

Cellphone : 9444034638

e-Mail ID : soovro@yahoo.ca

Address:

Department of Biotechnology, The University of Burdwan
Golap Bag Campus, Burdwan, West Bengal, 713104 India



Present Position

Associate professor, Department of Biotechnology, The University of Burdwan from May 2021- Present

Previous Positions

Associate professor, Department of Biotechnology, Anna University from January 2014- May 2021

- Scientist, AU-KBC Research Centre, Madras Institute of Technology, Anna University, Chennai during June-2000 and January-2014.

Other Employment

- Assistant Professor, Himalayan Institute of Medical Science, Dehradun for 1.5 years.

Degree

- ❖ M.Sc. in Human Physiology, Rajabazar Science College, Calcutta University (1989 - 1991).
- ❖ B.Sc. in Human Physiology, City College, Calcutta University (1986 - 1989).

Research Degree

- ❖ Postdoctoral Research in Cell Biology and Vascular Biology from Faculty of Gastroenterology, St Marry's Hospital, Mayo Clinic Rochester (2000 - 2004).
Title: Studying nitric oxide biology of portal hypertension.
- ❖ Postdoctoral Research in Cell Biology from Faculty of Urology, Royal Victoria Hospital, McGill University (1998 - 2000).
Title: Improving protocols of spermatozoa cryopreservation for assisted reproduction.

- ❖ Ph.D. in Cell Biology and Physiology from Faculty of Life Science, School of Life Science, Devi Ahilya University (1992 - 1999).
Title: Biochemical and Biophysical Perturbations in Spermatozoa during Infertility Induction in Males .

Areas of Specialisation

- Cell Biology and Vascular Biology

Membership in Professional Organizations

- Society for Nitric Oxide and Allied Radicals
- American Physiological Society

Research Guidance

Ph.D. Supervisor Registration Number	: 8170088
Number of Ph.D Scholars Guided	: 12
Number of Ph.D Scholars Guiding	: 9
Number of M.S (By Research) Scholars Guided	: 2
Number of M.S (By Research) Scholars Guiding	: 1
Number of M.E./ M.Tech. Projects Guided	: 12
Number of M.E./ M.Tech. Projects Guiding	: 4
Number of M.S (By Research) Scholars Guiding as Joint-Supervisor	: 2

Papers Published in Journals

Research Papers Published in International Journals 129

1. Chatterjee, S; Laloraya, M., Kumar, G.P, "Exorbitantly enhanced protein gyration and eronious membrane modification programs in spermatozoa after vasectomy: A biophysical basis for low fertility revival after vasectomy", Biochem. Biophys. Res. Commun, published by Elsevier. Vol. 197, Issue 2, pp. 450-58 (1993).
2. Chatterjee S, Laloraya, M. and Kumar G.P, "Free radical bombing of spermatozoa in spermatc granuloma: An attempt to prevent autoimmune switch on ", Biochem. Biophys. Res. Commun, published by Elsevier. Vol. 201, Issue 1, pp. 472-77 (1994).
3. Chatterjee S, Laloraya, M. and Kumar G.P, "Free radical induced liquefaction of ejaculated human semen: A new dimension in semen biochemistry ", Arch. Androl, published by Taylor & Francis. Vol. 38, Issue 2, pp. 107-11 (1997).
4. Chatterjee S, Laloraya, M. and Kumar G.P, "Free radical mediated sperm load management in the vagina of rat", Arch Androl., published by Taylor & Francis. Vol. 39, Issue 2, pp. 127-33 (1997).

5. Chatterjee, S., Laloraya, M., Kumar, G.P, "Superoxide anion radical mediated dissection of rat sperm: An in vitro study ", Arch. Androl, published by Taylor & Francis. Vol. 39, Issue 2, pp. 101-4 (1997).
6. Chatterjee S, Purohit, S.B., Laloraya, M. and Kumar G.P, "Vasectomy induced SOD inactivation in the male reproductive tract of rat: A prerequisite for spermatic granuloma formation", Urologia Internationalis , published by Karger. Vol. 59, Issue 4, pp. 23-25 (2000).
7. Bilodeau,J.F, Chatterjee S, Sirad, M.A., Gagnon, C, "Levels of antioxidant defenses are decreased in bovine spermatozoa after a cycle of freezing and thawing", Mol. Rep. Dev. Mol Reprod Dev, published by Wiley InterScience, Wiley. Vol. 55, Issue 3, pp. 282-88 (2000).
8. Herrero, M.B., Chatterjee S, Lefièvre, L., de Lamirande, E., Gagnon , C., "Nitric Oxide interacts with the cAMP pathway to modulate capacitation of human spermatozoa ", Free Rad. Biol. Med, published by Elsevier. Vol. 29, Issue 6, pp. 522-36 (2000).
9. Chatterjee, S; Laloraya, M., Kumar, G.P, "Regional variations in thiol distribution pattern and superoxide dismutase activity of male reproductive tract of rat modulate the transport of spermatozoa through epididymis and vas deferens", Urol. Int., published by Nihon Hinyōkika Gakkai, Wiley. Vol. 66, Issue 2, pp. 100-4 (2001).
10. Chatterjee S., Gagnon, C, "Evidence for the production of oxygen free radicals during freezing/thawing of bull spermatozoa", Mol. Reprod. Dev, published by Wiley. Vol. 59, Issue 4, pp. 451-8 (2001).
11. Chatterjee, S., Laloraya, M., Kumar, G.P, "Sperm disposal system in spermatic granuloma: A link with superoxide radicals ", Int. J. Androl, published by European Academy of Andrology, Wiley. Vol. 24, Issue 5, pp. 278-283 (2001).
12. Chatterjee, S., Gagnon, G, "Cryopreservation alters membrane sulfhydryl status of bull spermatozoa: Protection by oxidized glutathione ", Mol. Reprod. Dev, published by Wiley InterScience. Vol. 60, Issue 4, pp. 498-506 (2001).
13. Hendrickson H, Chatterjee S, Cao M, Morales Ruiz M, Sessa WC, Shah V, "Influence of caveolin on a constitutively activated form of recombinant eNOS: Insights into eNOS dysfunction in the bile duct ligated liver ", Am J Physiol Gastrointest Liver Physiol, published by American Physiological Society. Vol. 285, Issue 3, pp. 652-60 (2003).
14. Chatterjee S, Cao, S. and Shah, V J, " Inhibition of GTP-dependent vesicle trafficking impairs internalization of plasmalemmal eNOS and cellular nitric oxide production", J Cell Sci, published by The company of Biologists. Vol. 116, Issue 17, pp. 3645-55 (2003).
15. Gulati R, Jevremovic D, Peterson TE, Chatterjee S, Shah V, Vile RG, Simari RD, "76. Functional heterogeneity of cells with an endothelial phenotype obtained from adult human blood ", Cir Res , published by American Heart Association. Vol. 93, Issue 11, pp. 1023-25 (2004).
16. Lim I, Stregge PR, Gibbons SJ, Lyford GL, Miller SM, Sarr MG, Chatterjee S, Shah V, Farrugia G, "Carbon monoxide activates human intestinal smooth muscle L-type Ca⁺⁺ channels through a nitric oxide dependent mechanism ", Am J. Physiol, published by American Physiological Society. Vol. 288, Issue 1, pp. G7-14 (2004).

17. Lee J.S., Decker NK, Chatterjee S, Yao J, Friedman S, Shah V, "Mechanisms of nitric oxide interplay with Rho GTPase family members in modulation of actin membrane dynamics in pericytes and fibroblasts ", *Am J. Pathol*, published by American Association of Pathologists. Vol. 166, Issue 6, pp. 1861-70 (2005).
18. Tamilarasan KP, Kolluru GP, Rajaram M, Indhumathy M, Saranya R, Chatterjee S, " Thalidomide attenuates nitric oxide mediated angiogenesis by blocking migration of endothelial cells ", *BMC Cell Biol*, published by Springer. Vol. 4, Issue 7, pp. 17 (2006).
19. Kolluru GK, Tamilarasan KP, Geeetha Priya S, Durgha NP, Chatterjee S, "Cadmium induced endothelial dysfunctions: Consequence of defective migratory pattern of endothelial cells in association with poor nitric oxide availability under cadmium challenge", *Cell Biol. Int.*, published by Wiley. Vol. 30, Issue 5, pp. 427-38 (2006).
20. Perri R, Langer DA, Chatterjee S, Gibbons SJ, Gadgil J, Farrugia G, Shah V, "Defects in cGMP-PKG pathway contribute to impaired NO dependent relaxation in activated hepatic stellate cells ", *Am J Physiol Gastrointest Liver Physiol*, published by American Physiological Society. Vol. 290, Issue 3, pp. 535-42 (2006).
21. Iwakiri Y, Satoh A, Chatterjee S, Toomre DK, Chalouni CM, Fulton D, Groszmann RJ, Shah VH, Sessa WC, "Nitric oxide synthase generates nitric oxide locally to regulate compartmentalized protein S-nitrosylation and protein trafficking ", *Proc Natl Acad Sci U S A*, published by United States National Academy of Sciences . Vol. 103, Issue 52, pp. 19777-82 (2006).
22. Billadeau DD, Chatterjee S, Bramati P, Sreekumar R, Shah V, Hedin K and Urrutia R, " Characterization of the CXCR4 Signaling in Pancreatic Cancer Cells ", *Int J Gastrointest Canc* , published by Springer. Vol. 37, Issue 4, pp. 110-9 (2007).
23. Kang-Decker N, Cao S, Chatterjee S, Yao J, Egan LJ, Semela D, Mukhopadhyay D, Shah V, "Nitric oxide promotes endothelial cell survival signaling through S-nitrosylation and activation of dynamin-2 ", *J Cell Sci* , published by The company of Biologists. Vol. 120, pp. 492-501 (2007).
24. Majumder S, Tamilarasan KP, Kolluru GK, Muley A, Nair C M, Omanakuttan A, Murty KVGK and Chatterjee S, "Activated pericyte attenuates endothelial functions: Nitric oxide cGMP rescues activated pericyte associated endothelial dysfunctions ", *Biochem Cell Biol*, published by NRC Research Press. Vol. 85, Issue 6, pp. 709-20 (2007).
25. Majumder S, Muley A, Kolluru GK, Saurabh S, Tamilarasan KP, Chandrasekhar S, Reddy H, Purohit SB, Chatterjee S, " Cadmium reduces nitric oxide production by impairing phosphorylation of endothelial nitric oxide synthase ", *Biochem Cell Biol*, published by NRC Research Press. Vol. 86, Issue 1, pp. 1-10 (2008).
26. Kolluru GK, Tamilarasan KP, Rajkumar AS, Geetha Priya S, Rajaram M, Saleem NK, Majumder S, Jaffar Ali BM, Illavazagan G, Chatterjee S, "Nitric oxide-cGMP shields the endothelial cells from hypoxia-mediated leakiness ", *Eur. J. Cell Biol*, published by Elsevier. Vol. 87, pp. 147-61 (2008).

27. Majumder S, Rajaram M, Muley A, Himabindu Reddy S, Tamilarasan KP, Kolluru GK, Sinha S, Siamwala JH, Gupta R, Ilavarasan R, Venkataraman S, Sivakumar KC, Anishetty S, Pradeep Kumar G, Chatterjee S, "Thalidomide attenuates nitric oxide driven angiogenesis by interacting with soluble guanylate cyclase ", *Br J Pharmacol*, published by Wiley. Vol. 158, Issue 7, pp. 1720-1734 (2009).
28. Majumder S, Chatterjee S, Lee JO and Muralidhar K, "Antiangiogenic Activity of Buffalo Growth Hormone ", *Science and Culture*, published by Springer. Vol. 76, Issue 36, pp. 341 (2009).
29.) Majumder S, Gupta R, Himabindu Reddy S., Sinha S, Muley A, Kolluru GK, Chatterjee S, "Cadmium attenuates bradykinin driven nitric oxide production by interplaying with the localization pattern of endothelial nitric oxide synthase ", *Biochem Cell Biol*, published by NRC Research Press. Vol. 87, Issue 4, pp. 605-20 (2009).
30. Arora S, Tyagi YK, Kumar A, Majumder S, Saluja D, Raj HG, Chatterjee S, Saso L, Prasad AK, Singh PV, "The Role of Calreticulin Transacetylase in the Activation of Human Platelet Nitrite Reductase by Polyphenolic Acetates ", *Biological and Pharmaceutical Bulletin*, published by Nihon Yakugakkai, Pharmaceutical Society of Japan. Vol. 32, Issue 2, pp. 161-5 (2009).
31. Barh D, Kumar A, Chatterjee S, Liloglou T., "Molecular features, markers, drug targets, and prospective targeted therapeutics in cardiac myxoma", *Curr Cancer Drug Targets*, published by Bentham Science Publishers. Vol. 9, Issue 6, pp. 705-16 (2009).
32. Chandrasekaran K, Swaminathan K, Chatterjee S, Dey A., "Apoptosis in HepG2 cells exposed to high glucose", *Toxicol In Vitro*, published by ELSEVIER. Vol. 24, Issue 2, pp. 387-96 (2010).
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34. Jetti SK, Swain SM, Majumder S, Chatterjee S, Poornima V, Bera AK, "Evaluation of the role of nitric oxide in acid sensing ion channel mediated cell death", *Nitric Oxide*, published by ELSEVIER. Vol. 22, Issue 3, pp. 213-9 (2010).
35. Kumari R, Bansal S, Gupta G, Arora S, Kumar A, Goel S, Singh P, Ponnann P, Priya N, Tyagi TK, Baghel AS, Manral S, Tandon R, Joshi R, Rohil V, Gaspari M, Kohli E, Tyagi YK, Dwarakanath BS, Saluja D, Ch, "Calreticulin transacetylase: genesis, mechanism of action and biological applications", *Biochimie*, published by ELSEVIER. Vol. 92, Issue 9, pp. 1173-9 (2010).
36. Arun S. Rajkumar; Ajit Muley; Suvro Chatterjee; B. M. Jaffar Ali, " Probing the effect of elevated cholesterol on the mechanical properties of membrane-cytoskeleton by optical tweezers", *Proceedings of SPIE*, Vol. 7762, (2010).
37. Syamantak Majumder, M. Ilayaraja, Himabindu Reddy Seerapu, Swaraj Sinha, Jamila H. Siamwala, and Suvro Chatterjee, " Chick Embryo Partial Ischemia Model: A New Approach to Study Ischemia Ex Vivo", *PLoS ONE*, published by Public Library of Science. Vol. 5, Issue 5, pp. e10524 (2010).

38. Jamila H. Siamwala S. Himabindu Reddy Syamantak Majumder Gopi Krishna Kolluru Ajit Muley Swaraj Sinha Suvro Chatterjee, "Simulated microgravity perturbs actin polymerization to promote nitric oxide-associated migration in human immortalized Eahy926 cells", *Protoplasma*, published by SPRINGER. Vol. 242, Issue 1, pp. 3-12 (2010).
39. Siamwala JH, Majumder S, Tamilarasan KP, Muley A, Reddy SH, Kolluru GK, Sinha S, Chatterjee S, "Simulated microgravity promotes nitric oxide-supported angiogenesis via the iNOS-cGMP-PKG pathway in macrovascular endothelial cells", *FEBS Lett*, published by ELSEVIER. Vol. 584, Issue 15, pp. 3415-23 (2010).
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41. Kolluru GK, Siamwala JH, Chatterjee S, "eNOS phosphorylation in health and disease", *Biochimie*, published by ELSEVIER. Vol. 92, Issue 9, pp. 1186-98 (2010).
42. Kolluru GK, Sinha S, Majumder S, Muley A, Siamwala JH, Gupta R, Chatterjee S, "Shear stress promotes nitric oxide production in endothelial cells by sub-cellular delocalization of eNOS: A basis for shear stress mediated angiogenesis", *Nitric Oxide*, published by ELSEVIER. Vol. 22, Issue 4, pp. 304-15 (2010).
43. Sinha S, Sridhara SR, Srinivasan S, Muley A, Majumder S, Kuppusamy M, Gupta R, Chatterjee S, "NO (nitric oxide): the ring master.", *Eur J Cell Biol*, published by ELSEVIER. Vol. 90, Issue 1, pp. 58-71 (2011).
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45. Majumder S, Siamwala JH, Srinivasan S, Sinha S, Sridhara SR, Soundararajan G, Seerapu HR, Chatterjee S., "Simulated microgravity promoted differentiation of bipotential murine oval liver stem cells by modulating BMP4/Notch1 signaling", *J Cell Biochem*, published by Wiley-Liss (United States). Vol. 112, Issue 7, pp. 1898-908 (2011).
46. Chandrasekaran K, Swaminathan K, Kumar SM, Chatterjee S, Clemens DL, Dey A., "Elevated glutathione level does not protect against chronic alcohol mediated apoptosis in recombinant human hepatoma cell line VL-17A over-expressing alcohol metabolizing enzymes--alcohol dehydrogenas", *Toxicol In Vitro*, published by ELSEVIER. Vol. 25, Issue 4, pp. 969-78 (2011).
47. Swaminathan A1, Sridhara SR, Sinha S, Nagarajan S, Balaguru UM, Siamwala JH, Rajendran S, Saran U, Chatterjee S, "Nitrites derived from *Foeniculum vulgare* (fennel) seeds promotes vascular functions.", *J Food Sci*, published by Institute of Food Technologists. Vol. 77, Issue 12, pp. H273-H279 (2012).
48. Jamila H. Siamwala, Vimal Veeriah, M. Krishna Priya, Saranya Rajendran, Uttara Saran, Swaraj Sinha, Shunmugam Nagarajan, Pradeep T & Suvro Chatterjee, " Nitric oxide rescues thalidomide mediated teratogenicity", *Scientific Reports*, published by Nature Publishing Group. Vol. 2, pp. 679 (2012).

49. G. Sailakshmi , Tapas Mitra , Swaraj Sinha , Suvro Chatterjee , A. Gnanamani & A. B. Mandal, "Suberic Acid Acts as a Dissolving Agent as Well as a Crosslinker for Natural Polymers (Carbohydrate and Protein): A Detailed Discussion on the Chemistry Behind the Interaction", *Journal of Macromolecular Science*, published by Taylor and Francis Online. Vol. 49, Issue 8, pp. 619-629 (2012).
50. Barui AK, Veeriah V, Mukherjee S, Manna J, Patel AK, Patra S, Pal K, Murali S, Rana RK, Chatterjee S, Patra CR., " Zinc oxide nanoflowers make new blood vessels.", *Nanoscale*, published by Royal Society of Chemistry. Vol. 4, Issue 24, pp. 7861-9 (2012).
51. Majumder S, Sreedhara SR, Banerjee S, Chatterjee S., "TNF- α ; signaling beholds thalidomide saga: a review of mechanistic role of TNF- α ; signaling under thalidomide.", *Curr Top Med Chem*, published by Bentham Science Publishers. Vol. 12, Issue 13, pp. 1456-1467 (2012).
52. Majumder S, Siamwala JH, Srinivasan S, Sinha S, Sridhara SR, Soundararajan G, Seerapu HR, Chatterjee S., "Simulated microgravity promoted differentiation of bipotential murine oval liver stem cells by modulating BMP4/Notch1 signaling", *J Cell Biochem*, published by Wiley-Liss (United States). Vol. 112, Issue 7, pp. 1898-908 (2012).
53. Ivanka Dimova, Ruslan Hlushchuk, Andrew Makanya, Beata Styp-Rekowska, Amalia Ceausu, Stefanie Flueckiger, Sonja Lang, David Semela, Ferdinand Le Noble, Suvro Chatterjee, Valentin Djonov. Email author, " Inhibition of Notch signaling induces extensive intussusceptive neo-angiogenesis by recruitment of mononuclear cells", *Angiogenesis*, published by SPRINGER. Vol. 16, Issue 4, pp. 921-937 (2013).
54. Syamantak Majumdera, Anne-Christine Piguetb, Jean-François Dufourb, Suvro Chatterjee, "Study of the cellular mechanism of Sunitinib mediated inactivation of activated hepatic stellate cells and its implications in angiogenesis", *European Journal of Pharmacology*, published by ELSEVIER. Vol. 705, Issue 1, pp. 86-95 (2013).
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56. Palanivel Gajalakshmi, Mani Krishna Priya, Thangaraj Pradeep, Jyotirmaya Behera, Kandasamy Muthumani¹, Srinivasan Madhuwanti², Uttara Saran, Suvro Chatterjee, "Breast cancer drugs dampen vascular functions by interfering with nitric oxide signaling in endothelium", *Toxicology and Applied Pharmacology*, published by ELSEVIER. Vol. 269, Issue 2, pp. 121-131 (2013).
57. Siamwala JH¹, Dias PM, Majumder S, Joshi MK, Sinkar VP, Banerjee G, Chatterjee S, "L-theanine promotes nitric oxide production in endothelial cells through eNOS phosphorylation.", *J Nutr Biochem*, published by ELSEVIER. Vol. 24, Issue 3, pp. 595-605 (2013).
58. Mukherjee AK, Chatterjee S, Majumder S, Saikia D, Thakur R, Chatterjee A, "Characterization of a pro-angiogenic, novel peptide from Russell's viper (*Daboia russelii russelii*) venom", *Toxicon*, published by Elsevier B.V.. Vol. 77, pp. 26-31 (2013).

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63. G. Sailakshmi, Tapas Mitra, Suvro Chatterjee, A. Gnanamani, "Engineering Chitosan Using α -Dicarboxylic Acids—An Approach to Improve the Mechanical Strength and Thermal Stability", *Journal of Biomaterials and Nanobiotechnology*, published by Scientific Research. Vol. 4, Issue 2, pp. 151-164 (2013).
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65. Saran U, Piperni SG, Chatterjee S, "Role of angiogenesis in bone repair", *Arch Biochem Biophys*, published by Elsevier B.V.. Vol. 1, Issue 561, pp. 109-117 (2014).
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96. "MicroRNAs: Impaired vasculogenesis in metal induced teratogenicity", Reprod Toxicol, (2017).
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98. "sFRP4 signalling of apoptosis and angiostasis uses nitric oxide-cGMP-permeability axis of endothelium ", Nitric Oxide, (2017).
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107. Swaminathan A, Kasiviswanathan D, Balaguru UM, Kolluru GK, SuryaKumar G, Chatterjee S, " Hypoxia perturbs endothelium by re-organizing cellular actin architecture: Nitric oxide offers limited protection", *Tissue and Cell*, (2018).
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112. Akila Swaminathan, Uma Maheswari Balaguru, Reji Manjunathan, Srinivasan Bhuvanewari, Dharanibalan Kasiviswanathan, Bandi Sirishakalyani, Prasunpriya Nayak, Suvro Chatterjee, "Live imaging and analysis of vasoactive properties of drugs using an in-ovo chicken embryo model: Replacing and reducing animal testing", *Microscopy and Microanalysis*, pp. In press (2019).
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123. Jyotirmaya Behera, Shunmugam Nagarajan, Uttara Saran, Ravi Kumar, Gaurav Kumar Keshri, Geetha Suryakumar, Suvro Chatterjee, "Nitric oxide restores peripheral blood mononuclear cell adhesion against hypoxia via NO-cGMP signaling", Cell Biochemistry & Function, published by Wiley. (2020).
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125. Akila Swaminathan, Srinithi Ranganathan, Srinivasan Bhuvanewari, Sivasri Skandaprasad1, Suvro Chatterjee., " Study of coupling avian in-ovo perfusion system with ex-vivo caprine liver", *Tissue and Cell*, (2020).
126. Rajendran S, Sundaresan L, Venkatachalam G, Rajendran K, Behera J, Chatterjee S., "Temporal dynamics of nitric oxide wave in early vasculogenesis", *Vascular Medicine*, pp. In press (2021).
127. Swaminathan A, Kalyani KB, Sudhagar SK, Bhuvanewari S, Nagalatha ST, Raj TLS, Sumantran VN, Chatterjee S., "Nitric oxide mitigates thalidomide-induced abnormalities during germination and development of fennel seeds.", *Toxicological Research* , Vol. 10, Issue 4, pp. 893-901 (2021).
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129. Pavitra Kumar, Shuang Zhang, Marijke Koedam, Jeroen Demmers, Suvro Chatterjee, Johannes P. van Leeuwen, and Bram C. van der Eerden, "Inhibition of hypoxia-induced Mucin 1 alters proteomic composition of humanosteoblast-produced extracellular matrix, leading to reduced osteogenic andangiogenic potential", *Journal of Cellular Physiology*, published by Wiley. pp. In press (2021).

Research Papers Published in National Journals 0

Papers Presented in Programmes

Research Papers Presented in International Programmes 28
 Research Papers Presented in National Programmes 3

1. "Actin-dynamin-eNOS: The trio programs the permeability of endothelium under hypoxia" presented in a International level conference on 1st Congress of Asia Pacific Mountain Sickness Society, organised by Defence Institute of Physiology and Allied Sciences, New Delhi, India, INDIA .
2. "Nitric Oxide reverts Hypoxia-induced hyper-permeability of endothelial cells: Dissection of Nitric Oxide down stream signaling" presented in a National level conference on National Conference of Association of Physiologists and Pharmacologists of India , organised by Association of Physiologists and Pharmacologists of India , INDIA .
3. "A Cellular basis of Nitric Oxide Implications in High Altitude induced Pulmonary Edema" presented in a National level conference on V Annual conference of Society for Free Radical Research in India, organised by Society for Free Radical Research in India, INDIA from 17-Jan-2006 to 19-Jan-2006.
4. "No slip on the slope with NO: Beneficial interactions between endothelial cells and nitric oxide under low oxygen environment" presented in a National level conference on Fourth congress FIPS, organised by Federation of Indian Physiological Societies (FIPS), New Delhi , INDIA from 10-Jan-2007 to 13-Jan-2007.

5. ". Defining vascular pattern with shear stress under ischemia: A nitric oxide saga" presented in a International level seminar on Winter Symposia CMC , organised by CMC, Vellore, INDIA from 10-Jan-2008 to 12-Jan-2008.
6. ". In vitro assessment of bioactivity of crude extracts & compound formulae in Ayurveda" presented in a International level seminar on Satellite Workshop on S & T to Support Traditional Pharmaceuticals , organised by Foundation for Revitalisation of Local Health Traditions (FRLHT), Bangalore , INDIA from 28-May-2008.
7. "Thalidomide interferes with the activity of soluble guanylate cyclase to attenuate nitric oxide driven angiogenesis" presented in a International level seminar on Nitric Oxide Symposium, organised by Patel Chest Institute, Delhi, INDIA from 12-Jan-2009.
8. "Simulated space promotes blood vessel formation" presented in a International level seminar on National Symposium on molecular cell biology, organised by University of Delhi, INDIA from 24-Nov-2009 to 25-Nov-2009.
9. "Inhibition of dynamic-2 induces endothelial leakiness by attenuating nitric oxide production" presented in a International level workshop on 6th INDO-ITALIAN workshop on chemistry and biology of antioxidants Department of Chemistry, organised by University of Delhi, INDIA from 10-Dec-2009 to 11-Dec-2009.
10. "The Nitric oxide-sGC-cGMP Pathway Rolls our Angiogenesis templates in endothelium" presented in a International level workshop on INDO-US Bilateral Workshop on Redox Signaling in Degenerative Diseases, organised by National Brain Research Centre, Gurgaon, INDIA from 19-Dec-2009 to 21-Dec-2009.
11. "The temporal pattern of Nitric oxide release defines Angiogenesis" presented in a International level conference on International conference of Society for Free Radical Research in India, organised by Society for Free Radical Research in India, INDIA from 11-Jan-2010 to 13-Jan-2010.
12. "Hypoxia dampen nitric oxide signaling in vascular bed: Exogenous nitric oxide reverses the barrier dysfunctions in the vessels" presented in a International level workshop on The Indo-Italian Workshop on Chemistry and Biology of Antioxidants, organised by University of Delhi, INDIA from 16-Nov-2010.
13. Himabindu Reddy and Chatterjee S, ". The best fit nitric oxide dynamics warrants optimal angiogenesis: In search of an appropriate nitric oxide donor to aid post-ischemia recovery" presented in a International level seminar on National Symposium on Translational Research in New Drug Development, organised by Vallabhbhai Patel Chest Institute, University of Delhi, Delhi, INDIA from 12-Jan-2011 to 13-Jan-2011.
14. "Endothelial ring structure as a monomer of angiogenesis: The nitric oxide link" presented in a International level conference on Gordon Conference Angiogenesis, organised by GRC, USA from 21-Aug-2011 to 26-Aug-2011.
15. "The Space Odyssey of Heart: Pharmacological Protection for the Heart in Space" presented in a International level conference on 57th Annual Conference of Association of. Physiologists and Pharmacologists. , organised by AIIMS, New Delhi, INDIA from 13-Dec-2011 to 17-Dec-2011.

16. "Nitrite content of fennel seeds contributes functional nitric oxide to vasculature. " presented in a International level conference on 10th annual meetings of SFRR-India, organised by Society for Free Radical Research, INDIA from 12-Jan-2012 to 14-Jan-2012.
17. ". Dual role of Rho Kinase Inhibitor Y 27632 in endothelium under shear stress" presented in a International level conference on Cardiovascular Research Convergence, organised by AIIMS, New Delhi, INDIA from 17-Feb-2012 to 18-Feb-2012.
18. "Hypoxia driven formatting and re-formatting of endothelium" presented in a International level conference on International Conference on Chronic hypoxia, organised by DRDO, New Delhi, INDIA from 09-Aug-2012 to 12-Aug-2012.
19. "Nitric Oxide and early vasculogenesis" presented in a International level conference on 5th Mayo Clinic Angiogenesis Symposium Angiogenesis and Tumor Micro-environment: Basic Science to Clinical Practice, organised by Mayo Clinic, USA from 17-Aug-2012 to 19-Aug-2012.
20. "Architecture of Red Blood Cells defines RBC Nitric Oxide production" presented in a International level conference on 100th Session of the Indian Science Congress Association, organised by Science congress, INDIA from 03-Jan-2013 to 07-Jan-2013.
21. on EU- PEOPLE MARIE CURIE ACTIONS, organised by INTERBONE , Portugal from 22-May-2013 to 23-May-2013.
22. "Breast cancer drugs misfire endothelium: Nitric oxide is the compensator." presented in a International level seminar on Cancer Biology symposium, organised by University of L'Aquila, L'Aquila, Italy from 23-May-2013 to 24-May-2013.
23. "Temporal dynamics of NO wave in early vasculogenesis" presented in a International level conference on 2nd International Conference on Angiogenesis, organised by Kalinga Institute Of Industrial Technology University, Orissa, INDIA from 02-Feb-2014 to 04-Feb-2014.
24. "Nitric oxide based protection against teratogenecity" presented in a International level seminar on An emerging concept. Legacy of Nitric Oxide Discovery: Impact on Disease Biology, organised by Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram, INDIA from 05-Nov-2014 to 06-Nov-2014.
25. "Guiding the direction of nascent blood vessels: How nitric oxide does it" presented in a International level conference on 3rd INTERNATIONAL CONFERENCE IN ANGIOGENESIS: TECHNOLOGY & THERAPEUTICS, organised by Sastra University, INDIA from 23-Sep-2015 to 25-Sep-2015.
26. "Interfered vasculogenesis to defective organogenesis: Transcriptomic analysis explains the teratogenic virtues of thalidomide" presented in a International level conference on International Conference on Molecular Signalling: Recent Trends in Biosciences, organised by North-Eastern University, Shillong, INDIA from 20-Nov-2015 to 22-Nov-2015.
27. "NO Birth Defects" presented in a International level workshop on Research Methodology Workshop, organised by Centre for Medical Genetics, India from 20-Aug-2016 to 21-Oct-2017.

28. "An Omics approach to understand pro-vascular signalling under low gravity" presented in a International level conference on 5th International Conference on Molecular Signaling (ICMS), organised by AU-KBC Research centre, MIT, India from 10-Jan-2017 to 12-Jan-2017.
29. "Techniques for studying cardiovascular physiology and pathophysiology in animal models" presented in a International level workshop on National Workshop on Cardiovascular Physiology"(CVP-2017), organised by Annamalai Univeristy, India from 17-Mar-2017 to 18-Mar-2017.
30. " Simulation of disturbed blood flow around plaques: How endothelium reacts" presented in a International level conference on 4th International Conference on Angiogenesis, organised by Suroj Gupta Cancer centre and Research institute, India from 21-Sep-2017.
31. "Profiling the patterns of miRNAs and transcriptome of human vasculature under micro-gravity: A template study using space science for solving health problems on the Earth" presented in a International level conference on 2017 NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT) Conference, organised by SciGenom Research Foundation (SGRF), India from 02-Oct-2017 to 04-Oct-2017.

Books Published

1. "The Textbook of Angiogenesis and Lymphangiogenesis: Methods and Applications" authored by Syamantak Majumder, Syamantak Majumder and Suvro Chatterjee and published by Springer Science & Business Media.(2012)
2. "Actin: Structure, Functions and Disease" authored by Swaraj Sinha, Swaraj Sinha and Suvro Chatterjee and published by Nova Science Publishers.(2012)
3. "Translational Research in New Drug Development" authored by Sree Rama Chaitanya Sridhara, Sree Rama Chaitanya Sridhara and Suvro Chatterjee and published by Vidyanilayam Publications, Delhi.(2012)
4. "Stem Cell Therapy for Organ Failure" authored by Majumder S, Majumder S and Chatterjee S and published by Somasundaram, Indumathi (Ed.) .(2014)
5. "Bone Morphogenic Protein" authored by Jamila Siamwala, Jamila Siamwala and Suvro Chatterjee and published by Elsevier Science Ltd.(2015)
6. "Advances in Biochemistry in Health and Disease" authored by Vimalraj S, Vimalraj S and Chatterjee S and published by Springer.(2017)

Current Sponsored Projects

1. "Nitric oxide in hepatocellular carcinoma: mechanisms and therapeutic implications", funded by Department of Science and Technology (February-2015 - February-2018). Project Cost: 40.00.
2. "Studying vascular implications of scorpion venom by using whole human kinome testing platform", funded by Department of Science and Technology (March-2017 - February-2020). Project Cost: 47.00.

3. "Studying the first leading cell of angiogenesis using eNOS GFP transgenic Zebrafish", funded by Department of Science and Technology (March-2017 - February-2020). Project Cost: 66.00.

Sponsored Projects Completed

1. "Development and validation of a Cell-tissue co-culture model for aiding liver specific studies and drug discovery applications", funded by Department of Biotechnology (October-2012 - September-2015). Project Cost: 24.00.
2. "Application of microgravity assisted endothelial tubes in wound healings", funded by Department of Biotechnology (August-2012 - August-2015). Project Cost: 32.00.
3. "The interplay among bone cells, matrices and systems", funded by EU (INTERBONE) FP7-PEOPLE (July-2012 - June-2015). Project Cost: 47.00.
4. "Development of chick embryo model for ischemia diseases", funded by Indian Council of Medical Research (March-2011 - February-2014). Project Cost: 24.00.
5. "Study of Nitric Oxide implications in cardiovascular dysfunctions under microgravity", funded by Indian Space Research Organisation (February-2011 - August-2012). Project Cost: 12.00.
6. "Targeting organosulphur as a drug for high altitude induced pulmonary edema", funded by Life Sciences Research Board, DRDO (October-2010 - September-2013). Project Cost: 24.00.
7. "Mechanistic analysis of cadmium-induced cardiovascular diseases", funded by Indian Council of Medical Research (August-2010 - July-2013). Project Cost: 29.00.
8. "Dissecting signaling mechanism of sFRP4 mediated inhibition of angiogenesis", funded by Department of Biotechnology (August-2010 - July-2013). Project Cost: 38.00.
9. "Study on microgravity induced signaling mechanisms of angiogenesis", funded by Council of Scientific and Industrial Research (March-2010 - February-2013). Project Cost: 18.00.
10. "Proteome study of the cadmium perturbations in nitric oxide signaling", funded by Board of Research in Nuclear Sciences, DAE (May-2009 - April-2012). Project Cost: 22.00.
11. "Dissecting nitric oxide signaling pathways of hypoxia induced tissue remodeling in lungs", funded by Life Sciences Research Board, DRDO (April-2009 - March-2012). Project Cost: 21.00.
12. "Use of nitric oxide in reversing pathologic fibrogenesis in liver: A cell biology approach to cure liver cirrhosis", funded by The Academy of Sciences for the Developing World TWAS (March-2009 - February-2010). Project Cost: 3.00.
13. "Studying the effects of mTOR inhibitor and Sunitinib on Hepatic Stellate Cells", funded by Department of Science and Technology (February-2008 - January-2011). Project Cost: 18.00.
14. "Testing the potential of organosulfurs as drug to protect lungs from high altitude induced pulmonary edema using cell and animal tissue models", funded by Defence Research and Development Organisation (May-2007 - April-2008). Project Cost: 8.00.

15. "Implication of shear stress- mediated production of nitric oxide in the migration of endothelial cells", funded by Council of Scientific and Industrial Research (September-2006 - August-2009). Project Cost: 17.00.
16. "Dissecting the molecular mechanism of endothelial nitric oxide synthase translocation", funded by Department of Science and Technology (February-2006 - January-2009). Project Cost: 21.00.

Programme Chaired

1. Chairman, International level conference titled "2nd International Conference on Angiogenesis" conducted by Kalinga Institute of Industrial Technology University from 02-Feb-2014 to 04-Feb-2014.
2. Chairman, International level conference titled "India - UK Angiogenesis Meeting" conducted by Aston University from 09-Dec-2014 to 13-Dec-2014.
3. Chairman, International level conference titled "3rd International Conference in Angiogenesis" conducted by Sastra University from 23-Sep-2015 to 25-Sep-2015.

Programme Organized

1. Convener, International level conference on "1st International Conference on Angiogenesis" from 01-Mar-2012 to 03-Mar-2012.
2. Convener, International level workshop on "International Workshop on Wound Healing and Angiogenesis" from 14-Dec-2013 to 15-Dec-2013.
3. Convener, International level conference on "5 th International Conference on Molecular Signaling: Basics to Applications" from 10-Jan-2017 to 12-Oct-2017.

Special Repräsentations

1. Visiting Scientist in University of Bern, Switzerland from 02-Apr-2012 to 30-Jun-2012.
2. Visiting Scientist in National Institute of Health, Maryland, USA from 02-Mar-2009 to 31-Mar-2009.
3. Visiting Scientist in University of Bern, Switzerland from 01-Nov-2006 to 30-Nov-2006.
4. Visiting Scientist in University of Western Australia from 01-May-2006 to 31-May-2006.
5. Lecturer in Srimati Subha Mukherjee Memorial Oration Lecture, PHYSIOCON,

Honours

1. "Wood Whelan Fellow" given by International Union of Biochemistry and Molecular Biology (1997).

2. "MCBN - UNESCO Research Fellow" given by United Nations Educational, Scientific and Cultural Organization (1998).
3. "Dr. Alan B. Hawthorne Award" given by McGill University from Canada (2000).
4. "Mayo Foundation Fellow Award" given by Mayo Clinic from USA (2001).
5. "UGC Associate Professor" given by University Grants Commission from India (2012).
6. "INSA International Fellow Award" given by Indian National Science Academy from India (2014).
7. "International Short Visit Award" given by Swiss National Science Foundation from Switzerland (2014).
8. "Fulbright-Nehru Academic and Professional Excellence Fellowship (FNFPE)" given by United States-India Educational Foundation from USA (2018).

Patents

1. Having a patent for "Anti-angiogenic agents and methods of their use" awarded by International. Patent number:0 (11-Apr-2007).
2. Having a patent for "N- substituted phthalimide derivatives as potential angiogenesis inhibitors" awarded by India. Patent number:51 (05-Aug-2011).
3. Having a patent for "Interplanetary Travel G Simulator (IPTGS)" awarded by India. Patent number:591 (03-Mar-2015).

Experience Abroad

1. Visited Sanghai Institute of Cell Biology, China from 15-Apr-1997 to 30-Apr-1997. Purpose of visit :Training in Electrophysiology Technique.
2. Visited Hyogo College of Medicine, Japan from 01-Oct-1997 to 02-Nov-1997. Purpose of visit :Research.
3. Visited Royal Victoria Hospital, McGill University, Canada from 17-Feb-1998 to 31-Mar-2001. Purpose of visit :Research.
4. Visited Max Plank Institute of Biophysics, Germany from 01-Nov-1998 to 01-Dec-1998. Purpose of visit :Research.
5. Visited Mayo Clinic, Rochester, India from 01-Apr-2001 to 30-Apr-2004. Purpose of visit :Research.
6. Visited University of Western Australia, Australia from 01-May-2006 to 31-May-2006. Purpose of visit :Research visit.
7. Visited University of Bern, Switzerland from 01-Nov-2006 to 30-Nov-2006. Purpose of visit :Research Visit.

8. Visited National Institute of Health (NIH), Bethesda, USA from 01-Mar-2009 to 31-Mar-2009. Purpose of visit :Research.
9. Visited Anatomy Institute, University of Bern, Switzerland from 30-Mar-2012 to 02-Jun-2012. Purpose of visit :Research.
10. Visited University of Bern, Switzerland from 15-Jul-2014 to 16-Aug-2014. Purpose of visit :Research.
11. Visited University of Aberdeen, Scotland from 10-Oct-2014 to 10-Nov-2014. Purpose of visit :Research.
12. Visited Louisiana State University Shreveport , USA from 01-Aug-2018 to 31-Dec-2018. Purpose of visit :Fulbright Professional Excellence Award.

Invited Lectures

1. Delivered a Lecture on "Cross-talk between endothelial and stellate cells in Cirrhotic liver: role of Nitric Oxide" organized by RGCB, Trivandrum, India (21-Jan-2006).
2. Delivered a Lecture on "Nitric Oxide mediated angiogenesis ensuing on Thalidomide treatment: Discussion of Nitric oxide downstream signaling in endot" organized by Department of Clinical research, University of Ber, Switzerland (17-Nov-2006).
3. Delivered a Lecture on "Mechanistic study of thalidomide implications in the inhibition of angiogenesis " organized by Institute of Himalayan Bioresource Technology (IHB, India (04-Aug-2008).
4. Delivered a Lecture on "A cross talk between thalidomide and soluble guanylate cyclase leads to the inhibition of angiogenesis" organized by National Institute of Health (NIH), Maryland (21-Apr-2009).
5. Delivered a Lecture on "role of nitric oxide in defining the fate-map of embryo." in IIT Madras BIOMER organized by IIT Madras, Chennai, INDIA (16-Nov-2013).
6. Delivered a Lecture on "Nitric oxide signaling in early vasculogenesis and development" in Dr. C.V.Pichappa Endowment Lecture organized by Madras university , Chennai (25-Mar-2014).
7. Delivered a Lecture on "Vascular Biology: Basic and Transnational Research. 16th Refresher Course in Life Sciences " (18-Dec-2015).
8. Delivered a Lecture on "Growing Blood Vessels (Angiogenesis) in Space: How and Why?" in Dr.J.N. Mukherjee Memorial Prize Distribution Ceremony organized by City College , Kolkata (17-Dec-2016).
9. Delivered a Lecture on "Nitric Oxide and functional definition of Endothelium under flow conditions" in Symposium organized by Sri Balaji Hospital, Chennai (23-Feb-2017).
10. Delivered a Lecture on "Vascular effects of Indian spice: The nitrite reserve Oxidative Stress in health and Diseases" in Symposium organized by Kalyani University, Kalyani (30-Mar-2017).