 Assistant Exercise Physiologist, Brazilian National Soccer Team (CBF) during FIFA Confederations Cup and World Cup in Brazil.
- 2013-current Scientific Advisor Consultant, Gatorade Sports Science Institute.
- 2009-16 Assistant Professor in Exercise Physiology, Federal University of Sao Francisco Valley, Brazil.
- 2008-09 Visiting PhD Student, Brunel University London (Advisor: Dr José González-Alonso), United Kingdom.
- 2004-05 Visiting Master Student, Loughborough University (Advisor: Dr Ron Maughan), United Kingdom.
- 2002-03 Undergraduate Assistant in Human Anatomy, Brazilian Lutheran University, Brazil.

### **ADMINISTRATIVE EXPERIENCE**

- 2011-14 Chair of the Department of Physical Education, Federal University of Sao Francisco Valley, Brazil.
- 2009-11 Vice-chair of the Department of Physical Education, Federal University of Sao Francisco Valley, Brazil.
- 2020 current Member of the Advocacy Committee Shock Society, USA.

#### PROFESSIONAL SOCIETIES

American Heart Association American Physiological Society American College of Sports Medicine Shock Society

#### **HONORS AND AWARDS**

- 2020 First Year Assistant Professor (FYAP) Award/Florida State University
- 2018 Military Physiology Postdoctoral Research Award Environmental & Exercise Physiology Section American Physiological Society.
- 2013 International Travel Award Gatorade Sports Science Institute European College of Sports Science, Barcelona, Spain.
- 2004 International Travel Award Gatorade Sports Science Institute Loughborough University, Loughborough, UK.

# **RESEARCH SUPPORT**

## **Current Research Support:**

#### NIH/NIA

1R21AG072011-01 Laitano (PI) \$423,500.00 (total cost)
Sepsis-induced myopathy in aging: influence of disuse on skeletal muscle regeneration

Role: PI

Period: 06/2021 - 05/2023

# University of Florida Clinical and Translational Science Institute's Precision Health Initiative

UF/CTSI Pilot Award Laitano (PI) \$44,582.00 (total cost)

Sepsis-induced myopathy: development of a myotube avatar assay for precision medicine

Role: PI

Period: 10/2021 - 10/2022

# Past Research Support

#### NIH/NIGMS

1R01GM118895-01 Clanton (PI) 05/2016 – 04/2020 Functional Role of Skeletal Muscle in the Innate Immune to Sepsis

Role: Co-I

# First Year Assistant Professor (FYAP) Award/Florida State University

FYAP/Summer Award Laitano (PI) \$19,993.00 (total cost) The role of circulatory chemokines on sepsis-induced myopathy

Role: PI

Period: 05/2021 - 08/2021

# **DoD/US Army**

W81XWH21C0073 Laitano (PI) \$87,597.00 (total cost)

The role of estrogen deficiency on heat acclimation and organ damage in exertional heat stroke in mice.

Role: PI

Period: 04/2021 - 04/2022

## **REVIEWING ACTIVITITES**

#### **Associate Editor:**

International Journal of Sports Medicine International Journal of Hyperthermia

## Journal Review:

American Journal of Physiology – Regulatory, Integrative and Comparative Physiology

Annals of Biomedical Engineering

Applied Physiology, Nutrition and Metabolism

Biochemistry and Biophysics Reports

**Biology of Sports** 

BioMed Research International

Critical Care Explorations

**European Journal of Nutrition** 

European Journal of Sports Science

**Experimental Gerontology** 

**Experimental Physiology** 

Frontiers in Physiology (Exercise Physiology)

International Journal of Sports Medicine

International Journal of Sports Nutrition and Exercise Metabolism

Journal of Applied Physiology

Journal of Physiological Sciences

Journal of Science and Medicine in Sport

Journal of Science and Medicine in Sports

Journal of the Neurological Sciences

Journal of Thermal Biology

Medicine & Science in Sports & Exercise

Military Medical Research

**Nutrition and Health** 

PlosOne

Scandinavian Journal of Medicine & Science in Sports

Shock

Sports Medicine

### **Grant Reviewer:**

October 2022 cycle – Early Career Reviewer for NIH, Skeletal Muscle and Exercise Physiology Study Section.

#### **TEACHING EXPERIENCE**

# Federal University of São Francisco Valley, Petrolina, Brazil

- 2016/1 Advanced Topics in Thermoregulation and Exercise (30 hours course)
- 2016/1 Exercise Physiology (60 hours course)
- 2016/1 Cell Biology and Biochemistry (60 hours course)
- \*\*2014/2 to 2015/2 Sabbatical leave to University of Florida, USA
- 2014/1 Exercise Physiology (60 hours course)
- 2014/1 Cell Biology and Biochemistry (60 hours course)
- 2013/2 Exercise Physiology (60 hours course)
- 2013/2 Cell Biology and Biochemistry (60 hours course)
- 2013/1 Exercise Physiology (60 hours course)
- 2013/1 Cell Biology and Biochemistry (60 hours course)
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- 2012/1 Cell Biology and Biochemistry (60 hours course)
- 2011/2 Exercise Physiology (60 hours course)
- 2011/2 Cell Biology and Biochemistry (60 hours course)
- 2011/1 Exercise Physiology (60 hours course)
- 2011/1 Cell Biology and Biochemistry (60 hours course)
- 2010/2 Research Methods (60 hours course)

2010/2 - Exercise Physiology (60 hours course)

2010/2 - Cell Biology and Biochemistry (60 hours course)

2010/1 – Exercise Physiology (60 hours course)

2010/1 – Cell Biology and Biochemistry (60 hours course)

# Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Advanced Exercise Physiology (Fall, 2007) Human Thermoregulation (Fall, 2007)

# Florida State University, Tallahassee, USA

Fall 2021 – Environmental Aspects of Exercise (3 credits) Spring 2022 – Environmental Aspects of Exercise (3 credits)

#### **PUBLICATIONS**

# **Articles in Peer-Reviewed Journals**

- 41. Cramer MN, Gagnon D, <u>Laitano O</u>, Crandall CG. Human temperature regulation under heat stress in health, disease, and injury. <u>Physiol Rev</u>. 2022 Jun 9. doi:10.1152/physrev.00047.2021.
- 40. Efron PA, Darden DB, Li EC, Munley J, Kelly L, Fenner B, Nacionales DC, Ungaro RF, Dirain ML, Rincon J, Mankowski RT, Leeuwenburgh C, Moore FA, Brakenridge SC, Foster TC, **Laitano O**, Casadesus G, Moldawer LL, Mohr AM, Thomas RM. Sex differences associate with late microbiome alterations after murine surgical sepsis. *J Trauma Acute Care Surg*. 2022 Mar 24. doi: 10.1097/TA.00000000000003599.
- 39. Bouchama A, Abuyassin B, Lehe C, <u>Laitano O</u>, Jay O, O'Connor FG, Leon LR. Classic and exertional heatstroke. *Nat Rev Dis Primers*. 2022 Feb 3;8(1):8.
- 38. de Melo-Marins D, Farinha JB, Boeno FP, Vieira AF, Munhoz SV, Dos Santos GC, Krause M, **Laitano O**, Reischak-Oliveira A. The Impact of Dehydration and Hyperthermia on Circulatory Glutathione Metabolism after Exercise in the Heat with Insights into the Role of Erythrocytes. *Life (Basel)*. 2021 Oct 27;11(11):1144.
- 37. Mattingly AJ, <u>Laitano O</u>, Garcia CK, Robinson GP, Clanton TL. Lipopolysaccharide-Induced Cytokine Secretion From in Vitro Mouse Slow and Fast Limb Muscle. <u>Shock.</u> 2021 Nov 17. doi: 10.1097/SHK.000000000001891. Online ahead of print.
- 36. <u>Laitano O</u>, Murray KO, Leon LR. Response to Comment on "Overlapping Mechanisms of Exertional Heat Stroke and Malignant Hyperthermia: Evidence vs. Conjecture". <u>Sports Med.</u> 2021 Oct 9. doi: 10.1007/s40279-021-01571-1. Online ahead of print.

- 35. Mankowski RT, <u>Laitano O</u>, Darden D, Kelly L, Munley J, Loftus TJ, Mohr AM, Efron PA, Thomas RM. Sepsis-Induced Myopathy and Gut Microbiome Dysbiosis: Mechanistic Links and Therapeutic Targets. <u>Shock</u> Epub 2021 Aug 18.
- 34. de Melo-Marins D, Farinha JB, Rodrigues-Krause J, <u>Laitano O</u>, Reischak-Oliveira A. Redox balance during exercise in the heat in healthy adults: A systematic review. <u>*J Therm Biol.*</u> 2021 Jul;99:102943. doi: 10.1016/j.jtherbio.2021.102943. Epub 2021 Apr 17.
- 33. <u>Laitano O</u>, Pindado J, Valera I, Spradlin RA, Murray KO, Villani KR, Alzahrani JM, Ryan TE, Efron PA, Ferreira LF, Barton ER, Clanton TL. The impact of hindlimb disuse on sepsis-induced myopathy in mice. *Physiol Rep.* 2021 Jul;9(14):e14979. doi: 10.14814/phy2.14979.
- 32. King MA, Alzahrani JM, Clanton TL, <u>Laitano O</u>. A Preclinical Model of Exertional Heat Stroke in Mice. *J Vis Exp.* 2021 Jul 1;(173). doi: 10.3791/62738.
- 31. Mankowski RT, <u>Laitano O</u>, Clanton TL, Brakenridge SC. Pathophysiology and Treatment Strategies of Acute Myopathy and Muscle Wasting after Sepsis. <u>*J Clin Med.*</u> 2021 Apr 26;10(9):1874.
- 30. <u>Laitano O</u>, Robinson GP, Murray KO, Garcia CK, Mattingly AJ, Morse D, King MA, Iwaniec JD, Alzahrani JM, Clanton TL. Skeletal muscle fibers play a functional role in host defense during sepsis in mice. <u>Sci Rep</u>. 2021 Apr 1;11(1):7316.
- 29. <u>Laitano O</u>, Oki K, Leon LR. The Role of Skeletal Muscles in Exertional Heat Stroke Pathophysiology. *Int J Sports Med.* 2021 Mar 26. doi: 10.1055/a-1400-9754. (online ahead of print)
- 28. Valera IC, Wacker AL, Hwang HS, Holmes C, <u>Laitano O</u>, Landstrom AP, Parvatiyar MS. Essential roles of the dystrophin-glycoprotein complex in different cardiac pathologies. <u>Adv</u> <u>Med Sci.</u> 2020 Dec 30;66(1):52-71.
- 27. Murray KO, Brant JO, Iwaniec JD, Sheikh LH, de Carvalho L, Garcia CK, Robinson GP, Alzahrani JM, Riva A, **Laitano O**, Kladde MP, Clanton TL. Exertional heat stroke leads to concurrent long-term epigenetic memory, immunosuppression and altered heat shock response in female mice. **J Physiol.** 2021 Jan;599(1):119-141.
- 26. Mankowski RT, Thomas RM, Darden DB, Gharaibeh RZ, Hawkins RB, Cox MC, Apple C, Nacionales DC, Ungaro RF, Dirain ML, Moore FA, Leeuwenburgh C, Brakenridge SC, Clanton TL, <u>Laitano O</u>, Moldawer LL, Mohr AM, Efron PA. Septic Stability? Gut Microbiota in Young Adult MICE Maintains Overall Stability After Sepsis Compared to Old Adult MICE. <u>Shock.</u> 2020 Online ahead of print.
- 25. <u>Laitano O</u>, Robinson GP, Garcia CK, Mattingly AJ, Sheikh LH, Murray KO, Iwaniec JD, Alzahrani J, Morse D, Hidalgo J, Clanton TL. Skeletal Muscle Interleukin-6 Contributes to the Innate Immune Response in Septic mice. <u>Shock.</u> 2020 Online ahead of print.

- 24. <u>Laitano O</u>, Murray KO, Leon LR. Overlapping mechanisms of exertional heat stroke and malignant hyperthermia: evidence vs. conjecture. <u>Sports Medicine.</u> 2020 Sep;50(9):1581-1592.
- 23. Iwaniec J, Robinson GP, Garcia CK, Murray KO, de Carvalho L, Clanton TL, <u>Laitano O</u>. Acute phase response to exertional heat stroke in mice. <u>Exp Physiol</u>. 2021 Jan;106(1):222-232.
- 22. Garcia CK, Sheikh LH, Iwaniec JD, Robinson GP, Berlet RA, Mattingly AJ, Murray KO, Laitano O, Clanton TL. Effects of Ibuprofen during exertional heat stroke in mice. <u>Med Sci Sports Exerc.</u> 2020 Sep;52(9):1870-1878..
- 21. <u>Laitano O</u>, Garcia CK, Mattingly AJ, Robinson GP, Murray KO, King MA, Ingram B, Ramamoorthy S, Leon LR, Clanton TL. Delayed metabolic dysfunction in myocardium following exertional heat stroke in mice. <u>J Physiol.</u> 2020 Mar;598(5):967-985.
- 20. <u>Laitano O</u>, Leon LR, Roberts WO, Sawka MN. Controversies in exertional heat stroke diagnosis, prevention and treatment. <u>J Appl Physiol</u> (1985) 2019 Nov 1;127(5):1338-1348.
- 19. <u>Laitano O</u>, Sheikh LH, Mattingly AJ, Murray KO, Ferreira LF, Clanton TL. Osmolality Selectively Offsets the Impact of Hyperthermia on Mouse Skeletal Muscle in vitro. <u>Front Physiol.</u> 2018 Oct 31;9:1496.
- 18. Garcia CK, Mattingly AJ, Robinson GP, <u>Laitano O</u>, King MA, Dineen SM, Leon LR, Clanton TL. Sex-dependent responses to exertional heat stroke in mice. <u>J Appl Physiol</u> (1985). 2018 Sep 1;125(3):841-849.
- 17. de Melo-Marins D, Souza-Silva AA, da Silva-Santos GLL, Freire-Júnior FA, Lee JKW, **Laitano O**. Personalized Hydration Strategy Attenuates the Rise in Heart Rate and in Skin Temperature Without Altering Cycling Capacity in the Heat. **Front Nutr**. 2018 Apr 12;5:22.
- 16. Mattingly AJ, <u>Laitano O</u>, Clanton TL. Epinephrine stimulates CXCL1 IL-1 $\alpha$ , IL-6 secretion in isolated mouse limb muscle. <u>Physiol Rep</u>. 2017 Dec;5(23).
- 15. <u>Laitano O</u>, Van Steenbergen D, Mattingly AJ, Garcia CK, Robinson GP, Murray KO, Clanton TL, Nunamaker EA. Xiphoid Surface Temperature Predicts Mortality in a Murine Model of Septic Shock. <u>Shock</u>. 2018 Aug;50(2):226-232.
- 14. Souza-Silva AA, Moreira E, de Melo-Marins D, Schöler CM, de Bittencourt PI Jr, <u>Laitano</u> <u>O</u>. High intensity interval training in the heat enhances exercise-induced lipid peroxidation, but prevents protein oxidation in physically active men. <u>Temperature</u> (Austin). 2015 Dec 29;3(1):167-75.
- 13. Ferreira LF, <u>Laitano O</u>. Regulation of NADPH oxidases in skeletal muscle. <u>Free Radic Biol Med.</u> 2016 Sep;98:18-28.

- 12. Welc SS, Morse DA, Mattingly AJ, <u>Laitano O</u>, King MA, Clanton TL. The Impact of Hyperthermia on Receptor-Mediated Interleukin-6 Regulation in Mouse Skeletal Muscle. <u>PLoS One</u>. 2016 Feb 12;11(2):e0148927.
- 11. <u>Laitano O</u>, Ahn B, Patel N, Coblentz PD, Smuder AJ, Yoo JK, Christou DD, Adhihetty PJ, Ferreira LF. Pharmacological targeting of mitochondrial reactive oxygen species counteracts diaphragm weakness in chronic heart failure. <u>*J Appl Physiol*</u> (1985). 2016 Apr 1;120(7):733-42.
- 10. King MA, Clanton TL, <u>Laitano O</u>. Hyperthermia, dehydration, and osmotic stress: unconventional sources of exercise-induced reactive oxygen species. <u>Am J Physiol Regul</u> *Integr Comp Physiol*. 2016 Jan 15;310(2):R105-14.
- 9. Cadore EL, Pinheiro E, Izquierdo M, Correa CS, Radaelli R, Martins JB, Lhullier FL, <u>Laitano</u> O, Cardoso M, Pinto RS. Neuromuscular, hormonal, and metabolic responses to different plyometric training volumes in rugby players. <u>J Strength Cond Res</u>. 2013 Nov;27(11):3001-10.
- 8. Becker GF, Macedo RC, Cunha Gdos S, Martins JB, <u>Laitano O</u>, Reischak-Oliveira A. Combined effects of aerobic exercise and high-carbohydrate meal on plasma acylated ghrelin and levels of hunger. <u>Appl Physiol Nutr Metab</u>. 2012 Feb;37(1):184-92.
- 7. <u>Laitano O</u>, Kalsi KK, Pearson J, Lotlikar M, Reischak-Oliveira A, González-Alonso J. Effects of graded exercise-induced dehydration and rehydration on circulatory markers of oxidative stress across the resting and exercising human leg. <u>Eur J Appl Physiol</u>. 2012 May;112(5):1937-44.
- 6. Cadore EL, Pinto RS, Alberton CL, Pinto SS, Lhullier FL, Tartaruga MP, Correa CS, Almeida AP, Silva EM, <u>Laitano O</u>, Kruel LF. Neuromuscular economy, strength, and endurance in healthy elderly men. <u>J Strength Cond Res</u>. 2011 Apr;25(4):997-1003.
- 5. <u>Laitano O</u>, Kalsi KK, Pook M, Oliveira AR, González-Alonso J. Separate and combined effects of heat stress and exercise on circulatory markers of oxidative stress in euhydrated humans. *Eur J Appl Physiol*. 2010 Nov;110(5):953-60.
- 4. <u>Laitano O</u>, Martins J, Mattiello R, Perrone C, Fischer GB, Meyer F. Sweat electrolyte loss in asthmatic children during exercise in the heat. <u>Pediatr Exerc Sci</u>. 2008 May;20(2):121-8.
- 3. Meyer F, <u>Laitano O</u>, Bar-Or O, McDougall D, Heigenhauser GJ. Effect of age and gender on sweat lactate and ammonia concentrations during exercise in the heat. <u>Braz J Med Biol Res.</u> 2007 Jan;40(1):135-43.
- 2. Perrone C, <u>Laitano O</u>, Meyer F. Effect of carbohydrate ingestion on the glycemic response of type 1 diabetic adolescents during exercise. *Diabetes Care*. 2005 Oct;28(10):2537-8.
- 1. Pires LA, Souza AC, <u>Laitano O</u>, Meyer F. [Bone mineral density, milk intake and physical activity in boys who suffered forearm fractures]. <u>J Pediatr</u> (Rio J). 2005 Jul-Aug;81(4):332-6.

# Complete List of Articles in MyBibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/1jSQr\_jl6ahQB/bibliography/48503031/public/?sort=date&direction=ascending

## **Manuscripts Submitted**

Alzahrani JM, Murray KO, Gambino BJ, Garcia CK, Sheikh LA, Cusack KJ, <u>Laitano O</u>, Clanton TL. Neuromuscular weakness and altered physiological responses to repeated severe exertional heat stroke in mice. <u>Am J Physiol Regul Integr Comp Physiol.</u> (second round of revisions) 2022.

Garcia CK, Renteria LI, Leite-Santos G, Leon LR, <u>Laitano O</u>. Exertional heat stroke: pathophysiology and risk factors. *BMJ Medicine* (invited review) 2022.

Houck J, McKenna Z, Fennel Z, Ducharme J, Wells A, Mermier C, Deyhle M, <u>Laitano O</u>, Specht J, Amorim F. The effect of interval and continuous work on markers of acute kidney injury in a hot environment. <u>Eur J Appl Physiol</u> (accepted) 2022.

Garcia CK, Robinson GP, Gambino BJ, Rua MT, <u>Laitano O</u>, Clanton TL. The impact of castration on physiological responses to exertional heat stroke in mice. <u>PlosOne</u> (second round of revisions) 2022.

# **Book Chapters**

- 2. <u>Laitano O</u>, King MA, Leon LR. Common Misconceptions in Classic and Exertional Heat Stroke. In Periard JD & Racinais S (Editors). *Heat Stress in Sport and Exercise: Thermophysiology of Health and Performance.* Springer International Publishing, Feb 26, 2019. ISBN 3319935143.
- 1. <u>Laitano O</u>, Gomes LE, Mattingly AJ, de Souza-Castro FA. Hyperthermia and dehydration in competitive swimmers: current aspects and recommendations. In Morouço P, Takagi H, & Fernandes RJ (Editors). *Sport Science: Current and Future Trends for Performance Optimization*. ESECS/Instituto Politécnico de Leiria. 2018 ISBN: 978-989-8797-19-3.

## Recent Abstracts

Centner A, Ukhanov V, <u>Laitano O</u>, Hill S, Cullen A, Salazar G. Sex Differences in Atherosclerosis in ApoE-/-Mice exposed to Nicotine and Cigarette Smoke. The FASEB Journal 35. Experimental Biology 2021

Murray KO, <u>Laitano O</u>, Salyers Z, Thome T, Robinson G, Gambino B, Ryan T, Clanton T. Exertional Heat Stroke Causes Long-Term Satellite Cell Dysfunction and Delayed Muscle Repair. The FASEB Journal 35. Experimental Biology 2021

CK Garcia, Sheikh LH, Iwaniec JD, Robinson GP, Berlet RA, Mattingly AJ, <u>Laitano O</u>, Murray KO, Clanton TL. Ibuprofen effects on the response to exertional heat stroke in male and

female mice. The FASEB Journal 33 (1\_supplement), 842.6-842.6. 2019 Experimental Biology, Orlando, FL.

Iwaniec JD, Robinson GP, Garcia CK, Murray KO, <u>Laitano O</u>, Clanton TL. Acute Phase Response to Exertional Heat Stroke in Mice. The FASEB Journal 33 (1\_supplement), lb443-lb44. 2019 Experimental Biology, Orlando, FL.

**Laitano O**, Robinson GP, Garcia CK, Mattingly AJ, Murray KO, Sheikh LH, Aboumahboub T, Wallet SM, Clanton TL. Suppression of Skeletal Muscle Interleukin-6 Alters Circulatory Cytokine and Leukocyte Trafficking in Septic Female Mice The FASEB Journal 33 (1\_supplement), 868.17-868.17. 2019 Experimental Biology, Orlando, FL.

Robinson GP, Garcia CK, Iwaniec JD, Sheikh LH, Murray KO, Berlet RA, <u>Laitano O</u>, Clanton TL. A Hydrogen Sulfide Donor NSAID Influences Inflammatory Cell Responses Following Exertional Heat StrokeThe FASEB Journal 33 (1\_supplement), 764.4-764.4. 2019 Experimental Biology, Orlando, FL.

Murray KO, Sheikh LH, <u>Laitano O</u>, Iwaniec JD, Garcia CK, Robinson GP, Hammamieh R, Campbell R, Yang R, Clanton TL. Epigenetic Memory and Phenotype Change Observed in Mouse Skeletal Muscle 30 Days after Exertional Heat Stroke. The FASEB Journal 33 (1\_supplement), 842.5-842.5. 2019 Experimental Biology, Orlando, FL.

Alzahrani JM, Murray KO, Sheikh L, Garcia CK, Robinson GP, <u>Laitano O</u>, Clanton TL. Deficits in Motor Function After Repeated Exertional Heat Stroke Exposure in Female Mice.The FASEB Journal 33 (1\_supplement) 2019 Experimental Biology, Orlando, FL.

**<u>Laitano O</u>**, Robinson GP, Garcia CK, Mattingly AJ, Murray KO, Sheikh LH, Aboumahboub T, Wallet SM, Clanton TL. Suppression of Skeletal Muscle IL-6 Alters Circulatory Cytokines Responses to Sepsis in Female Mice. ACSM's Integrative Physiology of Exercise (IPE), San Diego, California. September 2018.

Clanton TL, Murray KO, <u>Laitano O</u>, Mattingly AJ, Robinson GP, Morse DA, Garcia CK, Sheikh LH, Aboumahboub T, Wallet SM. Skeletal Muscle-Specific IL-6 Secretion Regulates Leukocyte Trafficking in Mice During Septic Shock. ACSM's Integrative Physiology of Exercise (IPE), San Diego, California. September 2018.

Murray KO, Laitano O, Sheikh LH, Iwaniec J, Robinson GP, Garcia CK, Alzahrani J, Hammamieh R, Campbell R, Yang R, Clanton TL. DNA Methylome is Conserved in Monocytes and Skeletal Muscle for up to 30 Days after Exertional Heat Stroke in Mice. ACSM's Integrative Physiology of Exercise (IPE), San Diego, California. September 2018.

Garcia CK, Mattingly AJ, Robinson GP, <u>Laitano O</u>, Clanton TL. Physical Factors Related to Heat Exchange In Male And Female Mice During Exertional Heat Stroke: 533 May 30 2. Medicine & Science in Sports & Exercise 50 (5S), 120, 2018. 66<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Minnesota, Minneapolis May-June, 2018.

<u>Laitano O</u>, Ingram B, Garcia CK, Robinson GP, Mattingly AJ, Ippolito DL, Leon LR, Clanton TL. Sustained Metabolic Switch to Lipid Oxidation in Murine Cardiac Muscle After Exertional

Heat Stroke: 532 May 30 2. Medicine & Science in Sports & Exercise 50 (5S), 120, 2018. 66<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Minnesota, Minneapolis May-June, 2018.

Mattingly AJ, <u>Laitano O</u>, Clanton TL. Aerobic Exercise Training Alters the Lipopolysaccharide-induced Cytokine Secretory Profile of Skeletal Muscle In Mice: 510 Board# 1 May 30 1. Medicine & Science in Sports & Exercise 50 (5S), 114, 2018. 66<sup>th</sup> Annual Meeting of the American College of Sports Medicine, Minneapolis, Minnesota, May-June, 2018.

**<u>Laitano O</u>**, Ingram B, Garcia CK, Robinson GP, Mattingly AJ, Ippolito DL, Leon LR, Clanton TL. Heart Metabolic Responses to Exertional Heat Stroke Are Dependent Upon Sex. FASEB JOURNAL 32 (1), 2018. Experimental Biology, San Diego, California, April, 2018.

Garcia CK, Alzahrani J, Mattingly AJ, <u>Laitano O</u>, Robinson GP, Murray KO, Clanton TL. Ibuprofen increases resistance to exertional heat stroke in female mice. FASEB JOURNAL 32 (1), 2018. Experimental Biology, San Diego, California, April, 2018.

Robinson GP, Mattingly AJ, Garcia CK, Murray KO, Clanton TL, <u>Laitano O</u>. Skeletal Muscle Produces Acute Phase Proteins in Response to Polymicrobial Sepsis. FASEB JOURNAL 32 (1), 2018. Experimental Biology, San Diego, California, April, 2018.

Murray KO, <u>Laitano O</u>, Sheikh LH, Iwaniec J, Robinson GP, Garcia CK, Alzahrani J, Hammamieh R, Campbell R, Yang R, Clanton TL. Epigenetic responses to exertional heat stroke in mice: a potential link to long term Ca2+ dysregulation in skeletal muscle. FASEB JOURNAL 32 (1), 2018. Experimental Biology, San Diego, California, April, 2018.

Mattingly AJ, <u>Laitano O</u>, Clanton TL. Senescent Skeletal Muscle Produces a Distinct Cytokine Secretory Profile in Response to Endotoxin Exposure in Vitro. The FASEB Journal 32 (1\_supplement), 907.12-907.12, 2018. Experimental Biology, San Diego, California, April, 2018.

Garcia CK, Robinson GP, Mattingly AJ, <u>Laitano O</u>, Van Steenbergen D, King MA, Leon LR, Clanton TL. Differences in tolerance to exertional hyperthermia between male and female mice. The FASEB Journal 31 (1\_supplement), 1018.10-1018.10, 2017. Experimental Biology, Chicago, Illinois, 2017.

Robinson GP, King MA, Mattingly AJ, Garcia CK, <u>Laitano O</u>, Van Steenbergen D, Leon LR, Clanton TL. Major Metabolic Hormone Responses to Exertional Heat Stroke in Mice. The FASEB Journal 31 (1\_supplement), 1085.8-1085.8, 2017. Experimental Biology, Chicago, Illinois, 2017.

**Laitano O**, Mattingly AJ, Robinson GP, Garcia CK, Clanton TL. Hyperthermia and extracellular hyperosmolality affect sarcolemmal damage and protein oxidation in mammalian skeletal muscle in vitro. The FASEB Journal 31 (1\_supplement), 1023.2-1023.2, 2017. Experimental Biology, Chicago, Illinois, 2017.

Mattingly AJ, <u>Laitano O</u>, Garcia CK, Robinson GP, Van Steenbergen D, Clanton TL.Cytokine secretory responses of MYD88 skeletal muscle specific knockout to pathogen exposure in

vitro. The FASEB Journal 31 (1\_supplement), 1083.14-1083.14, 2017. Experimental Biology, Chicago, Illinois, 2017.

Mattingly AJ, <u>Laitano O</u>, Welc SS, Morse DA, King MA, Clanton TL. Interaction of Hyperthermia and Ligand-Mediated IL-6 Production in Mouse Skeletal Muscle. The FASEB Journal 30 (1\_supplement), 1243.12-1243.12, 2016. Experimental Biology, San Diego, California, 2016.

# **Translations (English to Portuguese)**

### **Textbooks**

- 2013 Powers SK & Howley ET. Exercise Physiology: Theory and Application to Fitness and Performance. McGraw-Hill 9<sup>th</sup> Edition (Manole Publisher in Portuguese).
- 2011 Wilmore JH, Costill DL, Kenney WL. Physiology of Sports and Exercise. Human Kinetics 4<sup>th</sup> Edition (Manole Publisher in Portuguese).
- 2010 McConnel A. Breathe Strong Perform Better. Human Kinetics 1<sup>st</sup> Edition (Manole Publisher in Portuguese).
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- 2009 Mujika I. Tapering and Peaking for Optimal Performance. Human Kinetics 1<sup>st</sup> Edition (Manole Publisher in Portuguese).
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#### Online course

Powers SK. Refresher Course in Exercise Physiology – 22 Lectures (Slides and Audio Translation) Manole Publisher in Portuguese.

## **INVITED PRESENTATIONS**

From Exertional Heat Stroke to Critical Illness Myopathy: Mechanistic Links and Therapeutic Targets. Center for Exercise Science Seminar Series, University of Florida, Gainesville, FL. 2021.

From Exertional Heat Stroke to Critical Illness Myopathy: Mechanistic Links and Therapeutic Targets. Department of Nutrition, Food and Exercise Sciences, Florida State University, Tallahassee, FL. 2020.

From Exertional Heat Stroke to Critical Illness Myopathy: Mechanistic Links and Therapeutic Targets. Department of Exercise and Nutrition Science's Seminar, University at Buffalo, NY. February 2020.

Skeletal Muscles as Endocrine Organs. Brazilian Congress of Exercise Nutrition. Sao Paulo, Brazil. November 2019.

New perspectives in exertional heat stroke – Center for Exercise Science Seminar Series, University of Florida, October 10<sup>th</sup> 2019.

Skeletal muscle responses to hyperthermia and osmotic stress. United States Army Research Institute for Environmental Medicine, Natick, MA – August 28<sup>th</sup> 2018.

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