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EDUCATION

2008 Ph.D.	Federal University of Rio de Janeiro Biological Sciences (Biochemistry)
2003 M.Sc.	Federal University of Rio de Janeiro Biological Sciences (Biochemistry)
2001 B.Sc.	Federal University of Rio de Janeiro Physical Education (Kinesiology)

ACADEMIC POSITIONS HELD

Fall 2022 – Present San Diego State University	Assistant Professor (Tenure-track) Exercise Physiology
Fall 2021 – Summer 2022 University of California San Diego	Associate Research Scientist Physiology
Fall 2017 – Summer 2021 University of California San Diego	Assistant Research Scientist Physiology
Spring 2017 – Fall 2017 Federal University of Rio de Janeiro	Associate Professor (Tenured) Biochemistry
Fall 2014 – Fall 2017 Federal University of Rio de Janeiro	Assistant Professor (Tenure-track) Biochemistry
Spring 2014 – Summer 2014 Federal University of Rio de Janeiro	Research Fellow Biochemistry
Fall 2009 – Fall 2013 University of California San Diego	Post-doctoral fellow Physiology
Fall 2008 – Summer 2009 Duke University	Post-doctoral fellow Physiology/Molecular Biology
Fall 2004 – Spring 2008 Estacio de Sá University	Part-time lecturer Kinesiology and Physical Therapy

PROFESSIONAL GROWTH

REFEREED JOURNAL ARTICLES

Before Tenure

1. Zero, A.M., Rice, C.L., **Nogueira, L.** Competing effects of activation history on force and cytosolic Ca^{2+} in intact single mice myofibers. *Pflugers Arch.*, 477 (3):407 – 419, 2025. Doi: 10.1007/s00424-024-03061-5. PMID: 39738587
   Contribution: **Anchor author.** Contributed to the conception, design, and interpretation of the data, performed the experimental work, analyzed the data, and wrote the manuscript.
   Ranking of the Journal: #30 out of 196 in Physiology
   Acceptance Rate of the Journal: Not available
   Impact Factor: 2.9

2. Stevens, N.E., Loreti, M., Ramirez-Sanchez, I., Dos Reis, F.C.G., Sacco, A., Breen, E.C., **Nogueira, L.** Cigarette smoke exposure impairs early-stage recovery of myofiber cross-sectional area from lengthening contractions. *Physiological Reports*, 12(18):e70064, 2024. Doi: 10.14814/phy2.70064. PMID: 39328164
   Contribution: **Anchor author.** Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version.
   Ranking of the Journal: #80 out of 196 in Physiology
   Acceptance Rate of the Journal: 77%
   Impact Factor: 2.5

3. **Nogueira, L**, Zemljic-Harpf AE, Yusufi R, Ranjbar M, Susanto C, Tang K, Mahata SK, Jennings PA, and Breen EC. E-cigarette aerosol impairs male mouse skeletal muscle force development and prevents recovery from injury. *Am J Physiol Regul Integr Comp Physiol.* 323: R849-R860, 2022. Doi: 10.1152/ajpregu.00314.2021. PMID: 36250633
   Contribution: Conceived and designed research, performed experiments, analyzed data, interpreted results of experiments, prepared figures, drafted manuscript, edited and revised manuscript, approved final version of manuscript.
   Ranking of the Journal: #5441 out of 27955 Journals, Conferences, and Book Series (#68 out of 196 in Physiology)
   Acceptance Rate of the Journal: Not available
   Impact Factor: 2.8

4. **Nogueira, L.**, Gilmore, N.K., and Hogan, M.C. Fatigue-induced changes in force and intracellular cytosolic calcium transients in intact single myofibers from parvalbumin conditional knockout mice. *J Appl Physiol*, 132: 1041-1053, 2022. Doi: 10.1152/japplphysiol.00861.2021. PMID: 35238653
   Contribution: **Anchor author.** Conceived and designed research, performed experiments, analyzed data, interpreted results of experiments, prepared figures, drafted manuscript, edited and revised manuscript, approved final version of manuscript.
   Ranking of the Journal: #4474 out of 27955 Journals, Conferences, and Book Series (#27 out of 81 in Physiology)
   Acceptance Rate of the Journal: Not available
   Impact Factor: 3.3

5. Cannon, D.T., **Nogueira, L.,** Gutierrez-Gonzalez, A.K., Gilmore, N.K., Bigby, T.D., and Breen, E.C. Role of IL-33 receptor (ST2) deletion in diaphragm contractile and mitochondrial function in the Sugen5416/hypoxia model of pulmonary hypertension. *Resp Physiol Neurobiol.* 295:103783, 2021. doi: 10.1016/j.resp.2021.103783. PMID: 34508866.

Contribution: Performed data acquisition, data analysis, data interpretation, manuscript drafting, critical revision.
Ranking of the Journal: #8468 out of 27955 Journals, Conferences, and Book Series.
Acceptance Rate of the Journal: 24%
Impact Factor: 2.3

6. **Nogueira L.** and Breen E.C. Invited Editorial: Cigarettes Make You Weak: RANKL/RANK Link Changes in Muscle and Bone. *Am J Respir Cell Mol Biol.* 64:533-535, 2021. doi: 10.1165/rcmb.2021-0098ED. PMID: 33711242
Contribution: Performed manuscript writing, edited, and revised manuscript, approved final version of manuscript.
Ranking of the Journal: #14 in pulmonology
Acceptance Rate of the Journal: Not available
Impact Factor: 6.4

7. Cocksedge, S.P., Breese, B.C., Morgan, P.T., **Nogueira, L.**, Thompson, C., Wylie, L.J., Jones, A.M., and Bailey, S.J. Influence of muscle oxygenation and nitrate-rich beetroot juice supplementation on O_2 uptake kinetics and exercise tolerance. *Nitric Oxide* 99: 25-33, 2020. Doi: 10.1016/j.niox.2020.03.007. PMID: 32272260
Contribution: Interpreted results of experiments, drafted manuscript, edited and revised manuscript, approved final version of manuscript
Ranking of the Journal: #4747 out of 27955 Journals, Conferences, and Book Series
Acceptance Rate of the Journal: Not available
Impact Factor: 3.9

8. Bailey, S.J., Gandra, P.G., Jones, A.M., Hogan, M.C., and **Nogueira, L.** Incubation with sodium nitrite attenuates fatigue development in intact single mouse fibres at physiological PO_2. *J. Physiol.* 597: 5429-5443, 2019. doi: 10.1113/JP278494. PMID: 31541562.
Contribution: **Anchor author.** Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version of the manuscript.
Ranking of the Journal: #2021 out of 27955 Journals, Conferences, and Book Series (#20 out of 196 in Physiology)
Acceptance Rate of the Journal: 24.8%
Impact Factor: 6.228

9. **Nogueira L.,** Trisko B.M., Lima-Rosa F.L., Jackson J., Lund-Palau H., Yamaguchi M., and Breen E.C. Cigarette smoke directly impairs skeletal muscle function through capillary regression and altered myofibre calcium kinetics in mice. *J. Physiol.* 596: 2901-2916, 2018. doi: 10.1113/JP275888. PMID: 29797443
Contribution: Contributed to the design, collection, analysis and interpretation of the nose-only and i.p. delivery of cigarette smoke and muscle function and morphometric data. Contributed in drafting/revising the manuscript. Contributed to the overall concept, experimental design, analysis and interpretation of data and drafting and revision of the manuscript.
Ranking of the Journal: #2021 out of 27955 Journals, Conferences, and Book Series (#12 out of 81 in Physiology)
Acceptance Rate of the Journal: 24.8%
Impact Factor: 6.228

10. Gandra, P.G., Shiah, A.A., **Nogueira, L.**, and Hogan, M.C. A mitochondrial-targeted antioxidant improves myofilament Ca^{2+} sensitivity during prolonged low frequency force depression at low PO_2. *J. Physiol.* 596: 1079-1089, 2018, doi: 10.1113/JP275470. PMID: 29334129.

Contribution: Participated in the conception and design of the study, interpretation of the data, drafting of the manuscript, and critically revised the manuscript.
Ranking of the Journal: #2021 out of 27955 Journals, Conferences, and Book Series (#12 out of 81 in Physiology)
Acceptance Rate of the Journal: 24.8%
Impact Factor: 6.228

11. Yamashita, A.M.S., Ancillotti, M.T.C., Rangel, L.P., Fontenele, M., Figueiredo-Freitas, F., Possidonio, A.C., Soares, C.P., Sorenson, M.M., Mermelstein, C., and **Nogueira, L**. Balance between S-nitrosylation and denitrosylation modulates myoblast proliferation independently of soluble guanylyl cyclase activation. *Am J. Physiol. Cell Physiol.* 313: C11–C26, 2017. doi: 10.1152/ajpcell.00140.2016. PMID: 28381519.
Contribution: **Anchor author**. Conceived and designed research, analyzed data, interpreted results of experiments, prepared figures, drafted manuscript, approved final version of manuscript, edited and revised manuscript.
Ranking of the Journal: #2214 out of 27955 Journals, Conferences, and Book Series (#10 out of 81 in Physiology)
Acceptance Rate of the Journal: Not available
Impact Factor: 5.5

12. Figueiredo-Freitas C., Dulce R.A., Foster M.W., Liang J., Yamashita A.M., Lima-Rosa F.L., Thompson J.W., Moseley M.A., Hare J.M., **Nogueira L**., Sorenson M.M., and Pinto J.R. S-Nitrosylation of Sarcomeric Proteins Depresses Myofilament Ca^{2+}-Sensitivity in Intact Cardiomyocytes. *Antioxid. Redox Signal.* 23: 1017-1034, 2015. doi: 10.1089/ars.2015.6275. PMID: 26421519.
Contribution: Analyzed data, interpreted results of experiments, prepared figures, drafted manuscript, approved final version of manuscript, edited and revised manuscript.
Ranking of the Journal: #1713 out of 27955 Journals, Conferences, and Book Series
Acceptance Rate of the Journal: Not available
Impact Factor: 6.6

13. Moreno-Ulloa A., **Nogueira L.**, Rodriguez A., Barboza J., Hogan M.C., Ceballos G., Villarreal F.H., and Ramirez-Sanchez I. Recovery of Indicators of Mitochondrial Biogenesis, Oxidative Stress, and Aging With (-)-Epicatechin in Senile Mice. *J. Gerontol. A Biol. Sci Med. Sci.* 70: 1370-1378, 2015. doi: 10.1093/gerona/glu131. PMID: 25143004
Contribution: Performed experiments; Prepared figures; Analyzed data; Edited and revised manuscript; Approved final version of manuscript
Ranking of the Journal: #18 out of 54 in Geriatrics & Gerontology
Acceptance Rate of the Journal: Not available
Impact Factor: 5.1

14. Delavar H., **Nogueira L.**, Wagner P.D., Hogan M.C., Metzger D., and Breen E.C. Skeletal myofiber VEGF is essential for the exercise training response in adult mice. *Am. J. Physiol. Reg. Integr. Comp. Physiol.* 306: R586-595, 2014. doi: 10.1152/ajpregu.00522.2013. PMID: 2452334.
Contribution: Participated in the conception and design of the study, performed experiments, interpretation of the data, prepared figures, drafted the manuscript, and critically revised the manuscript.
Ranking of the Journal: #5441 out of 27955 Journals, Conferences, and Book Series (#39 out of 81 in Physiology)
Acceptance Rate of the Journal: Not available
Impact Factor: 2.8

15. Gutierrez-Salmean G., Ciaraldi T.P., **Nogueira L.**, Barboza J., Taub P.R., Hogan M.C., Henry R.R., Meaney E., Villarreal F.H., Ceballos G., and Ramirez-Sanchez I. Effects of (-)-epicatechin on molecular

modulators of skeletal muscle growth and differentiation. *J. Nutr. Biochem.* 25: 91-94, 2014. doi: 10.1016/j.jnutbio.2013.09.007. PMID: 24314870
Contribution: Performed experiments; Prepared figures; Analyzed data; Edited and revised manuscript; Approved final version of manuscript.
Ranking of the Journal: #3391 out of 27955 Journals, Conferences, and Book Series
Acceptance Rate of the Journal: Not available
Impact Factor: 6.048

16. Ramirez-Sanchez I., Taub P.R., Ciaraldi T.P., **Nogueira L**., Coe T., Perkins G., Hogan, M.C., Maisel A.S., Henry R.R., Ceballos G., and Villarreal F.H. (-)-Epicatechin rich cocoa mediated modulation of oxidative stress regulators in skeletal muscle of heart failure and type 2 diabetes patients. *Int. J. Cardiol.* 168:3982-90, 2013. doi: 10.1016/j.ijcard.2013.06.089. PMID: 23870648
Contribution: Performed experiments; Prepared figures; Analyzed data; Edited and revised manuscript; Approved final version of manuscript.
Ranking of the Journal: # 62 out of 211 in cardiac and cardiovascular systems
Acceptance Rate of the Journal: Not available
Impact Factor: 3.5

17. Tang, K., Murano, G., Wagner, H., **Nogueira, L.**, Wagner, P.D., Tang, A., Dalton, N.D., Gu, Y., Peterson, K.L., and Breen, E.C. Impaired exercise capacity and skeletal muscle function in a mouse model of pulmonary inflammation. *J. Appl. Physiol.* 114:1340-1350, 2013. doi: 10.1152/japplphysiol.00607.2012. PMID: 23449936.
Contribution: Performed experiments; Analyzed data; Edited and revised manuscript; Approved final version of manuscript.
Ranking of the Journal: #4474 out of 27955 Journals, Conferences, and Book Series (#27 out of 81 in Physiology)
Acceptance Rate of the Journal: Not available
Impact Factor: 3.3

18. **Nogueira, L.**, Shiah, A., Gandra, P.G., and Hogan, M.C. Ca^{2+}-Pumping Impairment during Repetitive Fatiguing Contractions in Single Myofibers: Role of Cross-Bridge Cycling. *Am. J. Physiol. Reg. Integr. Comp. Physiol*. 305: R118-R125, 2013. doi: 10.1152/ajpregu.00178.2013. PMID: 23678027.
Contribution: **Anchor author**. Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version of the manuscript.
Ranking of the Journal: #5441 out of 27955 Journals, Conferences, and Book Series (#39 out of 81 in Physiology)
Acceptance Rate of the Journal: Not available
Impact Factor: 2.8

19. Ramirez-Sanchez, I., **Nogueira, L.**, Moreno, A., Murphy, A., Taub, P.R., Perkins, G., Ceballos, G., Hogan, M.C., Malek, M.L., and Villarreal, F. Stimulatory effects of the flavanol (-)-epicatechin on cardiac angiogenesis: Additive effects with exercise. *J. Cardiovasc. Pharmacol*. 60: 429-438, 2012. doi: 10.1097/FJC.0b013e318269ae0d. PMID: 22833114.
Contribution: Performed experiments, interpretation of the data, and participated in drafting the manuscript.
Ranking of the Journal: #7947 out of 27955 Journals, Conferences, and Book Series (#75 out of 211 in cardiac and cardiovascular systems)
Acceptance Rate of the Journal: Not available
Impact Factor: 3.0

20. Gandra, P.G., **Nogueira, L.**, and Hogan, M.C. Mitochondrial activation at the onset of contractions in isolated myofibres during successive contractile periods. *J. Physiol.* 590: 3597-3609, 2012. doi: 10.1113/jphysiol.2012.232405. PMID: 22711953
Contribution: Conception and design of the study, interpretation of the data and drafting of the manuscript
Ranking of the Journal: #2021 out of 27955 Journals, Conferences, and Book Series (#12 out of 81 in Physiology)
Acceptance Rate of the Journal: 24.8%
Impact Factor: 6.228

21. **Nogueira, L**., Ramirez-Sanchez, I., Perkins, G., Murphy, A., Taub, P.R., Ceballos, G., Villarreal, F., Hogan, M.C. and Malek, M.L. (-)-Epicatechin enhances fatigue resistance and oxidative capacity in mouse muscle. *J. Physiol.* 589: 4615-4631, 2011. doi: 10.1113/jphysiol.2011.209924. PMID: 21788351
Contribution: Collection, analysis and interpretation of data, and drafting the manuscript.
Ranking of the Journal: #2021 out of 27955 Journals, Conferences, and Book Series (#12 out of 81 in Physiology)
Acceptance Rate of the Journal: 24.8%
Impact Factor: 6.228

22. Sun, Q.A., Hess, D.T., **Nogueira, L**., Yong, S., Bowles, D.E., Eu, J., Laurita, K.R., Meissner, G., and Stamler, J.S. Oxygen-coupled redox regulation of the skeletal muscle ryanodine receptor-Ca^{2+} release channel by NADPH oxidase 4. *Proc. Natl. Acad. Sci. USA.* 108: 16098-16103, 2011. doi: 10.1073/pnas.1109546108. PMID: 21896730
Contribution: Performed research and analyzed data.
Ranking of the Journal: #373 out of 27955 Journals, Conferences, and Book Series
Acceptance Rate of the Journal:
Impact Factor: 11.1

23. Zuo, L., **Nogueira, L**., and Hogan, M.C. Reactive oxygen species formation during tetanic contractions in single isolated *Xenopus* myofibers. *J. Appl. Physiol.* 111: 898-904, 2011. doi: 10.1152/japplphysiol.00398.2011. PMID: 21700897
Contribution: Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version of the manuscript.
Ranking of the Journal: #4474 out of 27955 Journals, Conferences, and Book Series (#27 out of 81 in Physiology)
Acceptance Rate of the Journal: Not available
Impact Factor: 3.3

24. Zuo, L., **Nogueira, L**., and Hogan, M.C. Effect of pulmonary TNF-α overexpression on mouse isolated skeletal muscle function. *Am. J. Physiol. Reg. Integr. Comp. Physiol.* 301: R1025-R1031, 2011. doi: 10.1152/ajpregu.00126.2011. PMID: 21697519
Contribution: Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version of the manuscript.
Ranking of the Journal: #5441 out of 27955 Journals, Conferences, and Book Series (#39 out of 81 in Physiology)
Acceptance Rate of the Journal: Not available
Impact Factor: 2.8

25. **Nogueira, L.**, and Hogan, M.C. Phenol increases intracellular [Ca^{2+}] during twitch contractions in intact *Xenopus* skeletal myofibers. *J. Appl. Physiol.* 109: 1384-1393, 2010. doi: 10.1152/japplphysiol.00660.2010. PMID: 20724558

Ranking of the Journal: #4474 out of 27955 Journals, Conferences, and Book Series (#27 out of 81 in Physiology)
Contribution: Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version of the manuscript.
Acceptance Rate of the Journal: Not available
Impact Factor: 3.3

26. **Nogueira, L.,** Figueiredo-Freitas, C., Casimiro-Lopes, G., Magdesian, M.H., Assreuy, J., and Sorenson, M.M. Myosin is reversibly inhibited by S-nitrosylation. *Biochem. J.* 424: 221-231, 2009. doi: 10.1042/BJ20091144. PMID: 19747166
Contribution: Conception, design, and interpretation of the data. Performed the experimental work, analyzed the data, wrote the manuscript, and approved the final version of the manuscript.
Ranking of the Journal: #2777 out of 27955 Journals, Conferences, and Book Series
Acceptance Rate of the Journal: Not available
Impact Factor: 4.1

27. Forrester, M.T., Thompson, J.W., Foster, M.W., **Nogueira, L.**, Moseley, M.A., and Stamler, J.S. Proteomic analysis of S-nitrosylation and denitrosylation by resin-assisted capture. *Nature Biotechnol.* 27: 557-559, 2009. doi: 10.1038/nbt.1545. PMID: 19483679
Contribution: Performed experiments, interpretation of the data, and participated in drafting the manuscript.
Ranking of the Journal: #8 out of 27955 Journals, Conferences, and Book Series
Acceptance Rate of the Journal: Not available
Impact Factor: 46.9

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REFEREED PROCEEDINGS

Before Tenure

1. Marshall, Lloyd K.T.; Wong, William; Kent, Tyler M.; Baker, Jacob; Parks, Kyle; Trathen, Nicholas; Dominguez, Kyle; Keeble, Kristen; Alfaro, Christopher; Johnson, Drew; Parnes, Rafael; Tambunting, Andrew; Yee, Alex; and Nogueira, Leonardo PhD (2024) "Early and Later Stage Muscle Recovery from Lengthening Contraction-Induced Injury in Cigarette Smoke-Exposed Mice," *International Journal of Exercise Science: Conference Proceedings*: Vol. 14: Iss. 4, Article 92.

2. Baker, Jacob A. and **Nogueira, Leonardo** (2024) "Effects of Cigarette Smoke Exposure and Excessive Pulmonary Inflammation on Ex-vivo Diaphragm Force in Mice," *International Journal of Exercise Science: Conference Proceedings*: Vol. 14: Iss. 4, Article 140.

3. Kent, T.M., Brown, J., Dominguez, K., Keeble, K., Breen, E.C., **Nogueira, L.** Recovery of muscle torque after lengthening contraction injury in cigarette smoke-exposed mice. In *American College of Sports Medicine Meeting*. 2024, Boston, MA.

4. Marshall, L.K.T., Kasper, D.M., **Nogueira, L.** Time Course Changes in Muscle Torque Development after Single-Leg Fatiguing Exercise Training in Mice. In *American College of Sports Medicine Meeting*. 2024, Boston, MA.

5. Kasper, D.M., Marshall, L.K.T., **Nogueira, L.** Nitrate Supplementation Decreases In Vivo Muscle Torque Without Affecting Injury Recovery in Mice. In *American College of Sports Medicine Meeting*. 2024, Boston, MA.

6. Zero, A.M., Rice, C.L., **Nogueira, L.** Prolonged Low-Frequency Force Depression of Intact Single Mice Myofibers is Partly Recovered with Post-Tetanic Potentiation. In *American College of Sports Medicine Meeting*, 2024, Boston, MA.

7. Kent, T.M., Wong, W., Breen, E.C., **Nogueira, L.** Two Months of Cigarette Smoke Exposure in Mice Does Not Affect Recovery of In Vivo Nerve- Stimulated Torque but Delays Ex-Vivo Muscle Force Recovery. *2024 1st Center for Tobacco and Environment Meeting*, San Diego, CA.

8. Baker, J.A., Brown, J., Cannon, D.T., **Nogueira, L.** Effects of Cigarette Smoke Exposure on Diaphragm Force Function in Mice. *2024 1st Center for Tobacco and Environment Meeting*, San Diego, CA.

9. Al Dikka, D., Breen, E.C., **Nogueira, L**. Unraveling the evolutionary marathon: improved mitochondrial bioenergetics in Cmah gene deleted (cmah-/-) mouse skeletal myofibers. In *American Physiology Summit*, 2024, Long Beach, CA.

10. Pierce, S.P., Cannon, D.T., **Nogueira, L.** Diaphragm Force and Mitochondrial Function Following Enhanced Nitric Oxide Availability During Mechanical Ventilation. In *American Physiology Summit*, 2024, Long Beach, CA.

11. Pierce, S.P., Cannon, D.T., **Nogueira, L.** Diaphragm Force and Mitochondrial Function *Ex Vivo* Following GSNOR Inhibition *In Vivo* Preceding Mechanical Ventilation. In *Southwest Chapter of the ACSM*, 2023, Costa Mesa, CA. International Journal of Exercise Science: Conference Proceedings: Vol. 14: Iss. 3, Article 89.

12. Kasper, D.M., Marshall, L.K.T., **Nogueira, L.** Effects of Nitrate Supplementation on In Vivo Muscle Torque Recovery From $BaCl_2$-Induced Injury. In *Southwest Chapter of the ACSM*, 2023, Costa Mesa, CA. International Journal of Exercise Science: Conference Proceedings: Vol. 14: Iss. 3, Article 90.

13. Marshall, L.K.T., Kasper, D.M., **Nogueira, L.** Single-Leg Resistance Exercise Training in Mice Leads to a Fast Increase in In Vivo Torque of Anterior Crural Muscles. In *Southwest Chapter of the ACSM*, 2023, Costa Mesa, CA. International Journal of Exercise Science: Conference Proceedings: Vol. 14: Iss. 3, Article 81.

14. Chuong, T.H., Mattson, M.K., Do, C.H., Shen, Y., Stevens, N.E., **Nogueira, L**. Changes in muscle force recovery and myofiber satellite cell incorporation by modulating nitric oxide signaling in vivo during muscle repair after lengthening contractions. In: *Experimental Biology Meeting* 2022, Philadelphia. The FASEB Journal, 2022. v. 36. https://doi.org/10.1096/fasebj.2022.36.S1.R5904

15. Stevens, N., Loreti, M., Hogan, M. C., Sacco, A., **Nogueira, L.** Satellite cell incorporation in myofibers from anterior crural muscles of $Pax7^{CreER}$TdTomato transgenic mice during the recovery form lengthening contractions. In: *Integrative Exercise Physiology Conference*, 2020.

16. Stevens, N., Davila, D., Nguyen, N., Souresrafil, E., De-Perio, M., Vitorino, S. Breen, E.C., **Nogueira, L.** Short-term tobacco smoke exposure delays contractile force recovery following lengthening contractions. In: *Joining Forces 2020*, Palm Desert, CA.

17. **Nogueira, L.,** Tachibana, S., Lam K., Khosrowjerdi S., Gilmore, N., Etxaniz, U., Puri, P.L., Hogan, M.C., Ross, R.S., Cho, Y. Denervation alters contractility, intracellular Ca^{2+}-transients, and increases fatigue resistance in skeletal myofibers. In *Keystone Symposia: New Insights into the Biology of Exercise*. Keystone, CO, 2020.

18. Gilmore, N.K., Hogan, M.C., **Nogueira, L.** Inhibition of S-nitrosoglutathione Reductase During Contractions Slows Recovery of Low-Frequency Force in Isolated Fast-twitch Muscle and in Intact Single Myofibers. In: *Experimental Biology Meeting* 2020, San Diego. The FASEB Journal, 2022. v. 34. https://doi.org/10.1096/fasebj.2020.34.s1.07294

19. Stevens, N., Davila, D., De-Perio, M., Souresrafil, E., Nguyen, N., Hogan, M.C., Breen, E.C., **Nogueira, L.** Cigarette Smoke Exposure in Mice Impairs Force Development of Injured Fast-Twitch Skeletal Muscles. In: *Experimental Biology Meeting* 2020, San Diego. https://doi.org/10.1096/fasebj.2020.34.s1.05789

20. **Nogueira, L.**, Svensson, K., Schenk, S., and Hogan, M.C., PO_2-dependent changes in contractility and mitochondrial activation in single myofibers from young and old mice. In: *American College of Sports Medicine Meeting*. 2020, San Francisco.

21. **Nogueira, L.** and Breen, E.C. Enhanced O_2-Dependent Mitochondrial Activation in Myofibers from CMP N-Glycolylneuraminic Acid Hydroxylase (Cmah) Gene Inactivated Mice. In: *Biophysical Society Meeting*, 2020, San Diego. Biophysical Journal, 2020. v. 118. p. 450A-450A.

22. Gilmore, N. K.; Hogan, M. C., **Nogueira, L.** Nitric oxide dependent delay in post-fatigue contractile recovery in isolated fast-twitch muscle: The role of the S-nitrosoglutathione reductase. In: *Experimental Biology Meeting*, 2019, Orlando, FL. The FASEB Journal, 2019. v. 33. p. 538.6-538.6. https://doi.org/10.1096/fasebj.2019.33.1_supplement.538.6

23. **Nogueira, L.**; Tachibana, S., Gilmore, N. K., Etxaniz, U., Puri, P. L., Hogan, M. C., Ross, R.S., Cho, Y. Overexpression of Perm1 in skeletal muscles recovers the denervation induced decrease in mitochondrial proteins but did not alter the changes in muscle contractility. In: *Alternative Muscle Club Meeting*, 2018, La Jolla, CA.

24. Gilmore, N. K., Hogan, M. C., **Nogueira, L.** Acute inhibition of the S-nitrosoglutathione reductase (GSNOR) in isolated fast-twitch muscle delays the contractile recovery post-fatigue. In: *Alternative Muscle Club Meeting*, 2018, La Jolla, CA.

25. **Nogueira, L.** and Hogan, M.C. Fatigue-induced changes in intracellular calcium transients in single myofibers from parvalbumin conditional knockout mice. In: *ACSM Conference on Integrative Physiology of Exercise*, San Diego, CA, 2018

26. Ramirez-Sanchez, I., **Nogueira, L.,** Hogan, M.C., Ciaraldi, T.P., Dugar, S., Schreiner, G., Henry, R.R. R. R., Ceballos, G., Villarreal, F. (+)-Epicatechin Stimulates Mitochondria Biogenesis Related Pathways Leading To Improved Exercise Performance In Rats. In: *ACSM Conference on Integrative Physiology of Exercise*, 2018, San Diego, CA.

27. Ancillotti, M.T.C., Yamashita, A.M.S., Sorenson, M.M., Puri, P.L., **Nogueira, L.** The role of GSNOR during the differentiation of C2C12 cells. In: XIX *Brazilian Society of Cell Biology*, 2018, São Paulo, SP, Brazil.

28. Lima-Rosa, F.L., Bilian, P.J., **Nogueira, L.**, Klip, A. The glutathione recycling system is a regulator of myotube contraction-induced GLUT4 translocation to the plasma membrane. In: *IUPS 38th World Congress*, 2017, Rio de Janeiro, RJ, Brazil.

29. Yamashita, A.M.S., Ancillotti, M.T.C., **Nogueira, L**. Mermelstein, C.S., Sorenson, M.M. Nitric Oxide and cGMP Increases Proliferation of Skeletal Muscle Cells. In: 46th *Brazilian Society for Biochemistry and Molecular Biology* 2017, Águas de Lindoia, SP, Brazil.

30. Yamashita, A.M.S., Ancillotti, M.T.C., Rangel, L.P., Fontenele, M., Figueiredo-Freitas, C., Possidonio, A., Soares, C.P., Sorenson, M.M., Mermelstein, C.S., **Nogueira, L.** S-nitrosoglutathione reductase modulates myoblast proliferation and fusion independently of sGC activation. In: *Gordon Research Conference - Myogenesis*, 2017, Barga, Italy.

31. Yamashita, A.M.S., Ancillotti, M.T.C., Sorenson, M.M., Mermelstein, C.S., **Nogueira, L.** Role of S-nitrosoglutathione reductase on controlling protein S-nitrosylation during myogenesis in primary cultures of muscle progenitor cells. In: XVIII *Brazilian Society of Cell Biology*, 2016, São Paulo, SP, Brazil.

32. Yamashita, A.M.S., Figueiredo-Freitas, C., Soares, C.P., Possidonio, A., **Nogueira, L.**, Mermelstein, C.S., Sorenson, M.M. S-nitrosoglutathione reductase and S-nitrosocyateine modulate myoblast proliferation and fusion. In: *23rd International Congress of the IUBMB* 2015, Foz do Iguaçu, Brazil.

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36. Figueiredo-Freitas, C., Foster, M.W., **Nogueira, L.**, Liang, J., Yamashita, A., Dulce, R., Thompson, J.W., Hare, J.H., Mosoley, M.A., Sorenson, M.M., Pinto, J.R. S-Nitrosylation Decreases Ca^{2+} Sensitivity and Actomyosin ATPase Activity of Contractile Proteins in Cardiac Myofibrils. In: *Biophysical Society 57th Annual Meeting*, 2013, Philadelphia. Biophysical Journal, 2013. v. 104. p. 451a.

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39. Shiah, A., **Nogueira. L.**, Gandra, P.G., Hogan, M.C. Effect of hypoxia on single skeletal muscle fiber contractility at physiological temperature. In: *Experimental Biology 2012*, San Diego. The FASEB Journal, 2012. v. 26. p. 1078.27-1078.27. https://doi.org/10.1096/fasebj.26.1_supplement.1078.27

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41. Gandra, P.G., **Nogueira, L.**, Hogan, M.C. NAD(P)H Kinetics at onset of contractions in single myofibers: Effect of prior contractions. In: *ACSM 59th Annual Meeting*, 2012, San Francisco. Medicine & Science in Sport & Exercise. Danvers: Lippincott Williams & Wilkins, 2012. v. 44. p. S493-S493.

42. **Nogueira, L**., Hogan, D., Hogan, M.C. Acute Oxaloacetate Exposure Enhances Resistance to Fatigue in in vitro Mouse Soleus Muscle. In: *Experimental Biology*, 2011, Washington DC. The FASEB Journal, 2011. v. 25. p. 1104. https://doi.org/10.1096/fasebj.25.1_supplement.1104.5

43. **Nogueira, L**., Hogan, M.C. Effects of low PO_2 on contractile and Ca^{2+} kinetics during fatigue in single mouse myofibers at 35ºC. In: *58th ACSM Annual Meeting*, 2011, Denver, CO. Medicine & Science in Sport & Exercise. Philadelphia, PA: Lippincott Williams & Wilkins, 2011. v. 43. p. S25-S25.

44. Zuo, L., **Nogueira, L**., Hogan, M.C. Overexpression of TNF-alfa reduces skeletal muscle functions in mice under low PO_2 condition. In: *58th ACSM Annual Meeting* 2011, Denver, CO. Medicine & Science in Sport & Exercise. Philadelphia, PA: Lippincott Williams & Wilkins, 2011. v. 43. p. S25-S25.

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47. Zuo, L., **Nogueira, L**., Hogan, M.C. Reactive Oxygen Species Formation during Tetanic Contractions Inducing Fatigue in Single Isolated *Xenopus* Myofibers. In: *ACSM Conference on Integrative Physiology of Exercise*, 2010, Miami, FL. Medicine & Science in Sports & Exercise. Philadelphia: Lippincott Williams & Wilkins, 2010. v. 42. p. 58-59.

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49. Hogan, D., **Nogueira, L**., Hogan, M.C. Oxaloacetate enhances resistance to fatigue in in vitro mouse soleus muscle. In: *Southwest Chapter of the ACSM (SWACSM)*, 2010, San Diego, CA.

50. Figueiredo-Freitas, C., Casimiro-Lopes, G., **Nogueira, L.**, Sorenson, M.M. S-nitrosylation of myosin by NO is regulated by oxygen pressure (pO_2). In: *Brazilian Federation of Experimental Biology Societies* (FeSBE) 2010, Águas de Lindóia, SP, Brazil.

51. Figueiredo-Freitas, C., Veltri, T., Monteiro, J., Casimiro-Lopes, G., **Nogueira, L.**, Sorenson, M.M. S-nitrosation of skeletal muscle contractile proteins reduces Ca^{2+} sensitivity and inhibits myosin activity in vitro. In: *Brazilian Society for Biochemistry and Molecular Biology* 2009, Águas de Lindóia, SP, Brazil.

52. Figueiredo-Freitas, C., **Nogueira, L.**, Magdesian, M., Sorenson, M.M. Myosin forms S-nitrosothiols by transnitrosation and is a target of S-nitrosation in skinned muscle fibers. In: *Brazilian Society for Biochemistry and Molecular Biology* 2008, Águas de Lindóia, SP, Brazil.

53. Ferreira, A.M., Ledo, J.H., Reynaldo, D.P., Figueiredo-Freitas, C., **Nogueira, L.**, Castro, C.L.N., Sorenson, M.M. Glycation affects myosin subfragment-1 ATPase activity. In: *Brazilian Society for Biochemistry and Molecular Biology* 2008, Águas de Lindóia, SP, Brazil.

54. Figueiredo-Freitas, C., **Nogueira, L.**, Magdesian, M., Sorenson, M.M. Myosin and actin of skinned skeletal muscle fibers are targets for S-nitrosylation. In: *Brazilian Federation of Experimental Biology Societies* (FeSBE) 2007, Águas de Lindoia, SP, Brazil.

55. **Nogueira, L.**, Figueiredo-Freitas, C., Magdesian, M., Sorenson, M.M. Myosin activity is reduced by S-nitrosation being an important target for nitrosative stress in skinned muscle fibers. In: *V Meeting of SFRBM South American Group*, 2007, Montevideo, Uruguay.

56. **Nogueira, L.**, Sorenson, M.M. S-nitrosation forms labile -SNO bonds that affect Mg^{2+}ATPase activity of skeletal muscle myosin. In: *13th Society for Free Radical Biology and Medicine*, 2006, Denver. Free Radical Biology and Medicine. Amsterdam: Elsevier, 2006. v. 41. p. S128-S128.

57. Costa, L.S., Silva, A.P.P., **Nogueira, L**., Sorenson, M.M., Sola-Penna, M. Putative effects of nitric oxide on skeletal muscle 6-phosphofructo-1-kinase regulation. In: *Brazilian Society for Biochemistry and Molecular Biology* 2005, Aguas de Lindoia, SP, Brazil.

58. Machado, C.J.V., **Nogueira, L.**, Menezes, R.S., Foguel, D., Saadi, L.M.V., Sorenson, M.M. Phenol increases Ca^{2+} sensitivity in mammalian skinned fibers and uncouples the actomyosin ATPase activity without affecting Ca^{2+} binding to troponin C. In: *Brazilian Society for Biochemistry and Molecular Biology* 2004, Caxambu, MG, Brazil.

59. **Nogueira, L.**, Assreuy, J., Sorenson, M.M. Characterization of S-nitrosylation in skeletal muscle myosin and its effects on ATPase activity. In: *Brazilian Society for Biochemistry and Molecular Biology* 2003, Caxambu, MG, Brazil.

60. **Nogueira, L.**, Sorenson, M.M. Effects of nitric oxide donors on contractile properties of myosin. In: *Brazilian Society for Biochemistry and Molecular Biology* 2002, Caxambu, MG, Brazil.

61. **Nogueira, L.**, Machado, C.J.V., Saadi, L.M.V., Sorenson, M.M. Effects of phenol on Ca^{2+}-induced tension in skinned fast- and slow-twitch skeletal muscle fibers of rabbit. In: *Brazilian Society for Biochemistry and Molecular Biology* 2001, Caxambu, MG, Brazil.

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NON-REFEREED PROCEEDINGS

Before Tenure

1. Kent, T.M., Brown, J., Dominguez, K., Keeble, K., **Nogueira, L.** Recovery of muscle torque after lengthening contraction injury in cigarette smoke-exposed mice. In *2024 San Diego State University Student Symposium (S3)*, San Diego, CA.

2. Marshall, L.K.T., Kasper, D.M., **Nogueira, L.** Single-leg Resistance Exercise Training in Mice Leads to a Decrease Followed by an Increase in In Vivo Torque of Anterior Crural Muscles. In *2024 San Diego State University Student Symposium (S3)*, San Diego, CA.

3. Kasper, D.M., Marshall, L.K.T., **Nogueira, L.** Nitrate Supplementation Decreases In Vivo Muscle Torque Without Affecting Injury Recovery in Mice. In *2024 San Diego State University Student Symposium (S3)*, San Diego, CA.

4. Pierce, S.P., Brown, J., Cannon, D.T., **Nogueira, L.** Diaphragm Force and Mitochondrial Function Ex Vivo Following GSNOR Inhibition In Vivo Preceding Mechanical Ventilation. *2024 San Diego State University Student Symposium (S3)*, San Diego, CA.

5. Pierce, S. **Nogueira, L**. Cigarette smoke exposure effects on diaphragms susceptibility for ventilator-induced diaphragm dysfunction. In: *2023 San Diego State University Student Symposium (S3),* San Diego, CA.

6. Marshall, L., **Nogueira, L.** Effects of smoking on locomotor muscle adaptations to chronic electrical stimulation. In*: 2023 San Diego State University Student Symposium (S3),* San Diego, CA.

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SCHOLARLY AWARDS

Before Tenure

1. 2007 International Travel Award to attend the 5th SFRBM meeting, South American Group and 5th International Conference on Peroxynitrite and Reactive Nitrogen Species, Montevideo, Uruguay.

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FUNDED RESEARCH GRANTS

Before Tenure

Active Grants

1. $7,500 - Locomotor muscle susceptibility for eccentric exercise-induced muscle injury in cigarette smoke-exposed mice, **Principal Investigator**, San Diego State University SEED grant program (SDSU), Acceptance Rate: 42%, 01/01/2025 – 12/31/2025

2. $1,166,328 - Mechanisms of COPD sustained muscle inflammation impeded myofiber repair and function, **Principal Investigator**, Tobacco-Related Disease Research Program (TRDRP) Research Award (T32IR5221; State), Acceptance Rate: 15%, 08/16/2022 – 08/15/2025

3. $1,170,000 - Targeting IL-33 for the treatment of SARS-CoV 2 respiratory disease in smokers, **Co-Investigator** (PI: Breen/Jennings), Tobacco-Related Disease Research Program (TRDRP) Research Award (T32IR4683; State), Acceptance Rate: 15%, 07/01/2022 – 06/30/2025

Completed Grants

1. $750,000 - Cigarette smoke effects on nitric oxide-dependent muscle regeneration, **Principal Investigator**, Tobacco-Related Disease Research Program (TRDRP) New Investigator Award (T29KT0397; State), Acceptance Rate: 17%, 04/01/2019 – 03/31/2025.

2. $7,500 - Cigarette smoke exposure effects on diaphragm's susceptibility for ventilator-induced diaphragm dysfunction, **Principal Investigator**, San Diego State University SEED grant program (SDSU), Acceptance Rate: 42%, 01/01/2023 – 12/31/2023

3. $400,000 - Role of Perm1, a novel mitochondrial regulatory protein in cardiac ischemia, Co-investigator (PI: Cho), Tobacco-Related Disease Research Program (TRDRP), Pilot Project Grant (T31IP1606; State), Acceptance Rate: 15%, 07/01/2020 – 6/30/2022.

4. $6,500 - The role of nitrite reductase activity on muscle function and fatigue resistance, **Principal Investigator**, Ministry of Science - CNPq (Brazil; Federal), Acceptance Rate: Not available, 03/01/2017 – 02/28/2019.

5. $7,000 - The role on systemic inflammation on skeletal muscle function, **Principal Investigator**, FAPERJ – APQ1 (Brazil; State), Acceptance Rate: Not available, 08/01/2014 – 07/31/2015.

6. $40,000 - Molecular mechanisms of cigarette smoking on skeletal muscle function, **Principal Investigator**, CAPES (Brazil; Federal), Acceptance Rate: Not available, 01/05/2014 – 08/13/2015.

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FUNDED TRAINING GRANTS

Before Tenure

1. $ 20,000 - Graduate (Ph.D.) study fellowship (Grant Agency: CNPq – Brazil, Federal), Acceptance Rate: Not available, 2003–2008
2. $ 4,800 - Graduate (M.Sc.) study fellowship (Grant Agency: CAPES – Brazil, Federal), Acceptance Rate: Not available, 2001–2003

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GRANTS SUBMITTED

Before Tenure

1. *In Review*: $ 452,334 - Defining the Impact of Analgesic Pain Medication on Skeletal Muscle Contractile Function. **Co-investigator** (PI: Sanchez-Lopez), NIH R21 (1R21AR085841-01, Federal), Acceptance rate: Not available yet, 12/01/2025 – 11/30/2027

2. *Not-funded*: $ 900,000 - Inflammatory and Myogenic-Progenitor Cell Dysfunction due to Smoking-induced Pulmonary Inflammation, **Principal Investigator,** Tobacco-Related Disease Research Program (TRDRP) Research Award (State), Acceptance Rate: 14%, 07/01/2025 - 06/30/2028

3. *Not-funded*: $ 750,000 - Cigarette smoke-induced pulmonary inflammation effects on ventilator-induced diaphragm dysfunction, **Principal Investigator,** Tobacco-Related Disease Research Program (TRDRP) Pilot Award (State), Acceptance Rate: 14%, 07/01/2025 - 06/30/2027

4. *Not-funded*: $ 750,000 - Smoking-induced damage of glycan-dependent peripheral microvascular function, **Co-Investigator** (PI: Ellen Breen, UCSD), Tobacco-Related Disease Research Program (TRDRP) Pilot Award (State), Acceptance Rate: 14%, 07/01/2025 - 06/30/2027

5. *Not-funded*: $ 900,000 – Effects of nicotine associated with cannabis components on the pre-natal brain, lung, and diaphragm development in rats, **Co-Investigator** (PI: Jennifer Thomas, SDSU)**,** Tobacco-Related Disease Research Program (TRDRP) Research Award (State), Acceptance Rate: 14%, 07/01/2025 - 06/30/2028

6. *Not funded*: $ 300,000 - Elucidation of cannabidiol mechanisms regulating muscle regeneration after exercise-induced injury, **Principal Investigator,** Center for Medicinal Cannabis Research (CMCR) (State), Acceptance Rate: Not available, 04/01/2024 – 03/31/2026

7. *Not funded*: $ 230,745 - Detection of dynamic subcellular O_2 regulation in skeletal myofibers. **Co-investigator** (PI: Breen/Tong), NIH R21 (1R21AR084215-01, Federal), Acceptance rate: 6%, 04/01/2024 – 03/31/2026

8. *Not funded*: $ 434,500 - Angiotensin II-dependent diaphragm dysfunction during SARS-CoV-2 infection: The risk of cigarette smoke use, Principal Investigator, NIH R21 (Federal), Acceptance Rate: Not available, 10/2/2023 – 10/1/2025

9. *Not funded*: $ 650,000 - Diaphragm dysfunction during SARS-CoV-2 infection: The risk of cigarette smoke use. Principal Investigator, Tobacco-Related Disease Research Program (TRDRP) Pilot Award (State), Acceptance Rate: Not available, 07/01/2022 - 06/30/2024

10. *Not funded*: $ 2,442,827- Mechanisms of COPD sustained muscle inflammation impeded myofiber repair and function, Principal Investigator, NIH R01 (Federal), Acceptance Rate: 5%, 09/01/2021 – 08/31/2026, Scored 38th percentile.

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PARTICIPATION IN PROFESSIONAL ASSOCIATIONS

Before Tenure

1. American Physiological Society - Environmental & Exercise Physiology Section
2. American College of Sports Medicine
3. Southwest chapter of the American College of Sports Medicine

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WORKS-IN-PROGRESS

1. Gilmore, N.K., Wong, W.*, **Nogueira, L.** Acute inhibition of the S-nitrosoglutathione reductase delays recovery post-fatigue in isolated fast-twitch muscle. **Manuscript in preparation.**
   Contribution: **Anchor author.** *SDSU student

2. Pierce, S.*, Brown, J.*, Cannon, D.T., **Nogueira, L.** Increase in S-nitrosothiol availability during mechanical ventilation in mice does not affect diaphragm force ex-vivo but mitochondrial free radical production. **Manuscript in preparation.** *SDSU student
   Contribution: **Anchor author.**

3. Wong, W.*, Marshall, L., & **Nogueira, L**. Delayed locomotor muscle recovery from lengthening contraction-induced injury in heterozygous lung-specific tumor necrosis factor-alpha overexpressing mice. **Manuscript in preparation.**
   Contribution: **Anchor author.** *SDSU student

4. Baker, J.*, Wong, W.*, Nogueira, L. Two months of cigarette smoke exposure accelerates ventilator-induced diaphragm dysfunction in mice. **Manuscript in preparation.**
   Contribution: **Anchor author.** *SDSU student

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TEACHING EFFECTIVENESS

Undergraduate student mentoring and co-mentoring

2025 – 2025	Dwijja Patel, Adryan Aquino, Abigail Carniglia, Darragh Howard, Devin Vitug, Janelle Maricar Cruz, Jada Lew, Mia Fernandez Alfonso, Mia Tolentino, Ryan De Leon, Kielelani Cowles. Undergraduate students (ENS-SDSU). Project: Cigarette smoke exposure in mice effects on muscle regeneration and diaphragm function. Role: Mentor
2024 – 2024	Andrew Tambunting, Rafael Parnes, Kyle Parks Christopher Alfaro, Alex Yee, and Drew Johnson: Undergraduate students (ENS-SDSU). Project: Cigarette smoke exposure in mice effects on muscle regeneration. Role: Mentor
2023 – 2024	Tyler Mcclure Kent, undergraduate student (ENS-SDSU). Project: Cigarette smoke exposure in mice effects on muscle regeneration / Role of exogenous pyruvate and acetate on muscle fatigue resistance in slow-twitch muscles. Role: Mentor
2022 – 2024	Dylan Kasper, undergraduate student (ENS-SDSU). Project: Effects of nitrate supplementation on muscle recovery after intramuscular injury with $BaCl_2$ in mice. Role: Mentor
2022 – 2024	Simon Pierce, undergraduate student (ENS-SDSU). Project: Role of nitric oxide metabolism on production of S-nitrosothiols in the diaphragm during mechanical ventilation in mice. Role: Mentor

2022 – 2024	Lloyd Marshall, undergraduate student (ENS-SDSU). Project: Role of single-leg exercise training on muscle satellite cell incorporation in muscle fibers in mice. Role: Mentor.
2023 – 2023	Kyle Dominguez and Kristen Keeble, undergraduate students (ENS-SDSU). Project: Cigarette smoke exposure in mice effects on muscle regeneration. Role: Mentor
2021 – 2022	Christina Do, undergraduate student (UCSD). Project: Measurement of satellite cell proliferation in collagenase-digested myofibers from mice treated with cigarette smoke extract. Role: Mentor.
2021 – 2021	Timothy Chuong, undergraduate student (UCSD). Project: Activation of mitochondrial function during contraction in single myofibers from mice. Role: Mentor.
2019 – 2020	Erin Rosales, undergraduate student (UCSD). Project: Measurements of angiotensin converting enzyme-2 expression in the diaphragm from mice treated with COVID recombinant spike proteins. Role: Mentor.
2015 – 2017	Maryana Tavares de Campos Ancillotti, undergraduate student (UFRJ). Project: Measurements of myotube formation in progenitor muscle cells from chicken embryos in response to S-nitrosoglutathione reductase inhibitor treatment. Role: Mentor.
2011 – 2013	Amy A. Shiah, undergraduate student (UCSD). Project: Measurements of calcium kinetics in intact single myofibers during electrical stimulations when myosin ATPase activity is blocked. Role: Co-mentor.

Graduate student mentoring and co-mentoring

2024 – present	David Tran, M.Sc. candidate (SDSU-ENS). Thesis project: Locomotor muscle susceptibility for eccentric exercise-induced muscle injury in cigarette smoke-exposed mice. Role: Mentor
2024 – 2025	William Wong, M.Sc. candidate (SDSU-ENS). Thesis project: Effects of pulmonary inflammation on the formation of new myofibers after eccentric contractions-induced muscle injury. Role: Mentor
2023 – 2025	Jacob Baker, M.Sc. candidate (SDSU-ENS). Thesis project: Cigarette smoke exposure effects on diaphragm's susceptibility for ventilator-induced diaphragm dysfunction. Role: Mentor
2022 – 2024	Megan Mattson, M.Sc. candidate (UCSD). Thesis project: Effects of nitrate supplementation on muscle recovery after lengthening contractions in mice. Role: Co-mentor
2019 – 2021	Natalie Gilmore, M.Sc. (UCSD), Thesis title: The role of S-nitrosoglutathione reductase on skeletal muscle contractile function during recovery from fatigue. Role: Co-mentor
2019 – 2021	Nicole Stevens, M.Sc. (UCSD), Thesis title: The consequences of short-term and long-term cigarette smoke exposure in mice on satellite cell activation and muscle regeneration after muscle overuse damage. Role: Co-mentor

2015 – 2018 Frederico Luis Lima Rosa, M.Sc. (UFRJ Brazil), Thesis title: The consequences of chronic cigarette smoke extract treatment on intact muscle contractile function. Role: Mentor

2014 – 2018 Aline Miyoko Sakaguchi Yamashita, Ph.D. (UFRJ Brazil), Thesis title: The role of S-nitrosylation/denitrosylation balance in cell signaling during myogenesis. Role: Mentor

Committee Member

2025 Alexis Guzman (M.Sc. Cell and Molecular Biology, SDSU), Thesis title: Understanding the role of *Embargoed* in the specification of muscle fiber fates in *Drosophila melanogaster*.

2025 Jennah Brown (M.Sc. Exercise Physiology, SDSU), Thesis title: Mitochondrial function in permeabilized diaphragm fibers following mechanical ventilation in the mouse.

2025 Mehrshad Taghizadeh (M.Sc. Physiology, SDSU), Thesis title: The effects of sHSP manipulation on the aging drosophila indirect flight muscle.

2024 Elizabeth Barajas Alonso (Thesis proposal, M.Sc. Cell and Molecular Biology, SDSU), Thesis title: Understanding the role of epigenetic regulators in the specification of muscle fiber identities in Drosophila.

2024 Reina Marie Corpus (M.Sc. Exercise Physiology, SDSU), Thesis title: Oxygen delivery dependence of non-invasive muscle oxidative capacity measurements.

2024 Nora Le. (M.Sc. Public Health [Environmental Health], SDSU), Thesis title: Impacts on cytotoxicity and invasion capacity in the placental cell line HTR-8/SVNEO post-exposure to S-(1,2-dichlorovinyl)-L-Cysteine (DCVC) in hypoxic conditions.

2023 Gabrielle Nicole Antonio (M.Sc. Exercise Physiology, SDSU), Thesis title: Chest Wall Strapping and Dynamic Hyperinflation in Healthy Volunteers.

2017 André Felipe Batista (Ph.D. Biological Sciences Biochemistry, Federal University of Rio de Janeiro, Brazil), Thesis title: Neurotoxic effects of a-beta oligomers in the synaptic dysfunction in experimental models of Alzheimer disease: Neuroprotection by an antidiabetic agent.

2015 Ruy Andrade Louzada Neto (Ph.D. Physiology, Federal University of Rio de Janeiro, Brazil), Thesis title: Regulation of type II iodothyronine deiodinase in skeletal muscle during cold- and exercise- adaptations in rats.

2016 Vinícius Rodrigues de Araújo (M.Sc. Biomedical Sciences Experimental Physiopathology, Federal University of Rio de Janeiro, Brazil), Thesis title: Utilization of saliva markers to evaluate and control physical and cognitive performance in soccer athletes.

2016 Luiz Fernando Carvalho Kelly (M.Sc. Biological Sciences Biochemistry, Federal University of Rio de Janeiro, Brazil), Thesis title: Biochemical characterization of phosphate transporters in *Acanthamoeba castellanii* and putative role in the process of encystment.

2015 Monique Passos da Silva Carrilho (M.Sc. Exercise Sciences, Federal University of Rio de Janeiro, Brazil), Thesis title: Effects of high intensity interval training in muscle atrophy and apoptosis and oxidative profile in rats exposed to a cafeteria diet.

2015 Nathália Rocco Machado (M.Sc. Biological Sciences Biochemistry, Federal University of Rio de Janeiro, Brazil), Thesis title: Modulation of Na+/K+ ATPase activity by hydrogen peroxide produced by heme in *Leishmania amazonensis*.

2015 Anderson Ferreira da Silva Porto (M.Sc. Physiology, Federal University of Rio de Janeiro, Brazil), Thesis title: Skeletal muscle injury therapy by a combination of physical exercise and antifibrotic agent.

2015 Luiz Felipe Garcia e Souza (M.Sc. Biological Sciences Biochemistry, Federal University of Rio de Janeiro, Brazil), Thesis title: Study of the alterations in mitochondrial metabolism induced by thrombin in human platelets.

Teaching Awards

Nothing to report.

Participation in Teaching Training or Teaching Conferences

Nothing to report.

Publication of Textbooks and Other Teaching Aids

Nothing to report.

Curriculum Development and Teaching Innovations

- Altered the teaching strategy for ENS 661 (Seminar in Advanced Exercise Physiology) to require students to present lectures based on comprehensive review papers and original research published in peer-reviewed journals, and evaluate lectures given by invited speakers.

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COURSES TAUGHT AT SDSU

Semester	Course #	Course Name	Number of Students	Level (i.e., upper, lower, grad)	Modality (i.e., online, in-person, hybrid)	Co - Taught?
Fall 2022	*ENS 304*	*Physiology of Exercise*	*42*	*Upper*	*In-Person*	*No*
Spring 2023	*ENS 304*	*Physiology of Exercise*	*118*	*Upper*	*In-Person*	*No*
	ENS 499	*Special Studies*	*2*	*Upper*	*In-Person*	*No*
Fall 2023	*ENS 304*	*Physiology of Exercise*	*85*	*Upper*	*In-Person*	*No*
	ENS 499	*Special Studies*	*3*	*Upper*	*In-Person*	*No*
Spring 2024	*ENS 304*	*Physiology of Exercise*	*115*	*Upper*	*In-Person*	*No*
	ENS 499	*Special Studies*	*6*	*Upper*	*In-Person*	*No*
Fall 2024	*ENS 304*	*Physiology of Exercise*	*108*	*Upper*	*In-Person*	*No*
	ENS 790	*Seminar in Directed Readings*	*9*	*Grad*	*In-person*	*No*
	ENS 798	*Special Study*	*2*	*Grad*	*In-person*	*No*
	ENS 499	*Special Study*	*6*	*Upper*	*In-person*	*No*
Spring 2025	*ENS 304*	*Physiology of Exercise*	*115*	*Upper*	*In-person*	*No*
	ENS 499	*Special Study*		*Upper*	*In-person*	*No*
	ENS 798	*Special Study*		*Grad*	*In-person*	*No*
	ENS 661	*Seminar in Advanced Exercise Physiology*	*11*	*Grad*	*In-person*	*No*
	ENS 799			*Grad*	*In-person*	*No*
	ENS 797					

COURSES TAUGHT AT OTHER INSTITUTIONS

Federal University of Rio da Janeiro, Rio de Janeiro, Brazil (Physical Therapy course)

Semester	Course #	Course Name	Number of Students	Level (i.e., upper, lower, grad)	Modality (i.e., online, in-person, hybrid)	Co - Taught?
Fall 2021	*BQM147*	*Biochemistry*	*50*	*Lower*	*Online*	*No*
Spring 2021	*BQM147*	*Biochemistry*	*50*	*Lower*	*Online*	*No*
Fall 2020	*BQM147*	*Biochemistry*	*50*	*Lower*	*Online*	*No*
Spring 2020	*BQM147*	*Biochemistry*	*50*	*Lower*	*Online*	*No*
Spring 2017	*BQM147*	*Biochemistry*	*50*	*Lower*	*In-Person*	*No*
Fall 2016	*BQM147*	*Biochemistry*	*50*	*Lower*	*In-Person*	*No*
Spring 2016	*BQM147*	*Biochemistry*	*50*	*Lower*	*In-Person*	*No*
Fall 2015	*BQM147*	*Biochemistry*	*50*	*Lower*	*In-Person*	*No*
Spring 2015	*BQM147*	*Biochemistry*	*50*	*Lower*	*In-Person*	*No*
Fall 2014	*BQM147*	*Biochemistry*	*50*	*Lower*	*In-Person*	*No*

Estacio de Sá University, Rio da Janeiro, Brazil (Kinesiology and Physical Therapy courses)

Semester	**Course Name**	**Number of Students**	**Level** (i.e., upper, lower, grad)	**Modality** (i.e., online, in-person, hybrid)	**Co - Taught?**
Spring 2008	*Exercise Physiology I and II*	*120*	*Upper*	*In-Person*	*No*
Fall 2007	*Exercise Physiology I and II*	*120*	*Upper*	*In-Person*	*No*
Spring 2007	*Exercise Physiology I and II*	*120*	*Upper*	*In-Person*	*No*
Fall 2006	*Exercise Physiology I and II*	*120*	*Upper*	*In-Person*	*No*
Spring 2006	*Exercise Physiology I*	*50*	*Upper*	*In-Person*	*No*
Fall 2005	*Exercise Physiology/Human Physiology*	*120*	*Upper*	*In-Person*	*No*
Spring 2005	*Exercise Physiology I*	*50*	*Upper*	*In-Person*	*No*
Fall 2004	*Exercise Physiology I*	*50*	*Upper*	*In-Person*	*No*

SERVICE

Service for the Profession

Editorial Board

1. 2024 – Present — Editorial board – American Journal of Physiology: Regulatory, Integrative, and Comparative Physiology.
2. 2022 – Present — Editorial board – Journal of Applied Physiology
3. 2022 – Present — Editorial board – Frontiers in Physiology (Striated Muscle Physiology)

Invited talks

4. 2024 — Invited talk: "Chronic Pulmonary inflammation: consequences to myofiber function and muscle regeneration". Molecular Biology Institute Seminar Series, Department of Biology – November 14th, 2024, SDSU.
5. 2024 — Invited talk: "Chronic Pulmonary Inflammation: Consequences to Locomotor and Respiratory Muscle Function and Regeneration". Carl V. Gisolfi Seminar Series – November 8th, 2024, University of Iowa, Iowa City.
6. 2021 — Invited talk: "Cigarette smoke exposure effects on muscle repair after injury". In: *Annual CPGLO meeting*, La Jolla, CA.
7. 2018 — Invited talk: "Skeletal muscle function at physiological PO_2 conditions." In: *Annual CPGLO meeting*, La Jolla, CA.
8. 2011 — Invited talk: "Inhibition of myosin ATPase results in prolonged SERCA function during fatiguing contractions in single skeletal muscle fibers." In: *ACSM 58th Annual Meeting*, Denver, CO.
9. 2011 — Invited talk: "Muscle fatigue and mitochondria activation in single skeletal muscle fibers" In: *SWACSM Chapter Meeting*, Reno, NV.
10. 2010 — Invited talk: "Skeletal Muscle Calcium Handling and SERCA Function during Exercise". In: *SWACSM Chapter Meeting*, San Diego, CA.

Symposium organizer

1. 2023 — Symposium organizer "New Insights About the Consequences of the Exposure to Tobacco Products on Cardiac and Skeletal Muscle". In: *SWACSM Chapter Meeting*, Costa Mesa, CA

Grant review

2. 2024 — Peer Review Committee Member for 24-25 American Heart Association Pre-doctoral and Post-doctoral Fellowship – Basic: Vascular Wall Biology Angiogenesis and Non-Atherosclerotic Disease
3. 2023 — Peer Review Committee Member for 23-24 American Heart Association Pre-doctoral and Post-doctoral Fellowship – Basic: Vascular Wall Biology Angiogenesis and Non-Atherosclerotic Disease

Journal reviewer

American Journal of Physiology; Respiratory Physiology and Neurobiology; Applied Physiology, Nutrition and Metabolism; Journal of Physiology; Journal of Applied Physiology

Service for the Department

1. 2023 – Present — Faculty Hearing Panel (ENS-SDSU)
2. 2022 – Present — Master's in Exercise Physiology Graduate Admissions Committee (ENS-SDSU)
3. 2023 – 2024 — Kinesiology Exercise Physiology Search Committee (ENS-SDSU)
4. 2023 — Physical Activity Behavioral Science Search Committee (ENS-SDSU)
5. 2018 – 2022 — Physiological Science Seminar organizer (Department of Medicine, UCSD).

Service for the College

1. 2023 Invited Presenter at the CHHS workshop on Seed Grant

Service for the University

1. 2023 – 2024 SDSU: IACUC Committee member
2. 2023 SDSU: Judge at the 2023 SDSU Student Research Symposium (S3)
3. 2021 – 2022 UCSD: Medical Scientist Training Program (MD/PhD) Admissions Committee Member.
4. 2014 – 2017 UFRJ/Brazil: Biohazard and chemical hazard security committee

Service for the Community

1. 2016 "Espaço Ciência Viva" (translating to English: "Space for living science"), in which a small laboratory is mounted outside the University (freely accessible to the public with no cost of admission) to demonstrate how scientific questions are answered by experimental work. I built a small laboratory to show how muscle contractile proteins utilize energy during exercise and how muscles develop force during intense exercise.

2. 2024 Upward Bound Summer Academy program at the Institute for Transformative Education (ITE) on the SDSU campus. Role: Mentor high school students from underrepresented communities in San Diego.