CURRICULUM VITAE

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Education

- 2016 - 2019: Post-doctoral fellow, Division of Cardiology, Department of Internal Medicine, University of Texas Southwestern Medical Center
  Concentration: Thermal and Vascular Physiology
  Mentor: Craig G. Crandall, Ph.D.

- 2012 - 2016: Doctor of Philosophy, Biomedical Science, University of North Texas Health Science Center
  Concentration: Integrative Physiology
  Mentor: Peter B. Raven, Ph.D.

- 2008 - 2010: Master of Science, Health and Kinesiology, University of Texas at San Antonio
  Concentration: Exercise Physiology
  Mentor: William H. Cooke Ph.D.

- 2005 - 2007: Bachelor of Science, Health and Kinesiology, University of Texas at San Antonio
  Concentration: Exercise Science

Education- Additional Coursework

- 2019 - 2020: Program to Increase Diversity among Individuals Engaged in Health-Related Research Training Certificate sponsored by National Heart, Lung, and Blood Institute, National Institutes of Health.
- 2016 - 2018: Postdoctoral Training Certificate in Research - Postdoctoral Training Program at University of Texas Southwestern Medical Center.
- 2014 & 2013 (May): The Danish Cardiovascular Research Academy and Faculty of Health Sciences, University of Copenhagen, Denmark; Ph.D. course: Integrative Human Cardiovascular Control. Course Director: Niels H. Secher MD, D MSc. Chief and Chair of Anesthesiology University of Copenhagen Medical School and Rigshospitalet.

Professional Experience

- 2019 - Present: Assistant Professor, University of Texas Southwestern Medical Center, School of Health Professions, Department of Applied Clinical Research.
- 2019 - Present: Associate Scientist at the Institute for Exercise and Environmental Medicine (IEEM)
- 2018: Adjunct faculty, Department of Applied Physiology and Wellness, Southern Methodist University, Dallas, Texas.

- 2016 - 2019: Postdoctoral Fellow, University of Texas Southwestern Medical Center, Division of Cardiology, Department of Internal Medicine & The Institute for Exercise and Environmental Medicine, Thermal and Vascular Physiology Laboratory, Texas Health Presbyterian Hospital Dallas.
- 2012 - 2016: Doctoral Fellow, Institute for Cardiovascular and Metabolic Disease, Department of Integrative Physiology, University of North Texas Health Science Center, Ft. Worth, Texas.
- 2011 - 2012: Research Assistant (Contractor), Combat Casualty Care Task Area, Naval Medical Research Unit- San Antonio, Fort Sam Houston, Texas.
- 2011 - 2012: Lecturer I, Department of Health and Kinesiology, The University of Texas at San Antonio.
- 2010 - 2011: Research Assistant (Contractor), Advanced Capabilities for Emergency Medical Monitoring Task Area, US Army Institute of Surgical Research, Fort Sam Houston, Texas. Supervisors: Victor A. Convertino, Ph.D. and Kathy L. Ryan, Ph.D.
- 2008 - 2010: Graduate Research Assistant, Laboratory for Applied Autonomic Neurophysiology, Department of Health and Kinesiology, University of Texas at San Antonio Mentor: William H. Cooke Ph.D.
- 2007 Fall: Research Intern, Advanced Capabilities for Emergency Medical Monitoring Task Area, U.S. Army Institute of Surgical Research, Fort Sam Houston, Texas.

Research Interests

- Autonomic responses and maladaptations to physiological stressors.
- Cardiovascular responses and adaptations to exercise and environmental stressors.
- Central mechanisms contributing to the devolvement of the hyperadrenergic disease state.
- Autonomic responses to inflammation, oxidative stress and the activation of renin-angiotensin system.

Peer-Reviewed Publications

Original Research

1. Hansen AB, **Moralez G**, Amin SB, Simspon LL, Hofstaetter F, Anholm JD, Gasho C, Stembridge M, Dawkins TG, Tymko MM, Ainslie PN, Villafuerte F, Romero SA, Hearon CM Jr, Lawley JS. Global Reach 2018: The adaptive phenotype to life with chronic mountain sickness and polycythaemia. J Physiol. 2021 Jul 10;. doi: 10.1113/JP281730. [Epub ahead of print] PubMed PMID: 34245004.

2. Cramer MN, Huang M, Fischer M, **Moralez G**, Crandall CG. Thermoregulatory Responses with Size-matched Simulated Torso or Limb Skin Grafts. Med Sci Sports Exerc. 2021 Apr 27;. doi: 10.1249/MSS.0000000000002694. [Epub ahead of print] PubMed PMID: 33935232.

3. Romero SA, **Moralez G**, Jaffery MF, Huang MU, Engelland RE, Cramer MN, Crandall CG. Exercise Training Improves Microvascular Function in Burn Injury Survivors. Med Sci Sports Exerc. 2020 Nov;52(11):2430-2436. doi: 10.1249/MSS.0000000000002379. PubMed PMID: 33064412; PubMed Central PMCID: PMC7573196.

4. Huang M, Watso JC, **Moralez G**, Cramer MN, Hendrix JM, Yoo JK, Badrov MB, Fu Q, Hinojosa-Laborde C, Crandall CG. Low-dose ketamine affects blood pressure, but not muscle sympathetic nerve activity, during progressive central hypovolemia without altering tolerance. J Physiol. 2020 Dec;598(24):5661-5672. doi: 10.1113/JP280491. Epub 2020 Oct 20. PubMed PMID: 33084081.

5. Watso JC, Huang M, **Moralez G**, Cramer MN, Hendrix JM, Cimino FA 3rd, Belval LN, Hinojosa-Laborde C, Crandall CG. Low dose ketamine reduces pain perception and blood pressure, but not muscle sympathetic nerve activity, responses during a cold pressor test. J Physiol. 2021 Jan;599(1):67-81. doi: 10.1113/JP280706. Epub 2020 Oct 20. PubMed PMID: 33017047.

6. Huang M, **Moralez G**, Romero SA, Jaffery MF, Cramer MN, Petric JK, Nabasny AD, Crandall CG. The benefits of an unsupervised exercise program in persons with well-healed burn injuries within the International Classification of Functioning, Disability and Health (ICF). Burns. 2020 Sep;46(6):1280-1288. doi: 10.1016/j.burns.2020.06.023. Epub 2020 Jul 3. PubMed PMID: 32660830; PubMed Central PMCID: PMC7529932.

7. Belval LN, Cramer MN, **Moralez G**, Huang M, Cimino FA 3rd, Watso JC, Crandall CG. Interaction of Exercise Intensity and Simulated Burn Injury Size on Thermoregulation. Med Sci Sports Exerc. 2020 Aug 21;. doi: 10.1249/MSS.0000000000002480. PubMed PMID: 32826639; PubMed Central PMCID: PMC7995740.

8. Cramer MN, Hieda M, Huang M, **Moralez G**, Crandall CG. Dietary nitrate supplementation does not influence thermoregulatory or cardiovascular strain in older individuals during severe ambient heat stress. Exp Physiol. 2020 Aug 20;. doi: 10.1113/EP088834. Epub 2020 Aug 31. PubMed PMID: 32816341; PubMed Central PMCID: PMC7731583.

9. Tymko MM, Lawley JS, Ainslie PN, Hansen AB, Hofstaetter F, Rainer S, Amin S, **Moralez G**, Gasho C, Vizcardo-Galindo G, Bermudez D, Villafuerte FC, Hearon CM Jr. Global Reach 2018 Heightened α-Adrenergic Signaling Impairs Endothelial Function During Chronic Exposure to Hypobaric Hypoxia. Circ Res. 2020 Jul 3;127(2):e1-e13. doi: 10.1161/CIRCRESAHA.119.316053. Epub 2020 Apr 9. PubMed PMID: 32268833; PubMed Central PMCID: PMC7483295.

10. Hansen AB, **Moralez G**, Romero SA, Gasho C, Tymko MM, Ainslie PN, Hofstätter F, Rainer SL, Lawley JS, Hearon CM Jr. Mechanisms of sympathetic restraint in human skeletal muscle during exercise: role of α-adrenergic and nonadrenergic mechanisms. Am J Physiol Heart Circ Physiol. 2020 Jul 1;319(1):H192-H202. doi: 10.1152/ajpheart.00208.2020. Epub 2020 Jun 5. PubMed PMID: 32502375; PubMed Central PMCID: PMC7474447.

11. Simpson LL, Meah VL, Steele AR, Gasho C, Howe CA, Dawkins TG, Busch SA, Oliver SJ, **Moralez G**, Lawley JS, Tymko MM, Vizcardo-Galindo GA, Figueroa-Mujíca RJ, Villafuerte FC, Ainslie PN, Stembridge M, Steinback CD, Moore JP. Global REACH 2018: Andean highlanders, chronic mountain sickness and the integrative regulation of resting blood pressure. Exp Physiol. 2020 Apr 9;. doi: 10.1113/EP088473. Epub 2020 May 14. PubMed PMID: 32271969.

12. Cramer MN, **Moralez G**, Huang MU, Kouda K, Poh PYS, Crandall CG. Exercise Thermoregulation with a Simulated Burn Injury: Impact of Air Temperature. Med Sci Sports Exerc. 2020 Mar;52(3):712-719. doi: 10.1249/MSS.0000000000002184. PubMed PMID: 31609298; PubMed Central PMCID: PMC7024026

13. Cramer MN, **Moralez G**, Huang MU, Kouda K, Poh PYS, Crandall CG. Exercise Core Temperature Response with a Simulated Burn Injury: Effect of Body Size. Med Sci Sports Exerc. 2020 Mar;52(3):705-711. doi: 10.1249/MSS.0000000000002160. PubMed PMID: 31524829; PubMed Central PMCID: PMC7024043.

14. Cramer MN, Huang M, **Moralez G**, Crandall CG. Keeping older individuals cool in hot and moderately humid conditions: wetted clothing with and without an electric fan. J Appl Physiol (1985). 2020 Mar

1;128(3):604-611. doi: 10.1152/japplphysiol.00786.2019. Epub 2020 Feb 6. PubMed PMID: 32027545; PubMed Central PMCID: PMC7099436.

15. Romero SA, **Moralez G**, Jaffery MF, Huang M, Cramer MN, Romain N, Kouda K, Haller RG, Crandall CG. Progressive exercise training improves maximal aerobic capacity in individuals with well-healed burn injuries. Am J Physiol Regul Integr Comp Physiol. 2019 Oct 1;317(4):R563-R570. doi: 10.1152/ajpregu.00201.2019. Epub 2019 Aug 21. PubMed PMID: 31433672; PubMed Central PMCID: PMC6842906.

16. Cramer MN, **Moralez G**, Huang MU, Crandall CG. No Thermoregulatory Impairment in Skin Graft Donor Sites during Exercise-Heat Stress. Med Sci Sports Exerc. 2019 May;51(5):868-873. doi: 10.1249/MSS.0000000000001883. PubMed PMID: 30614899; PubMed Central PMCID: PMC6465138.

17. Samuel TJ, Nelson MD, Nasirian A, Jaffery M, **Moralez G**, Romero SA, Cramer MN, Huang M, Kouda K, Hieda M, Sarma S, Crandall CG. Cardiac Structure and Function in Well-Healed Burn Survivors. J Burn Care Res. 2019 Feb 20;40(2):235-241. doi: 10.1093/jbcr/irz008. PubMed PMID: 30649454; PubMed Central PMCID: PMC6382409.

18. Huang M, Frantz J, **Moralez G**, Sabo T, Davis PF, Davis SL, Bell KR, Purkayastha S. Reduced Resting and Increased Elevation of Heart Rate Variability With Cognitive Task Performance in Concussed Athletes. J Head Trauma Rehabil. 2019 Jan/Feb;34(1):45-51. doi: 10.1097/HTR.0000000000000409. PubMed PMID: 29863622.

19. Romero SA, **Moralez G**, Jaffery MF, Huang M, Crandall CG. Vasodilator function is impaired in burn injury survivors. Am J Physiol Regul Integr Comp Physiol. 2018 Nov 1;315(5):R1054-R1060. doi: 10.1152/ajpregu.00188.2018. Epub 2018 Sep 26. PubMed PMID: 30256680; PubMed Central PMCID: PMC6295495.

20. Huang M, Brothers RM, Ganio MS, Lucas RAI, Cramer MN, **Moralez G**, Convertino VA, Crandall CG. Tolerance to a haemorrhagic challenge during heat stress is improved with inspiratory resistance breathing. Exp Physiol. 2018 Sep;103(9):1243-1250. doi: 10.1113/EP087102. Epub 2018 Jul 23. PubMed PMID: 29947436; PubMed Central PMCID: PMC6119106.

21. **Moralez G**, Jouett NP, Tian J, Zimmerman MC, Bhella P, Raven PB. Effect of centrally acting angiotensin converting enzyme inhibitor on the exercise-induced increases in muscle sympathetic nerve activity. J Physiol. 2018 Jun;596(12):2315-2332. doi: 10.1113/JP274697. Epub 2018 May 15. PubMed PMID: 29635787; PubMed Central PMCID: PMC6002210.

22. Ogoh S, **Moralez G**, Washio T, Sarma S, Hieda M, Romero SA, Cramer MN, Shibasaki M, Crandall CG. Effect of increases in cardiac contractility on cerebral blood flow in humans. Am J Physiol Heart Circ Physiol. 2017 Dec 1;313(6):H1155-H1161. doi: 10.1152/ajpheart.00287.2017. Epub 2017 Sep 15. PubMed PMID: 28916637; PubMed Central PMCID: PMC5814648.

23. Romero SA, Gagnon D, Adams AN, **Moralez G**, Kouda K, Jaffery MF, Cramer MN, Crandall CG. Folic acid ingestion improves skeletal muscle blood flow during graded handgrip and plantar flexion exercise in aged humans. Am J Physiol Heart Circ Physiol. 2017 Sep 1;313(3):H658-H666. doi: 10.1152/ajpheart.00234.2017. Epub 2017 Jun 30. PubMed PMID: 28667051; PubMed Central PMCID: PMC5625172.

24. Jouett NP, **Moralez G**, Raven PB, Smith ML. Losartan reduces the immediate and sustained increases in muscle sympathetic nerve activity after hyperacute intermittent hypoxia. J Appl Physiol (1985). 2017

Apr 1;122(4):884-892. doi: 10.1152/japplphysiol.00683.2016. Epub 2017 Jan 12. PubMed PMID: 28082332.

25. Jouett NP, **Moralez G**, White DW, Eubank WL, Chen S, Tian J, Smith ML, Zimmerman MC, Raven PB. N-Acetylcysteine reduces hyperacute intermittent hypoxia-induced sympathoexcitation in human subjects. Exp Physiol. 2016 Mar;101(3):387-96. doi: 10.1113/EP085546. Epub 2016 Feb 4. PubMed PMID: 27027616; PubMed Central PMCID: PMC4817372.

26. **Moralez G**, Romero SA, Rickards CA, Ryan KL, Convertino VA, Cooke WH. Effects of dehydration on cerebrovascular control during standing after heavy resistance exercise. J Appl Physiol (1985). 2012 Jun;112(11):1875-83. doi: 10.1152/japplphysiol.01217.2011. Epub 2012 Mar 29. PubMed PMID: 22461441.

27. Cooke WH, **Moralez G**, Barrera CR, Cox P. Digital infrared thermographic imaging for remote assessment of traumatic injury. J Appl Physiol (1985). 2011 Dec;111(6):1813-8. doi: 10.1152/japplphysiol.00726.2011. Epub 2011 Sep 22. PubMed PMID: 21940851.

28. Romero SA, **Moralez G**, Rickards CA, Ryan KL, Convertino VA, Fogt DL, Cooke WH. Control of cerebral blood velocity with furosemide-induced hypovolemia and upright tilt. J Appl Physiol (1985). 2011 Feb;110(2):492-8. doi: 10.1152/japplphysiol.01060.2010. Epub 2010 Nov 25. PubMed PMID: 21109596.

Published Abstracts

1. Crandall C.G., Cramer M.N., Belval L.N., Huang M., **Moralez G**., Watso J.C., Kowalske K.A. Burn survivors can perform mild/moderate-intensity exercise in thermoneutral conditions without a risk of excessive elevations in core body temperature. Journal of Burn Care & Research, Volume 42, Issue Supplement_1, April 2021, Pages S5–S6, https://doi.org/10.1093/jbcr/irab032.005

2. **Moralez, G**., Hansen, A.B., Amin, S.B., Hofstatter, F., Tymko, M.M., Ainslie, P.N., Hearon, C.M., Jr and Lawley, J.S. (2020), Muscle sympathetic nerve activity in altitude acclimatized lowlanders during leg cycling exercise. The FASEB Journal, 34: 1-1. doi:10.1096/fasebj.2020.34.s1.09846

3. Huang, M., Cramer, M.N., **Moralez, G**. and Crandall, C.G. (2020), Use of a Water-soaked Garment, with and without an Electric Fan, to Mitigate Thermal Strain in Older Individuals under Heat Wave Conditions. The FASEB Journal, 34: 1-1. doi:10.1096/fasebj.2020.34.s1.02438

4. Crandall C.G., Cramer M.N., Huang M., **Moralez G**., Belval L.N., Watso J.C., Fishcher M. Burn Survivors Can Exercise for 30 Min, Even in the Heat, Without a Risk of Excessive Hyperthermia. Journal of Burn Care & Research, Volume 41, Issue Supplement_1, March 2020, Pages S48–S49, https://doi.org/10.1093/jbcr/iraa024.079

5. **Moralez, G**., Huang, M., Cramer, M.N., Hendrix, J.M., Hinojosa-Laborde, C., Ryan, K.L., Fu, Q. and Crandall, C.G. (2019), Ketamine Blunts Sympathetic Nerve Activity Responses to a Cold Pressor test. The FASEB Journal, 33: 848.5-848.5. doi:10.1096/fasebj.2019.33.1_supplement.848.5

6. Huang, M., **Moralez, G**., Cramer, M.N., Hendrix, J.M., Hinojosa-Laborde, C., Ryan, K.L. and Crandall, C.G. (2019), Analgesics in the Pre-Hospital Setting: Simulated Hemorrhagic Tolerance in Humans is not Impaired by Ketamine Administration. The FASEB Journal, 33: 541.3-541.3. doi:10.1096/fasebj.2019.33.1_supplement.541.3

7. Hearon, C.M., Hansen, A.B., **Moralez, G**., Romero, S.A., Levine, B.D. and Lawley, J.S. (2019), Global REACH Expedition: Chronic Hypoxia Attenuates α_1-Adrenergic-Mediated Vasoconstriction in Humans:

Mechanisms of “Chronic-Hypoxic Sympatholysis”. The FASEB Journal, 33: 838.25-838.25. doi:10.1096/fasebj.2019.33.1_supplement.838.25

8. Hearon, C.M., Hansen, A.B., **Moralez, G**., Romero, S.A., Levine, B.D. and Lawley, J.S. (2019), Global REACH Expedition: Chronic Hypoxia Attenuates the Contribution α-Adrenergic Receptors to Sympathetic Transduction in Exercising Humans. The FASEB Journal, 33: 562.11-562.11. doi:10.1096/fasebj.2019.33.1_supplement.562.11

9. Samuel, T.J., Nelson, M.D., Nasirian, A., Jaffery, M., **Moralez, G**., Romero, S.A., Cramer, M.N., Huang, M., Kouda, K., Babb, T.G., Sarma, S. and Crandall, C. (2019), Impaired pulmonary function and right ventricular morphology in well-healed burn survivors is related to aerobic capacity and not severity of burn injury. The FASEB Journal, 33: 535.9-535.9. doi:10.1096/fasebj.2019.33.1_supplement.535.9

10. Crandall CG, **Moralez G**, Romero SA, Cramer MN and Huang M. Six months of aerobic exercise training similarly improves aerobic capacity in well-healed burn survivors without regard to the percent of body surface area burned. *American Burn Association Conference. April 2019.*

11. Hansen AB , **Moralez G**, Amin SB ,Hofstaetter F , Dawkins TG,Tymko MM , Ainslie PN , Romero SA, Lawley JS And Hearon Jr.CM. Global Reach Expedition: Increase Basal α-Adrenergic Vasoconstriction And Impaired α-Adrenergic Responsiveness In Andeans With Chronic Mountain Sickness. *The 21st International Hypoxia Symposium. February 2019.*

12. Mugele H, Hansen AB , Hofstaetter F, Amin SB , Ainslie PN , Romero SA, Hearon Jr.CM, Moralez G, and Lawley JS. Global Reach Expedition: Normal Exercise Capacity and Exercise Pressor Response In Male Andeans With Chronic Mountain Sickness. *The 21st International Hypoxia Symposium. February 2019. February 2019.*

13. Hansen AB, **Moralez G**, Romero SA, Tymko MN, Ainslie PN, Hofstätter F, Rainer SL, Lawley JL, Hearon Jr CM. The Flying Dutchman sails again: A method to assess the mechanisms of sympathetic vascular restraint. *Europhysiology Conference. October 2018*

14. **Moralez, G.**, Hieda, M., Sarma, S., Romero, S.A., Cramer, M.N., Huang, M. and Crandall, C.G. (2018), Left ventricular systolic function is improved in well-healed burn survivors after six months of exercise training. The FASEB Journal, 32: 855.15-855.15. doi:10.1096/fasebj.2018.32.1_supplement.855.15

15. **Moralez G**, Romero SA, Cramer MN, Adams AN, Jaffery MF, Huang M, and Crandall CG. Cardiovascular Responses to Steady State Exercise in Well-healed Burned Survivors after Six Months of Exercise Training. *Medicine & Science in Sports & Exercise. May 2018 - Volume 50 - Issue 5S - p 550*

16. Huang M, Jaffery MF, **Moralez G**, Cramer MN, Romero SA, and Crandall CG. Mismatch between Perception of Disability and Functional Outcomes in Individuals with Large Burn Injuries. *Medicine & Science in Sports & Exercise. May 2018 - Volume 50 - Issue 5S - p 90*

17. Cramer MN, **Moralez G**, Huang M, and Crandall CG. No Evidence Of Thermoregulatory Impairment In Donor Skin During Exercise-induced Hyperthermia: *Medicine & Science in Sports & Exercise. May 2018 - Volume 50 - Issue 5S - p 622.*

18. Cramer MN, **Moralez G**, Huang M, and Crandall CG. Critical Environmental Limits for Prolonged Work in the Heat Using a Simulated Burn Injury Model. *The FASEB Journal 2018 32:1_supplement,590.15-590.15*

19. Jaffery MF, Romero SA, **Moralez G**, Kennedy N, and Crandall CG. Muscular Strength in Well Healed Burn Survivors is Similar to Controls. *The FASEB Journal 2018 32:1_supplement,856.2-856.2*

20. **Moralez G**, Kouda K, Hieda M, Hardin E, Sarma S, Romero SA, Cramer MN, Gagnon D, Adams AN, Jaffery MF, Crandall CG. Whole-body heat stress does not appear to reduce β1-adrenergic responsiveness in heat stressed older individuals. *FASEB J, 2017 31:1018.12*

21. **Moralez G**, Kouda K, Hieda M, Sarma S, Romero SA, Cramer MN, Adams AN, Jaffery MF, Crandall CG. Whole-body heat stress sensitizes β1-adrenergic receptor mediated cardiac systolic function. *Medicine & Science in Sports & Exercise. 49(5S):669, 2017.*

22. Cramer MN, Kouda K, **Moralez G**, Poh PY, Gagnon D, and Crandall CG. Core Temperature Responses to Exercise Using a Simulated Burn Injury Model: Impact Of Body Size: *Medicine & Science in Sports & Exercise. 49(5S):18, May 2017.*

23. Nasirian A, Nelson M, Kouda K, Romero SA, Adams AN, Jaffery MF, Cramer MN, **Moralez G**, Kowalske K, Phelan H, Wolf S, Merz NB, and Crandall CG. Left Ventricular Remodeling and Cardiac Dysfunction in Long-Term Burn Survivors. *FASEB J April 2017 31:843.18*

24. Romero SA, Gagnon D, Adams AN, Cramer MN, Jaffery MF, Kouda K, **Moralez G**, Crandall CG. Effect of chronic lower limb heating on indices of vascular function and functional capacity in aged humans. *Medicine & Science in Sports & Exercise. 49(5S):817, May 2017.*

25. Cramer MN, **Moralez G**, Kouda K, Gagnon D, and Crandall CG. Impact of air temperature on core temperature regulation during exercise using a simulated burn injury model. *FASEB J April 2017 31:1018.9*

26. Romero SA, Gagnon D, Adams AN, Cramer MN, Jaffery MF, Kouda K, **Moralez G**, Crandall CG. Acute folic acid ingestion improves skeletal muscle blood flow during graded handgrip and plantar flexion exercise in aged humans. *FASEB J April 2017 31:840.15*

27. Adams AN, Romero SA, Gagnon D, Jaffery MF, Cramer MN, Kouda K, **Moralez G**, Crandall CG. Evidence suggesting reduced macrovascular and microvascular dilator function in well-healed burned survivors. *Medicine & Science in Sports & Exercise. 49(5S):809, May 2017.*

28. Jaffery MF, Romero SA**,** Gagnon D, Adams AN, Kouda K, Cramer MN, **Moralez G**, Kennedy N, Crandall CG. Arterial stiffness is not altered in well-healed burn survivors. *Medicine & Science in Sports & Exercise. 49(5S):810, May 2017.*

29. Spector ER, Matsumoto T, Jones J, Shapiro J, Lang T, Shackelford LC, Smith SM, Evans HJ, Spector ER, Ploutz-Snyder R, Sibonga J, Nakamura T, Kohri K, Ohshima H, **Moralez G**, LeBlanc A. "Bone Loss Countermeasures for Long Duration Space Flight." ASBMR 2016 (American Society for Bone and Mineral Research), Atlanta, Georgia, September 16-19, 2016.

30. **Moralez G**, Jouett N, White DW, Zimmerman MC, Tian J, Chen S, Smith ML and Raven PB. Antioxidants Attenuate the Exercise Induced Increases in Muscle Sympathetic Nerve Activity during Heavy Dynamic Exercise. *Medicine and science in sports and exercise 48 (5 Suppl 1), 669, June 2016.*

31. **Moralez G**, Jouett N, Tian J, Zimmerman MC and Raven PB. Centrally Acting Perindopril Attenuates the Exercise Induced Increase in Muscle Sympathetic Nerve Activity during Heavy Dynamic Exercise. FASEB J April 2016 30:995.5

32. Jouett,NP, **Moralez G**, White DW, Eubank WL, Chen S, Tian J, Smith ML, Zimmerman MC, and Raven PB. N-Acetyl Cysteine Reduces Sympathetic Activation during Acute Intermittent Hypoxia in Healthy Human Subjects: Implications for Obstructive Sleep Apnea. FASEB J April 2016 30:757.9

33. Jouett,NP, **Moralez G**, White DW, and Raven PB. Antioxidants Attenuate the Exercise Induced Resetting of the Arterial Baroreflex in Healthy Human Subjects: Implications for Exercise Induced Hypertension. FASEB J April 2016 30:1289.4

34. LeBlanc A, Matsumoto T, Jones J, Shapiro J, Lang T, Shackelford L, Smith SM, Evans H, Spector E, Snyder RP, Sibonga J, Keyak J, Nakamura T, Kohri K, Ohshima H, **Moralez G.** Spaceflight Bone Atrophy-Problem Solved? Journal of Bone and Mineral Research. 2015;30 (Suppl 1). , Oct-2015.

35. Jouett N, **Moralez G**, Raven PB and Smith ML. N-Acetyl Cysteine Attenuates Intermittent Hypoxia Induced Sympathoexcitation in Human Subjects. FASEB J April 2015 29:955.4

36. LeBlanc A, Matsumoto T, Jones J, Shapiro J, Lang T, Shackelford L, Smith SM, Evans H, Spector E, Ploutz-Snyder R, Sibonga J, Keyak J, Nakamura T, Kohri K, Ohshima H, **Moralez G.** Update of the Bisphosphonate ISS Flight Experiment. NASA Human Research Program Investigators' Workshop (HRP IWS 2015), Galveston, TX, January,2015 JSC-CN-32238

37. LeBlanc A, Matsumoto T, Jones J, Shapiro J, Lang T, Shackelford L, Smith SM, Evans H, Spector E, Ploutz-Snyder R, Sibonga J, Keyak J, Nakamura T, Kohri K, Ohshima H, **Moralez G.** Update of the Bisphosphonate ISS Flight Experiment. American Society for Bone and Mineral Research; Sept. 2014; Houston, TX, Galveston, TX, JSC-CN-30935

38. Moralez G, White DW, and Raven PB. Effects of antioxidants on cerebrovascular control during moderate and high intensity exercise. *FASEB J* April 2014 28:1183.6

39. White DW, Kay VL, **Moralez G**, Benson T, Carlton J, Eubank W and Raven PB. Effect of posture on heart rate control prior to and following dynamic leg exercise. *FASEB J* April 2014 28:881.8

40. Moralez G, Romero SA, Ryan KL, Cooke WH, Rickards CA. Effects of inspiratory resistance on cerebral blood velocity during orthostasis with dehydration. *FASEB J* 2013; 27:1203.14.

41. Eubank W, White DW, **Moralez G**, Kay V, Watenpaugh DE and Raven PB. Role of Reactive Oxygen Species in Intermittent Hypoxia Induced Sympathoexcitation. *FASEB J* April 9, 2013 27:938.2.

42. White DW, Kay V, **Moralez G**, Eubank W and Raven PB. A Case for a Standardized Method for the Normalization of Muscle Sympathetic Nerve Activity (MSNA) Amplitude. FASEB J April 9, 2013 27:1117.1

43. Moralez G, Romero SA, Rickards CA, Raven PB, and Cooke WH. Cerebrovascular Hemodynamics during Concentric and Eccentric Phases of Heavy Resistance Exercise. *International Journal of Exercise Science*. 2, Article 14, 2013.

44. Moralez G, Cox P, Lucas RAI, Ganio MS, Pearson J, Crandall CG, and Cooke WH. Infrared thermal imaging of human skin temperature during combined simulated hemorrhage and thermal stress. FASEB J March 29, 2012 26:lb741

45. Rickards CA, **Moralez G**, Romero SA, Cooke WH, Ryan KL, Hinojosa-Laborde C, Lurie KG, and Convertino VA. The influence of oscillations in arterial pressure and cerebral blood velocity on tolerance to hypovolaemia - a review. Presented at Cerebral haemodynamics: Measurement and Management Conference, Imperial College, London England. July, 2011.

46. Cooke WH, **Moralez G**, and Cox P. Thermographic imaging during simulated uncontrolled hemorrhage in humans. *Medicine and Science in Sports and Exercise.*43(5) S448, 2011.

47. Romero SA, Jacuqez JD, **Moralez G**, Fogt DL, and Cooke WH. Arterial pulse wave velocities are unchanged following 12 weeks of circuit weight training. *Medicine and Science in Sports and Exercise*. 43(5) S445, 2011.

48. Lara J, **Moralez G**, Barrera C, Martinez A, and Cooke WH. No influence of ovarian hormones on cerebrovascular responses to the Valsalva maneuver. *International Journal of Exercise Science*. 2, Article 28, 2010.

49. Martinez A, **Moralez G**, Barrera C, Lara J, and Cooke WH. Thermographic imaging to detect reductions of central volume induced by simulated hemorrhage. *International Journal of Exercise Science*. 2, Article 28, 2010.

50. Barrera C, **Moralez G**, Lara J, Martinez A, and Cooke WH. Non-invasive techniques to track stroke volume during simulated uncontrolled hemorrhage. *International Journal of Exercise Science*. 2, Article 28, 2010.

51. Sanborn ER, Romero SA, , **Moralez G**, Jacquez JD, , Fogt DL and Cooke WH. Ovarian hormones and cerebral hemodynamics during upright tilt. *International Journal of Exercise Science*. 2, Article 20, 2009.

52. Jacquez JD, Romero SA, Sanborn ER, **Moralez G**, Liu DD, Fogt DL, and Cooke WH. Arterial pulse wave velocities are unchanged following 12 weeks of circuit weight training. *International Journal of Exercise Science*. 2, Article 12, 2009.

53. Romero SA, Sanborn ER, **Moralez G**, and Cooke WH. Effects of hypovolemia on cerebral blood velocity and autoregulation during uprignt tilt: Implications for post-spaceflight orthostasis. *International Journal of Exercise Science*. 2, Article 8, 2009.

54. Ryan KL, Rickards CA, Muniz GW, **Moralez G**, and Convertino VA. Interindividual variability in heart rate variability (HRV) and complexity (HRC) measurements *FASEB J*. 22: 1229.3 2008.

55. Rickards CA, Ryan KL, Muniz GW, **Moralez G**, and Convertino VA. How many heart beats are enough? A systematic assessment of data length reduction on measures of heart rate variability and complexity *FASEB J*. 22: 1229.1 2008.

Scientific Presentations

- **Moralez G**, Nabasny A, Huang M, and Juengst SB. Autonomic Nervous System Function Following Moderate to Severe Traumatic Brain Injury: Characterization and Association with One-Year Outcomes *American Congress of Rehabilitation Medicine 2020 VIRTUAL Annual Conference* - Invited speaker (10/2020)

- **Moralez G**, Jouett N, Tian J, Zimmerman MC and Raven PB. Centrally acting angiotensin converting enzyme inhibitor and antioxidants attenuate the central sympathetic outflow during dynamic exercise in humans. *International Society for Autonomic Neuroscience Symposium , Nagoya, Japan* - Invited speaker (8/2017)

- **Moralez G** and Raven PB. Evaluation of cardiovascular control during exercise. *Graduate School of Humanities and Sciences, Nara Women's University, Nara, Japan* - Invited speaker (8/2017)

- **Moralez G**, Kouda K, Hieda M, Sarma S, Romero SA, Cramer MN, Adams AN, Jaffery MF, Crandall CG. Whole-body heat stress does not appear to reduce β1-adrenergic responsiveness in heat stressed older individuals. *Experimental Biology Symposium, Chicago, Illinois*. (4/2017)

- **Moralez G**, Jouett N, White DW, Zimmerman MC, Tian J, Chen S, Smith ML and Raven PB. Antioxidants Attenuate the Exercise Induced Increases in Muscle Sympathetic Nerve Activity during

Heavy Dynamic Exercise. *American College of Sports Medicine National Conference, Boston, Massachusetts.* (06/2016)

- **Moralez G**, Jouett N, Tian J, Zimmerman MC and Raven PB. The role of angiotensin II linked central and systemic reactive oxygen species (ROS) production in the exercise induced resetting of the arterial baroreflex. *Texas Chapter of American College of Sports Medicine Conference, Austin, Texas*. (02/2015)

- **Moralez G**. Invited lecturer in Graduate course Research Methods, *Department of Kinesiology, The University of Texas at Arlington.* (11/2014)

- **Moralez G**, Romero SA, Rickards CA, Raven PB, and Cooke WH. Effects of Dehydration on Cerebral Blood Velocity and Autoregulation during Standing after Heavy Resistance Exercise. *Texas Chapter of American College of Sports Medicine Conference, Houston, Texas. (04/2010)*

Funding History

Research Support

Current

- 2020 - 2021: Intramural Grant: SHP Interdisciplinary Research Grant Program. Autonomic Dysfunction after Acute Moderate to Severe Traumatic Brain Injury and the Added Impact of Extracranial Injuries. The research objective of the proposed study is to identify the extent and severity of which head and extracranial injuries are associated with autonomic dysfunction.
  Role: Principal Investigator

Completed

- 2019 - 2020: Extramural Grant: NIH-NHLBI- Mechanisms contributing to the impaired autonomic control of sympathetic nerve activity. The goal of this Small Research Project funded by the National Heart, Lung, and Blood Institute (NHLBI) is to identify the role of reactive oxygen species, Angiotensin II and peripheral blood mononuclear cells production in the pronounced sympathetic nerve activity response during sympathoexcitatory stressors in normotensive African Americans.
  Role: Principal Investigator

- 2018 - 2019: Extramural Grant: Wilderness Medical Society Research in Training Grant. “Effect of hypobaric hypoxia on the control of muscle sympathetic nerve activity during dynamic exercise in humans.” In support of the Global Research Expedition on Altitude related Chronic Health (Global REACH): a scientific expedition to the Andean mountains. **Role: Principal Investigator**

- 2016 - 2018: Extramural Grant: Research Supplement to Promote Diversity in Health-Related Research. National Institutes of Health - National Institute of General Medical Sciences. “Exercise in Burn Survivors.” **Role: Co-investigator**; Principal Investigator: Craig G. Crandall

- 2015 - 2016: Extramural Grant: Texas Chapter of American College of Sports Medicine (TACSM) Student Research Development Grant (SRDA- Doctoral) “The role of central and systemic reactive oxygen species production in the exercise induced resetting of the atrial baroreflex”
  Role: Principal Investigator; Sponsor Peter B. Raven

- 2013 - 2015: Intramural Grant: “Exercise induced hypertension in humans: Pathophysiological mechanisms” Preliminary investigations. These investigations are designed to provide preliminary findings regarding the role of the Renin-Angiotensin system’s (RAS) central and peripheral role in enabling the arterial baroreflex to reset in and intensity related manner during exercise. RI6128 **Role: Co-investigator**; Principal Investigator: P.B. Raven

- 2012 - 2014: Intramural Grant: University of North Texas Health Science Center, Graduate School of Biomedical Sciences, Graduate Assistantship award.

- 2009 - 2010: Extramural Grant: Texas Chapter of American College of Sports Medicine (TACSM) Student Research Development Grant (SRDA- Masters) “Effects of Dehydration on Cerebral Blood Velocity and Autoregulation during Standing after Heavy Resistance Exercise”
  Role: Principal Investigator; Sponsor William H. Cooke

Honors and Awards

- 2020- UT Southwestern School of Health Professions Interdisciplinary Research Grant Award Recipient.
- 2019 - Scholar (Cohort 7) **Pr**ogram to **I**ncrease **D**iversity among Individuals **E**ngaged in Cardiovascular Health-Related Research (PRIDE-CVD) sponsored by the National Heart, Lung, and Blood Institute.
- 2018 - Wilderness Medical Society Research in Training Grant Award Winner.
- 2018 - Co-Investigator in the Global Research Expedition on Altitude related Chronic Health (Global REACH): a scientific expedition to the Andean mountains.
- 2017 - Mentor Judge Travel Award for the 2017 Annual Biomedical Research Conference for Minority Students (ABRCMS).
- 2016 - Research Supplement to Promote Diversity in Health-Related Research. National Institutes of Health - National Institute of General Medical Sciences.
- 2016 - University of North Texas Health Science Center, Dean’s Award for Scholarly Excellence in Research Nominee, Selected by the Committee for Graduate studies.
- 2016 - Young Investigator Award from Society for Experimental Biology and Medicine.
- 2016 - The American Physiological Society, Caroline tum Suden/Francis A. Hellebrandt Professional Opportunity Award.
- 2016 - University of North Texas Health Science Center, Graduate School of Biomedical Sciences, Graduate Student Travel Award.
- 2016 - University of North Texas Health Science Center, Graduate Student Association Travel Scholarship.
- 2015 - Texas Chapter of American College of Sports Medicine Student Research Development Grant (Doctoral).
- 2014 - The American Physiological Society Minority Travel Fellowship Award to attend Experimental Biology 2014.
- 2013 - The American Physiological Society Minority Travel Fellowship Award to attend Experimental Biology 2013.
- 2012 - University of North Texas Health Science Center, Graduate School of Biomedical Sciences, Graduate assistantship award.
- 2010 - Texas Chapter of American College of Sports Medicine Student Manuscript Award Winner.
- 2009 - Texas Chapter of American College of Sports Medicine Student Research Development Grant (Masters).

Teaching Experience

- 2020 - Present - ACR 5099, Dissertation, **Course Director,** Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.

- 2020- Present - ACR 5096, Special Topics Course, **Course Director,** Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.
- 2020- Present - ACR 5114, Scientific Communication, **Instructor**, Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.
- 2020- Present - ACR 5096, Special Topics Course, **Course Director,** Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.
- 2020- Present - ACR 5102 Grant Writing II, **Instructor**, Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.
- 2020- Present - HCS 5101 Grant Writing I, **Instructor**, Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.
- 2019- Present - HCS 5104 - Laboratory Rotations: Techniques in Applied Clinical Research, Laboratory Rotation **Instructor**, Department of Applied Clinical Research, School of Health Professions, UT Southwestern Medical Center.
- 2018, Spring - APSM 5300-701 Senior Project, **Instructor,** Department of Applied Physiology and Wellness, Southern Methodist University.
- 2015 – 2016 - Texas Academy of Biomedical Sciences (TABS) Preceptorship Lecturer in Physiology, **Instructor**, University of North Texas Health Science Center.
- 2011, Summer - KIN 3313, Anatomic Kinesiology (Anatomy and Physiology for Kinesiology), **Instructor**, Department of Kinesiology, Health, and Nutrition, The University of Texas at San Antonio.
- 2010, Spring – KIN 3433, Exercise Physiology, **Laboratory Instructor,** Department of Kinesiology, Health, and Nutrition at The University of Texas at San Antonio.
- 2010, Spring – KIN 4233, Advanced Topics in Exercise Physiology, **Laboratory Instructor**, Department of Kinesiology, Health, and Nutrition, The University of Texas at San Antonio.
- 2010, Spring - KIN 3313, Biomechanics, **Laboratory Instructor**, Department of Kinesiology, Health, and Nutrition, The University of Texas at San Antonio.

Student Mentoring

- 2021- Present: **Luyi Adesanya** – PhD student, Applied Clinical Research Program, University of Texas Southwestern Medical Center, School of Health Professions.
- 2017 & 2015 - **Elizabeth Nguyen** - Medical student at Texas College of Osteopathic Medicine, Fort Worth, TX
- 2014 - **Alexandra Huckabee**- Undergraduate student intern -Hardin-Simmons University Abilene, Texas
- 2014 & 2013 - **Mark Cheneler**- Undergraduate student intern - Saint Louis University, St. Louis, Missouri.
- 2014 & 2013 – **Dan Ton** - Undergraduate student intern - The University of Texas at Arlington, Arlington, TX
- 2013 - **Ritika Chaubey** - Texas Academy of Mathematics and Science (TAMS) student intern
- 2013 - **Jeffrey Lee Sang**- Undergraduate student intern - Texas Lutheran University, Seguin, Texas

Professional Service

- 2021 - 2023: UT Southwestern School of Health Professions, Faculty Assembly Executive Council- **Secretary (re-elected).**
- 2021- Present: Latinxs in Health Professions at UT Southwestern Medical Center **Faculty Adviser.**

- 2021- Present: UT Southwestern Medical Center, School of Health Professions, Diversity & Inclusion Advisory Committee **Member.**
- 2021- Present: UT Southwestern Medical Center, School of Health Professions, Academic Affairs Scholarship Committee **Member.**
- 2020- Present: UT Southwestern Medical Center Faculty Collaborative on Racial Diversity & Inclusion for Clinicians, Scientists and Educators.
- 2020- Present: UT Southwestern Medical Center, School of Health Professions, Department of Applied Clinical Research, Research Faculty Search Committee **Member**.
- 2020- Present: UT Southwestern Medical Center, School of Health Professions, Department of Applied Clinical Research, Qualifying Exam I Committee **Member**.
- 2020- Present: UT Southwestern Medical Center, School of Health Professions, Department of Applied Clinical Research, Currculum Committee **Member.**
- 2019- Present: UT Southwestern Medical Center, School of Health Professions, Department of Applied Clinical Research, Student Progress Committee **Chair.**
- 2019- Present: UT Southwestern Medical Center, School of Health Professions, Department of Applied Clinical Research, Graduate Studies Committee **Member**.
- 2019- Present: UT Southwestern Medical Center, Martin Luther King, Jr. Scholarship for Community Service Committee **Member**.
- 2019- Present: UT Southwestern Medical Center, School of Health Professions, Academic Affairs Committee **Member**.
- 2019- Present: UT Southwestern School of Health Professions, Research Advisory Committee **Member**.
- 2019 - 2021: UT Southwestern School of Health Professions, Faculty Assembly Executive Council- **Secretary.**
- 2019- Present: UT Southwestern Medical Center, School of Health Professions, Ph.D. Program in Applied Clinical Research Admissions Committee **Member**.
- 2019- Present: UT Southwestern Medical Center, School of Health Professions, Department of Health Care Sciences Biostatistician Search Committee **Member**.
- 2019- Present: UT Southwestern School of Health Professions Research Advisory Committee's Interdisciplinary Research Grant Program- **Sub-Committee Chair**.
- 2019 – Present :Texas Chapter of American College of Sports Medicine Board of Directors – **Secretary.**
- 2018 - **Session Chair** in Physiology, Pathology and Neuroscience for 2018 Society for Advancement of Chicanos and Native Americans in Science (SACNAS): National Diversity in STEM Conference.
- 2017 - 2019: Institute for Exercise and Environmental Medicine Strategic Plan Committee **Member**.
- 2017 - 2019: Institute for Exercise and Environmental Medicine Employee Recognition and Diversity Awareness Committee **Member**.

Manuscript Review

- The Journal of Physiology (*London)*
- American Journal of Physiology – Regulatory, Integrative and Comparative Physiology
- American Journal of Physiology – Heart and Circulatory Physiology
- Experimental Biology and Medicine
- Journal of Applied Physiology
- Experimental Physiology (*London)*
- Applied Physiology, Nutrition, and Metabolism (*Canada)*
- Federation of American Societies for Experimental Biology (FASEB)
- Physiological Reports
- Research Quarterly for Exercise and Sport

Professional Membership

- 2018: Wilderness Medical Society
- 2013: Society for Advancement of Chicanos and Native Americans in Science (SACNAS)
- 2009: American College of Sports Medicine
- 2008: Texas Chapter of American College of Sports Medicine
- 2007: American Physiological Society

Community Engagement

- 2019 - Judge for the Research Appreciation Day at University of North Texas Health Science Center
- 2019 - Manuscript Judge at the Texas Chapter of American College of Sports Medicine annual meeting
- 2018 - SACNAS Mentor Judge for the 2018 National Diversity in STEM Conference
- 2018 - Judge for the Research Appreciation Day at University of North Texas Health Science Center
- 2018 - Judge at the Texas Chapter of American College of Sports Medicine annual meeting
- 2017 - Mentor Judge for the 2017 Annual Biomedical Research Conference for Minority Students
- 2017 - Poster Judge at the Texas Chapter of American College of sports medicine annual meeting
- 2014 - Big Brothers Big Sisters Lone star charity event volunteer
- 2013 - Big Brothers Big Sisters Lone star charity event volunteer
- 2013 - Texas Academy of Biomedical Sciences (TABS) Laboratory demonstrations