

RESUME

NAME: Priviero, Fernanda Bruschi Marinho

CURRENT POSITION: Assistant Research Scientist – Augusta University – Since September/2018.

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
UNESP, Rio Claro, SP – Brazil	B.Sc.	01/00	Physical Education
UNESP, Rio Claro, SP - Brazil	M. Sc.	10/02	Physical Activity and Health
UNICAMP, Campinas, SP - Brazil	Ph.D.	03/06	Pharmacology
Medical College of Georgia, Augusta – GA – USA	Postdoctorate	07/07	Physiology
UNESP, Rio Claro, SP - Brazil	Postdoctorate	07/10	Physiology
Medical College of Georgia, Augusta – GA – USA	Postdoctorate	07/17	Physiology

A. Personal Statement

Cardiovascular pharmacology and physiology has been the field of study of my career since I started my master studies. I started working with isolated right atria during my masters and collaborative works allowed me to expand to other isolated tissues such as arteries (mesenteric, aorta, celiac, basilar, tail, etc), corpus cavernosum, anococcygeus smooth muscle, bladder and skeletal muscle. Further than isolated tissues, I have *in vivo* experience to measure rat blood pressure (through artery cannulation or tail cuff), cystometry, intracavernous pressure, western blot and biochemistry and molecular assays in experimental models of hypertension, diabetes, obesity, heart failure, etc. Additionally, I have taught biochemistry and pharmacology in medical college and other related to health sciences since 2009. My former job in Brazil, I had the opportunity of coordinating 2 grants. Supported by CNPq (Brazilian Federal Funding Agency) from 2010 – 2012, we investigated the role of L-arginine supplementation in the mitochondrial biogenesis and results were published in Life Sciences. Supported by the Sao Paulo state funding agency (2013-2015 –FAPESP), we investigated modified antioxidant flavonoids (and its association with physical exercise) as a therapy in the prevention and treatment of endothelial dysfunction in obese rats, and part of the results was published in Diabetes, Metabolic Syndrome and Obesity (2018). Other experimental part is still being taken, evaluating lipid modifications induced by flavonoids and physical exercise. Currently, my research project is investigating the role of TLR9 to the development of erectile dysfunction in obesity and the role of NLRP-3 in the pathology of overactive bladder observed in the late phase of diabetic bladder dysfunction. I am a communicative person, highly collaborative worker and committed to research. My career experience includes writing projects, grants and manuscripts, designing experimental protocols, data analyses, budget administration, member of examining committee (PhD and MSc committee – about 80 committees), reviewer of peer-reviewed manuscripts (29 journals), member of editorial board of ROS (Reactive Oxygen Species) and Motriz, member of judging committee of posters sessions for the Brazilian Society of Pharmacology and Experimental Therapeutics (2010 and 2011) and Council on Hypertension (AHA – 2018). I have mentored several undergraduate students, 3 MSc students and co-mentored PhD students in Brazil.

B. Positions and Honors

Position and Employment

2009 – Professor, Unipinhal, Espírito Santo do Pinhal, SP, Brazil

2011 – Professor, Health Sciences Program, Universidade São Francisco, Bragança Paulista, SP, Brazil.

2018 – Assistant Research Scientist, Department of Physiology, Augusta University, GA, USA

Other Experience and Professional Memberships

2000 – Member – Brazilian Society of Pharmacology and Experimental Therapeutics

2006 – Member - American Society of Pharmacology and Experimental Therapeutics (ASPET)

2009 – Member - American Heart Association (AHA) - Council on Hypertension

Award

2010 – Young Scientist Travel Award - American Society of Pharmacology and Experimental Therapeutics (ASPET)

C. Peer-reviewed Publications (Total of 44 peer-reviewed publications)

1. Calmasini FB, Klee N, Webb RC, **Priviero F**. (2019) Impact of Immune system activation and vascular impairment on male and female sexual dysfunction. *Sex. Med. Rev.*, in press.
2. Nascimento LS, Tedesco LM, Araujo NS, **Priviero FBM**, Claudino MA, Priolli DG, Rocha T. (2019) Molecular evidence of tissue remodeling in an animal model of heart failure. *Histol Histopathol.*, 18128. doi: 10.14670/HH-18-128
3. Mora AG, Furquim SR, Tartarotti SP, Andrade DR, Janussi SC, Krikorian K, Rocha T, Franco-Penteado CF, Priolli DG, **Priviero FBM**, Claudino MA. (2019) Progression of micturition dysfunction associated with the development of heart failure in rats: Model of overactive bladder. *Life Sci.*, 226:107-116. doi:10.1016/j.lfs.2019.04.017.
4. Gonçalves TT, Lazaro CM, De Mateo FG, Campos MC, Mezencio JG, Claudino MA, de O Carvalho P, Webb RC, **Priviero FB**. (2018) Effects of glucosyl-hesperidin and physical training on body weight, plasma lipids, oxidative status and vascular reactivity of rats fed with high-fat diet. *Diabetes Metab Syndr Obes.*, 11:321-332. doi: 10.2147/DMSO.S153661.
5. Martinez-Quinones PA, McCarthy CG, Watts SW, Klee N, Komic A, Calmasini F, **Priviero F**, Warner A, Chenghao Y, Wenceslau CF. (2018) Hypertension induced Morphological and Physiological Changes in Cells of the Arterial Wall. *Am J Hypertens*, 31(10): 1067-1078. doi: 10.1093/ajh/hpy083.
6. Silva FH, Veiga FJR, Mora AG, Heck RS, De Oliveira CC, Gambero A, Franco-Penteado CF, Antunes E, Gardner JD, **Priviero FBM**, Claudino MA. (2017) A novel experimental model of erectile dysfunction in rats with heart failure using volume overload. *PLoS One*. 12(11): e0187083.
7. **Priviero FB**, Toque HA, Nunes KP, Priolli DG, Teixeira CE, Webb RC. (2016) Impaired Corpus Cavernosum Relaxation Is Accompanied by Increased Oxidative Stress and Up-Regulation of the Rho-Kinase Pathway in Diabetic (Db/Db) Mice. *PLoS One*. 11(5): e0156030. PMID: 27227463

8. Orfali Gd, Duarte AC, Bonadio V, Martinez NP, de Araújo ME, **Priviero FB**, Carvalho PO, Priolli DG. (2016) Review of anticancer mechanisms of isoquercitin. *World J Clin Oncol.*, 7(2): 189-99. PMID: 27081641
9. de Souza VT, de Franco ÉP, de Araújo ME, Messias MC, **Priviero FB**, Frankland Sawaya AC, de Oliveira Carvalho P. (2015) Characterization of the antioxidant activity of aglycone and glycosylated derivatives of hesperetin: an in vitro and in vivo study. *J Mol Recognit.* 29(2): 80-7. PMID: 26370929.
10. Nunes KP, Teixeira CE, **Priviero FB**, Toque HA, Webb RC. (2015) Beneficial effect of the soluble guanylyl cyclase stimulator BAY 41-2272 on impaired penile erection in dbdb/- type II diabetic and obese mice. *J Pharmacol Exp Ther.* 353(2): 330-9. doi: 10.1124/jpet.114.220970.
11. Valgas da Silva CP, Rojas-Moscoso JA, Antunes E, Zanesco A, **Priviero FB**. (2014) L-Carnitine supplementation impairs endothelium-dependent relaxation in mesenteric arteries from rats. *Arch Physiol Biochem*, 120(3): 112-118. PMID: 24953351
12. Valgas da Silva CP, Delbin MA, La Guardia PG, Moura CS, Davel AP, **Priviero FB**, Zanesco A. (2015) Improvement of the physical performance is associated with activation of NO/PGC-1 α /mtTFA signaling pathway and increased protein expressions of electron transport chain in gastrocnemius muscle from rats supplemented with l-arginine. *Life Sci.* pii: S0024-3205(15)00004-1. doi: 10.1016/j.lfs.2014.12.021. PMID: 25636591.
13. Rocha T, Mendes IR, Costa TM, Ravos AG, Oliveira RAR, Claudino MA, **Priviero FB** (2014) Functional and morphological evaluation of the mesenteric artery, kidney and liver from obese rats: impact of a high fat diet plus fructose. *J Mol Gen Med.* S1: 013. doi: 10.4172/1747-0862.S1-013.
14. Silva FH, Mónica FZ, Báu FR, Brugnerotto AF, **Priviero FB**, Toque HA, Antunes E. (2013) Superoxide anion production by NADPH oxidase plays a major role in erectile dysfunction in middle-aged rats: prevention by antioxidant therapy. *J Sex Med.* 10(4):960-71. doi: 10.1111/jsm.12063. PMID: 23347406.
15. Claudino MA, Delbin MA, Franco-Penteado CF, **Priviero FB**, De Nucci G, Antunes E, Zanesco A. (2011) Exercise training ameliorates the impairment of endothelial and nitregeric corpus cavernosum responses in diabetic rats. *Life Sci.* 88(5-6):272-7. doi: 10.1016/j.lfs.2010.11.018. PMID: 21112341.
16. **Priviero FB**, Jin LM, Ying Z, Teixeira CE, Webb RC. (2010) Up-regulation of the RhoA/Rho-kinase signaling pathway in corpus cavernosum from endothelial nitric-oxide synthase (NOS), but not neuronal NOS, null mice. *J Pharmacol Exp Ther.* 333(1):184-92. doi: 10.1124/jpet.109.160606. Erratum in: *J Pharmacol Exp Ther.* 2010 May;333(2):629. PMID: 20093396.
17. **Priviero FB**, Webb RC. (2010) Heme-dependent and independent soluble guanylate cyclase activators and vasodilation. *J Cardiovasc Pharmacol.* 56(3): 229-33. doi: 10.1097/FJC.0b013e3181eb4e75. Review. PubMed PMID: 20571429
18. Báu FR, Mónica FZ, **Priviero FB**, Baldissera L Jr, de Nucci G, Antunes E. (2010) Evaluation of the relaxant effect of the nitric oxide-independent soluble guanylyl cyclase stimulator BAY 41-2272 in isolated detrusor smooth muscle. *Eur J Pharmacol.* 637(1-3):171-7. doi: 10.1016/j.ejphar.2010.04.008. PMID: 20399768.
19. Claudino MA, Franco-Penteado CF, **Priviero FB**, Camargo EA, Teixeira SA, Muscará MN, De Nucci G, Zanesco A, Antunes E. (2010) Upregulation of gp91phox subunit of NAD(P)H oxidase contributes to erectile dysfunction caused by long-term nitric oxide inhibition in rats: reversion by regular physical training. *Urology.* 75(4): 961-7. doi: 10.1016/j.urology.2009.05.098. PMID: 19962729.
20. **Priviero FBM**, Zemse SM, Teixeira CE, Webb RC. (2009) Oxidative Stress Impairs Vasorelaxation Induced by the Soluble Guanylyl Cyclase Activator BAY 41-2272 in Spontaneously Hypertensive Rats. *Am J Hypertens*, 22: 493. PMID: 19247264

21. Toque HA, **Priviero FB**, Teixeira CE, Claudino MA, Baracat JS, Fregonesi A, De Nucci G, Antunes E. (2009) Comparative relaxing effects of sildenafil, vardenafil, and tadalafil in human corpus cavernosum: contribution of endogenous nitric oxide release. *Urology*. 74(1):216-21. doi: 10.1016/j.urology.2008.12.056. PMID: 19371941.
22. Toque HA, **Priviero FB**, Zemse SM, Antunes E, Teixeira CE, Webb RC. (2009) Effect of the phosphodiesterase 5 inhibitors sildenafil, tadalafil and vardenafil on rat anococcygeus muscle: functional and biochemical aspects. *Clin Exp Pharmacol Physiol*. 36(4):358-66. doi: 10.1111/j.1440-1681.2008.05071.x. PubMed PMID: 18986324;
23. Flores-Toque HA, Teixeira CE, **Priviero FBM**, Morganti RP, Antunes E, De Nucci G. (2008) Vardenafil, but not sildenafil or tadalafil, has calcium-channel blocking activity in rabbit isolated pulmonary artery and human washed platelets. *Br J Pharmacol*, 154, 787. PMID: 18536732
24. Flores Toque HA, **Priviero FB**, Teixeira CE, Perissutti E, Fiorino F, Severino B, Frecentese F, Lorenzetti R, Baracat JS, Santagada V, Caliendo G, Antunes E, De Nucci G. (2008) Synthesis and pharmacological evaluations of sildenafil analogues for treatment of erectile dysfunction. *J Med Chem*. 51(9):2807-15. doi: 10.1021/jm701400r. PMID: 18393409.
25. Zecchin HG, **Priviero FB**, Souza CT, Zecchin KG, Prada PO, Carnevalheira JB, Velloso LA, Antunes E, Saad MJ. (2007) Defective insulin and acetylcholine induction of endothelial cell-nitric oxide synthase through insulin receptor substrate/Akt signaling pathway in aorta of obese rats. *Diabetes*, 56, 1014-24. PMID: 17229938
26. Montes-Gil AC, Zanfolin M, Okuyama CE, Lilla S, Alves DP, Santagada V, Perissutti E, Lavecchia A, Fiorino F, Severino B, Caliendo G, **Priviero FB**, Mendes GD, Donato JL, de Nucci G. (2007) Pharmacokinetic profile of atenolol aspirinate. *Arch Pharm (Weinheim)*., 340(9):445-55. PMID: 17763375.
27. **Priviero FB**, Teixeira CE, Claudino MA, De Nucci G, Zanesco A, Antunes E. (2007) Vascular effects of long-term propranolol administration after chronic nitric oxide blockade. *Eur J Pharmacol.*, 571(2-3): 189-96. PMID: 17610863.
28. Teixeira CE, Jin L, **Priviero FB**, Ying Z, Webb RC. (2007) Comparative pharmacological analysis of Rho-kinase inhibitors and identification of molecular components of Ca²⁺ sensitization in the rat lower urinary tract. *Biochem Pharmacol.*, 74(4): 647-58. PMID: 17603024
29. Teixeira CE, **Priviero FB**, Webb RC. (2007) Effects of 5-cyclopropyl-2-[1-(2-fluorobenzyl)-1H-pyrazolo[3,4-b]pyridine-3-yl]pyrimidin-4-ylamine (BAY 41-2272) on smooth muscle tone, soluble guanylyl cyclase activity, and NADPH oxidase activity/expression in corpus cavernosum from wild-type, neuronal, and endothelial nitric-oxide synthase null mice. *J Pharmacol Exp Ther.*, 322(3): 1093-102. PMID: 17596536.
30. **Priviero FB**, Leite R, Webb RC, Teixeira CE. (2007) Neurophysiological basis of penile erection. *Acta Pharmacol Sin.*, 28(6):751-5. PMID: 17506932.
31. Claudino MA, **Priviero FB**, Camargo EA, Teixeira CE, De Nucci G, Antunes E, Zanesco A. (2007) Protective effect of prior physical conditioning on relaxing response of corpus cavernosum from rats made hypertensive by nitric oxide inhibition. *Int J Impot Res.*, 19(2): 189-95. PMID: 16915305.
32. **Priviero FB**, Teixeira CE, Toque HA, Claudino MA, Webb RC, De Nucci G, Zanesco A, Antunes E. (2006) Vasorelaxing effects of propranolol in rat aorta and mesenteric artery: a role for nitric oxide and calcium entry blockade. *Clin Exp Pharmacol Physiol.*, 33(5-6): 448-55. PMID: 16700877.
33. Teixeira CE, **Priviero FB**, Todd J Jr, Webb RC. (2006) Vasorelaxing effect of BAY 41-2272 in rat basilar artery: involvement of cGMP-dependent and independent mechanisms. *Hypertension*, 47(3): 596-602. PMID: 16391173.

34. Teixeira CE, **Priviero FB**, Claudino MA, Baracat JS, De Nucci G, Webb RC, Antunes E. (2006) Stimulation of soluble guanylyl cyclase by BAY 41-2272 relaxes anococcygeus muscle: interaction with nitric oxide. *Eur J Pharmacol.*, 530(1-2): 157-65. PMID: 16371226.
35. Teixeira CE, **Priviero FB**, Webb RC. (2006) Molecular mechanisms underlying rat mesenteric artery vasorelaxation induced by the nitric oxide-independent soluble guanylyl cyclase stimulators BAY 41-2272 [5-cyclopropyl-2-[1-(2-fluorobenzyl)-1H-pyrazolo[3,4-b]pyridin-3-yl]pyrimidin-4-ylamine] and YC-1 [3-(5'-hydroxymethyl-2'-furyl)-1-benzyl Indazole]. *J Pharmacol Exp Ther.*, 317(1): 258-66. PMID: 16352702.
36. Teixeira CE, **Priviero FB**, Webb RC. (2006) Differential effects of the phosphodiesterase type 5 inhibitors sildenafil, vardenafil, and tadalafil in rat aorta. *J Pharmacol Exp Ther.*, 316(2):654-61. PMID: 16204472.
37. Teixeira CE, Jin L, Ying Z, Palmer T, **Priviero FB**, Webb RC. (2005) Expression and functional role of the RhoA/Rho-kinase pathway in rat coeliac artery. *Clin Exp Pharmacol Physiol.*, 32(10): 817-24. PMID: 16173942.
38. **Priviero FB**, Baracat JS, Teixeira CE, Claudino MA, De Nucci G, Antunes E. (2005) Mechanisms underlying relaxation of rabbit aorta by BAY 41-2272, a nitric oxide-independent soluble guanylate cyclase activator. *Clin Exp Pharmacol Physiol.*, 32(9): 728-34. PMID: 16173929.
39. **Priviero F**, De Nucci G, Antunes E, Zanesco A. (2004) Negative chronotropic response to adenosine receptor stimulation in rat right atria after run training. *Clin Exp Pharmacol Physiol.*, 31(10): 741-3. PMID: 15554918.
40. Claudino MA, **Priviero FB**, Teixeira CE, de Nucci G, Antunes E, Zanesco A. (2004) Improvement in relaxation response in corpus cavernosum from trained rats. *Urology*, 63(5):1004-8. PMID: 15135008.
41. Teixeira CE, de Oliveira JF, Baracat JS, **Priviero FB**, Okuyama CE, Rodrigues Netto N Jr, Fregonesi A, Antunes E, De Nucci G. (2004) Nitric oxide release from human corpus cavernosum induced by a purified scorpion toxin. *Urology*, 63(1): 184-9. PMID: 14751389.
42. Teixeira CE, **Priviero FB**, Okuyama CE, De Nucci G, Antunes E. (2003) Pharmacological characterization of the presynaptic activity of Tityus serrulatus venom in the rat anococcygeus muscle. *Toxicon*, 42(5): 451-60.
43. Baracat JS, Teixeira CE, Okuyama CE, **Priviero FB**, Faro R, Antunes E, De Nucci G. (2003) Relaxing effects induced by the soluble guanylyl cyclase stimulator BAY 41-2272 in human and rabbit corpus cavernosum. *Eur J Pharmacol.*, 477(2):163-9.
44. Gasparetti AL, Hyslop S, Costa SK, **Priviero FB**, De Nucci G, Antunes E, Zanesco A. (2002) Chronotropic response of beta-adrenergic-, muscarinic-, and calcitonin gene-related peptide-receptor agonists in right atria from neonatal capsaicin-treated rats. *Neurosci Lett.*, 325(3):147-50.

D. Journals serving as a Reviewer:

1. Hypertension (Dallas)
2. Acta Pharmacologica Sinica
3. Journal of Urology
4. Revista Motriz (Brazil)
5. RBCF. Revista Brasileira de Ciências Farmacêuticas (Brazil)
6. Journal of Cellular and Molecular Medicine
7. American Journal of Hypertension
8. Chinese Journal of Physiology
9. Biochemical Pharmacology
10. Journal of Pharmacy and Pharmacology

11. Life Sciences (1973)
12. Plos One
13. Biological Research
14. Cellular Physiology and Biochemistry
15. Urology
16. Diabetes
17. Current Pharmaceutical Design
18. Reproductive Biology
19. Pathophysiology
20. Food Chemical Toxicology
21. Oxidative Medicine and Cellular Longevity
22. Nitric Oxide
23. Molecular and Cellular Endocrinology
24. Food and Function
25. Comparative Biochemistry and Physiology
26. Andrology
27. Vascular Pharmacology
28. Clinical and Experimental Pharmacology and Physiology
29. Physiological Reports

E. Editorial Board

ROS (Reactive Oxygen Species)

Motriz – Journal of Physical Education (Brazil)