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EDUCATION

Ph.D (Pharmacology) : Indian Veterinary Research Institute, Izatnagar, India, 2008.

M.V.Sc (Pharmacology) : Tamilnadu Veterinary and Animal Sciences University, Chennai, India, 2004.

B.V.Sc (DVM) : Tamilnadu Veterinary and Animal Sciences University, Chennai, India, 2002.

ACADEMIC APPOINTMENTS

04/2005-08/2005	Part-time Teacher, Department of Pharmacology, NTR College of Veterinary Science, Gannavaram, AP, India
12/2008-06/2010	Postdoctoral Trainee, University of Tennessee Health Sciences Center, Memphis, TN, USA.
7/2010-07/2013	Postdoctoral Fellow, University of Connecticut Health Center, Farmington, CT, USA
08/2013-3/2015	Postdoctoral Research Associate, Texas Tech University Health Sciences Center, Lubbock, TX
04/2015-09/2016	Research Associate, Texas Tech University Health Sciences Center, Lubbock, TX
09/2016-Present	Research Assistant Professor, University of Texas Health Science Center, Tyler, TX.

PUBLICATIONS

1. Das KC, Kundumani-Sridharan V, **Subramani J.** Role of Thioredoxin in Age-Related Hypertension. (2018), *Curr Hypertens Rep.* Feb 14; 20(1):6.
2. **Subramani J**, Kundumani-Sridharan V, Hilgers RH, Owens C, Das KC**.** Thioredoxin Uses a GSH-independent Route to Deglutathionylate Endothelial Nitric-oxide Synthase and Protect against Myocardial Infarction. (2016*), J Biol Chem.* 291(45):23374-23389.
3. Hilgers RH, Kundumani-Sridharan V**, Subramani J**, Chen LC, Cuello LG, Rusch NJ, Das KC. Thioredoxin reverses age-related hypertension by chronically improving vascular redox and restoring eNOS function. (2017), *Sci Transl Med.,* 9 (376).
4. Kundumani-Sridharan, V., **Subramani, J**., Das, K.C. Thioredoxin activates MKK4-NFκB pathway in a redox-dependent manner to control manganese superoxide dismutase gene expression in endothelial cells. (2015) *Journal of Biological Chemistry*, 290 (28), pp. 17505-17519.
5. Ghosh, M., **Subramani, J**., Rahman, M.M., Shapiro, L.H. CD13 restricts TLR4 endocytic signal transduction in inflammation. (2015) *Journal of Immunology*, 194 (9), pp. 4466-4476.
6. Leo, M.D., Kandasamy, K., **Subramani, J**., Tandan, S.K., Kumar, D. Involvement of inducible nitric oxide synthase and dimethyl arginine dimethylaminohydrolase in Nω-Nitro-L-arginine methyl ester (L-NAME)-induced hypertension. (2015) *Cardiovascular Pathology*, 24 (1), pp. 49-55.
7. Rahman, M.M., **Subramani, J**., Ghosh, M., Denninger, J.K., Takeda, K., Fong, G.-H., Carlson, M.E., Shapiro, L.H. CD13 promotes mesenchymal stem cell-mediated regeneration of ischemic muscle. (2014) *Frontiers in Physiology*, 4 JAN, art. No. 402,
8. Rahman, M.M., Ghosh, M., **Subramani, J**., Fong, G.-H., Carlson, M.E., Shapiro, L.H. CD13 regulates anchorage and differentiation of the skeletal muscle satellite stem cell population in ischemic injury. (2014) *Stem Cells*, 32 (6), pp. 1564-1577.
9. Ghosh, M., Gerber, C., Rahman, M.M., Vernier, K.M., Pereira, F.E., **Subramani, J**., Caromile, L.A., Shapiro, L.H. Molecular mechanisms regulating CD13-mediated adhesion. **(2014)** *Immunology*, 142 (4), pp. 636-647.
10. Pereira, F.E., Cronin, C., Ghosh, M., Zhou, S.-Y., Agosto, M., **Subramani, J**., Wang, R., Shen, J.-B., Schacke, W., Liang, B., Yang, T.H., McAulliffe, B., Liang, B.T., Shapiro, L.H. CD13 is essential for inflammatory trafficking and infarct healing following permanent coronary artery occlusion in mice. (2013) *Cardiovascular Research*, 100 (1), pp. 74-83.
11. **Subramani, J**., Ghosh, M., Mamunur Rahman, M., Caromile, L.A., Gerber, C., Rezaul, K., Han, D.K., Shapiro, L.H. Tyrosine phosphorylation of CD13 regulates inflammatory cell-cell adhesion and monocyte trafficking. (2013) *Journal of Immunology*, 191 (7), pp. 3905-3912.
12. Kundumani-Sridharan, V., Van Quyen, D., **Subramani, J**., Singh, N.K., Chin, Y.E., Rao, G.N. Novel interactions between NFATc1 (nuclear factor of activated T cells c1) and

STAT-3 (signal transducer and activator of transcription-3) mediate G protein-coupled receptor agonist, thrombin-induced biphasic expression of cyclin D1, with first phase influencing cell migration and second phase directing cell proliferation. (2012) *Journal of Biological Chemistry,* 287 (27), pp. 22463-22482.

13. Ghosh, M., McAuliffe, B., Subramani, J., Basu, S., Shapiro, L.H. CD13 regulates dendritic cell cross-presentation and T cell responses by inhibiting receptor-mediated antigen uptake**.** (2012) *Journal of Immunology*, 188 (11), pp. 5489-5499.
14. Kundumani-Sridharan, V., Niu, J., Wang, D., Van Quyen, D., Zhang, Q., Singh, N.K., **Subramani, J.**, Karri, S., Rao, G.N. 15(S)-hydroxyeicosatetraenoic acid-induced angiogenesis requires Src-mediated Egr-1-dependent rapid induction of FGF-2 expression (2010) *Blood*, 115 (10), pp. 2105-2116.
15. **Subramani, J.,** Leo, M.D.M., Kathirvel, K., Arunadevi, R., Singh, T.U., Prakash, V.R., Mishra, S.K. Essential role of nitric oxide in sepsis-induced impairment of endothelium-derived hyperpolarizing factor-mediated relaxation in rat pulmonary artery. (2010) *European Journal of Pharmacology*, 630 (1-3), pp. 84-91.
16. ArunaDevi, R., Ramteke, V.D., Kumar, S., Shukla, M.K., **Subramani,J**., Kumar, D., Sharma, A.K., Tandan, S.K.Neuroprotective effect of s-methylisothiourea in transient focal cerebral ischemia in rat. (2010) *Nitric Oxide* - Biology and Chemistry, 22 (1), pp. 1-10.
17. **Subramani, J**., Kathirvel, K., Leo, M.D.M., Kuntamallappanavar, G., Singh, T.U., Mishra, S.K. Atorvastatin restores the impaired vascular endothelium-dependent relaxations mediated by nitric oxide and endothelium-derived hyperpolarizing factors but not hypotension in sepsis. (2009) *Journal of Cardiovascular Pharmacology*, 54 (6), pp. 526-534.
18. **Subramani, J**., Damodaran, A., Kanniappan, M., Mathuram, L.N. Anti-inflammatory effect of petroleum ether extract of *Vitex negundo* leaves in rat models of acute and subacute inflammation. (2009) *Pharmaceutical Biology*, 47 (4), pp. 335-339.
19. Sundaresan, N.R., Marcus Leo, M.D., **Subramani, J**., Anish, D., Sudhagar, M., Ahmed, K.A., Saxena, M., Tyagi, J.S., Sastry, K.V.H., Saxena, V.K. Expression analysis of melatonin receptor subtypes in the ovary of domestic chicken. (2009) *Veterinary Research Communications*, 33 (1), pp. 49-56.
20. Gupta, P.K., **Subramani, J**., Leo, M.D.M., Sikarwar, A.S., Parida, S., Prakash, V.R., Mishra, S.K. Role of voltage-dependent potassium channels and myo-endothelial gap junctions in 4-aminopyridine-induced inhibition of acetylcholine relaxation in rat carotid artery**.** (2008) *European Journal of Pharmacology*, 591 (1-3), pp. 171-176.
21. Sundaresan, N.R., Anish, D., Sastry, K.V.H., Saxena, V.K., Nagarajan, K., **Subramani, J**., Leo, M.D.M., Shit, N., Mohan, J., Saxena, M., Ahmed, K.A. High doses of dietary zinc induce cytokines, chemokines, and apoptosis in reproductive tissues during regression. (2008) *Cell and Tissue Research,* 332 (3), pp. 543-554.

22. Gupta, P.K., **Subramani, J.,** Singh, T.U., Leo, M.D.M., Sikarwar, A.S., Prakash, V.R., Mishra, S.K. Role of protein kinase G in nitric oxide deficiency-induced supersensitivity to nitrovasodilator in rat pulmonary artery. (2008) *Journal of Cardiovascular Pharmacology*, 51 (5), pp. 450-456.

23. Kundumani-Sridharan, V., **Subramani, J., Owens, C., Walker, T., Wasnick, J., and** Das, K.C. Short-duration hyperoxia causes genotoxicity in mouse lungs: Protection by volatile anesthetic isoflurane. (2018*), Am J Physiol Lung Cell Mol Physiol.,* (Submitted).

24. Subramani, J., Kundumani-Sridharan, V., Das, K.C. Novel mechanism of Angiotensin II induced apoptosis: AT2 receptor mediated downregulation of MnSOD expression via ASK-JNK-AP1 axis. (***In Preparation***).

25. Kundumani-Sridharan, V., **Subramani, J.,** Hilgers, RH. Owens, C., Das, K.C. A novel role for Neuregulin 1 and ErbB2/ErbB4 in endothelium-dependent coronary artery relaxation and remote ischemic preconditioning. **(*In Preparation).***

ABSTRACTS/POSTERS/ ORAL PRESENTATIONS

1. **Subramani,** J., Rezaul, K., Han, DK., and Shapiro LH. CD13 phosphorylation and cytoskeletal anchors in monocyte adhesion. North American Vascular Biology Association (NAVBO) Workshops in Vascular Biology, October 16-20, Cape Cod, **2011**, Poster no. 162.
2. Ghosh, M., McAuliffe, B., **Subramani, J**., Basu, S., Shapiro, L.H. CD13 regulates mannose receptor-mediated antigen uptake by dendritic cells. NAVBO Workshops in Vascular Biology, October 16-20, Cape Cod, **2011**, Poster no. 157.
3. Ghosh, M., McAuliffe, B., **Subramani, J**., Basu, S. and Shapiro L. CD13 regulates dendritic cell cross presentation and T cell responses by inhibiting receptor mediated antigen uptake. *Annual Meeting of the American Association of Immunologists*. May 4-8, Boston, **2012**, Abstract published in *The Journal of Immunology*, 188, 106.16.
4. Ghosh, M., **Subramani J**., Rahman M, Shapiro L. CD13 is a novel regulator of TLR4 endocytosis in dendritic cells (CAM5P. 241). *Annual Meeting of the American Association of Immunologists*. May 2-6, Pittsburgh, **2014,** Abstract published in *The Journal of Immunology* 192 (1 Supplement), 180.12.
5. Ghosh, M., **Subramani J**., Rahman M, Shapiro L. CD13 restricts TLR4 endocytic signal transduction in inflammation (INM7P.350). *Annual Meeting of The American Association of Immunologists*, May 8-12, New Orelans, **2015**, Abstract published in *The Journal of Immunology,* May 1, vol. 194 no. 1 Supplement 194.7.
6. Ghosh, M., **Subramani J.**, Rahman M, Shapiro L. CD13 is a Novel Regulator of TLR4 Endocytosis in Dendritic Cells. *Keystone Symposia* March 3–8, 2013, Colorado | USA, Poster No. 3014.
7. Leo MD, Kandasamy K, **Subramani J**, Tandan SK, Kumar D. Involvement of inducible nitric oxide synthase and dimethylarginine dimethylaminohydrolase in Nω-Nitro-L-arginine methyl ester (L-NAME)-induced hypertension (LB676*). Experimental biology*

meeting April 26-30, San Diego, 2014, Abstract published in *The FASEB Journal* (1 Supplement), 28, LB676.

8. Kundumani-Sridharan V, Van Quyen D, **Subramani J,** Singh NK, and Rao GN. Interaction between NFATc1 and STAT3 is required for thrombin-induced cyclin D1 expression in vascular smooth muscle cells. *Experimental biology meeting*, April 21-25, San Diego**, 2012,** Abstract published in *The FASEB Journal*, 26, 782.8.

SEMINAR PROCEEDINGS

Ravi Prakash, V., **Subramani, J**., Kathirvel, K., Singh, TU., and Mishra, S.K. **2008**. Transient Receptor Potential Channels as Therapeutic Targets. Seminar on "Therapeutic Potential of Ion Channel Modulators", 17th October 2008, Division of Pharmacology and Toxicology, Indian Veterinary Research, Institute, Izatnagar – 243 122, India.

HONORS

- Recipient of Tamil Nadu Veterinary and Animal Sciences University merit scholarship - 2002 during M.V.Sc
- Recipient of Indian Veterinary Research Institute (IVRI) - Senior Research Fellowship (SRF)-2005 during Ph.D
- University first position during Ph.D- Pharmacology in Indian Veterinary Research Institute, Izatnagar.
- University second position during M.V.Sc- Pharmacology in TANUVAS, Chennai.
- University Third position during B.V.Sc in Tamil Nadu Veterinary and Animal Sciences University, Chennai
- All India 1st Rank in all India entrance examination conducted by IVRI for Ph.D

PROFESSIONAL MEMBERSHIP

- Member of *American Heart Association* (AHA)
- Member of *North American Vascular Biology Organization* (NAVBO)
- Member of *American Society for Biochemistry and Molecular Biology* (ASBMB)

REVIEWER ASSIGNMENT FOR INTERNATIONAL JOURNALS

- Reviewer for *European Journal of Pharmacology* (Cardiovascular)
- Reviewed articles for *Indian Journal of Biochemistry & Biophysics*.