

CURRICULUM VITAE

Milene Tavares Fontes, Ph.D.

Postdoctoral Fellow

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SUMMARY

Physical Education Teacher with 12 years in basic research experience, with a strong background in theoretical and applied skills in vascular/physiology with *in vivo* and *in vitro* research experience studying preclinical mouse models of diabetes, hypertension, and Heart failure. Collaborative and flexible team player with exceptional verbal, interpersonal, and written communication skills.

EDUCATION

Ph.D. in Science Vascular/Physiology University of São Paulo, Brazil	2014-2019
MSc in Science Vascular/Health Science, Federal University of Sergipe, Brazil	2011-2013
BS in Physical Education Teacher, Federal University of Sergipe, Brazil	2005-2010

ACADEMIC APPOINTMENTS

Assistant Professor: Physical Education department, CMB-UNICBE (2019-2022), Rio de Janeiro-Brazil
Assistant Professor: Physiotherapy and Physical Education departments, Estacio de Sa University (2020-2022), Rio de Janeiro-Brazil

TRAINING

Postdoctoral Fellow, School of Medicine, University of South Carolina. Mentor: Camilla Ferreira Wenceslau. December/2021 - present.

- Study of the role of endothelial cells in inflammation, and especially the role of the endothelium in the action of Specialized pro-resolving mediators in arterial hypertension.

PEER REVIEWS

Motriz, Journal of Physical Education, February/2022-present.
Frontiers in Physiology, section Vascular Physiology, April/2022-present.
Pharmacological Research, January/2022-present.

SELECTED PUBLICATIONS:

1. **Fontes MT**, Arruda-Junior DSS, Ribeiro-Silva D. Antonio JC, Tucci ED, Ferreira PJ, Rossoni LV, Girardi AC. Dipeptidyl Peptidase 4 Inhibition Rescues PKA-eNOS Signaling and Suppresses Aortic Hypercontractility in Rats with Heart Failure. Available at SSRN: <https://ssrn.com/abstract=4280862> or <http://dx.doi.org/10.2139/ssrn.4280862>

2. Costa TJ, Linder BA, Hester S, **Fontes M**, Pernomian L, Wenceslau CF, Robinson AT, McCarthy CG. The janus face of ketone bodies in hypertension. *J Hypertens.* 2022 Nov 1;40(11):2111-2119. doi: 10.1097/HJH.0000000000003243. Epub 2022 Aug 8. PMID: 35969209.
3. Blanco-Rivero J, Couto GK, Paula SM, **Fontes MT**, Rossoni LV. Enhanced sympathetic neurotransduction in the superior mesenteric artery in a rat model of heart failure: role of noradrenaline and ATP. *Am J Physiol Heart Circ Physiol.* 2021 Feb 1;320(2):H563-H574. doi: 10.1152/ajpheart.00444.2020. Epub 2020 Nov 8. PMID: 33164582.
4. **Fontes MT**, Paula SM, Lino CA, Senger N, Couto GK, Barreto-Chaves MLM, Mill JG, Rossoni LV. Renin-angiotensin system overactivation in perivascular adipose tissue contributes to vascular dysfunction in heart failure. *Clin Sci (Lond).* 2020 Dec 11;134(23):3195-3211. doi: 10.1042/CS20201099. PMID: 33215657.
5. Paula SM, Couto GK, **Fontes MT**, Costa SK, Negrão CE, Mill JG, Rossoni LV. Exercise training restores the myogenic response in skeletal muscle resistance arteries and corrects peripheral edema in rats with heart failure. *Am J Physiol Heart Circ Physiol.* 2019 Jul 1;317(1):H87-H96. doi: 10.1152/ajpheart.00042.2019. Epub 2019 May 3. PMID: 31050559.
6. Araujo JEDS, Miguel-Dos-Santos R, Macedo FN, Cunha PS, **Fontes MT**, Murata GM, Lauton-Santos S, Santana-Filho VJ, Silva AMO, Antonioli AR, Curi R, Quintans JSS, Barreto RSS, Santos MRV, Quintans-Junior LJ, Barreto AS. Effects of high doses of glucocorticoids on insulin-mediated vasodilation in the mesenteric artery of rats. *PLoS One.* 2020 Mar 18;15(3):e0230514. doi: 10.1371/journal.pone.0230514. PMID: 32187237; PMCID: PMC7080254.
7. Victorio JA, **Fontes MT**, Rossoni LV, Davel AP. Different Anti-Contractile Function and Nitric Oxide Production of Thoracic and Abdominal Perivascular Adipose Tissues. *Front Physiol.* 2016 Jul 12;7:295. doi: 10.3389/fphys.2016.00295. PMID: 27462277; PMCID: PMC4940415.
8. Mota MM, Mesquita TR, Braga da Silva TL, **Fontes MT**, Lauton Santos S, dos Santos Aggum Capettini L, Guedes de Jesus IC, Quintans Júnior LJ, De Angelis K, Wichi RB, Santos MR. Endothelium adjustments to acute resistance exercise are intensity-dependent in healthy animals. *Life Sci.* 2015 Dec 1;142:86-91. doi: 10.1016/j.lfs.2015.10.007. Epub 2015 Oct 8. PMID: 26455551.
9. Silva TL, Mota MM, **Fontes MT**, Araújo JE, Oliveira Carvalho V, Bonjardim LR, Santos MR. Effects of one resistance exercise session on vascular smooth muscle of hypertensive rats. *Arq Bras Cardiol.* 2015 Aug;105(2):160-7. doi: 10.5935/abc.20150070. Epub 2015 Jun 23. PMID: 26107814; PMCID: PMC4559125.
10. **Fontes MT**, Silva TL, Mota MM, Barreto AS, Rossoni LV, Santos MR. Resistance exercise acutely enhances mesenteric artery insulin-induced relaxation in healthy rats. *Life Sci.* 2014 Jan 14;94(1):24-9. doi: 10.1016/j.lfs.2013.11.017. Epub 2013 Dec 4. PMID: 24316143.
11. Mota MM, Silva TL, **Fontes MT**, Barreto AS, Araújo JE, Oliveira AC, Wichi RB, Santos MR. Resistance exercise restores endothelial function and reduces blood pressure in type 1 diabetic rats. *Arq Bras Cardiol.* 2014 Jul;103(1):25-32. doi: 10.5935/abc.20140087. PMID: 25120082; PMCID: PMC4126758.

BOOK CHAPTER

1. Masuko Ushio-Fukai Valter J. Santana-Filho Jose Pablo Vazquez-Medina Chamith Rajapakse, Federico Sertic, Nuala Mooney Madhu Gupta Diana Klein Nabendu Pore Andrea Lynn DiCarlo Aravindan Natarajan Melpo Christofidou-Solomidou Marjan Boerma Chhanda Biswas Silvia Lachhini Kumkum Ganguly Roger Rodriguez Guzman Sourav Roy Oyebisi Mistura Azeez Syed Raza shah Frits Rosendaal Andre Barreto Fabricio Macedo **FONTES, MILENE TAVARES** Neha Raina, et al.; *Endothelial Signaling in Vascular Dysfunction and Disease*. 1. ed. Amsterdã: Elsevier, 2021. 279p.

AWARDS

1. Honorable mention, Federation of Experimental Biology Societies. (2017)
2. Young Investigator Award, Clinical Science. (2017)
3. Young Investigator Award Michel Jamra / AMGEN, Brazilian Society for Clinical Research. (2014)

4. X ABC Award for Scientific Publication, Brazilian Society of Cardiology. (2014)
5. Honorable mention, Federation of Experimental Biology Societies. (2011)
6. Honorable mention, Federation of Societies of Experimental Biology. (2010)

OTHER INFORMATION

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Link to my ResearchGate page:

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