

- 1) Suma PR, Padmanabhan RA, Telukutla SR, Ravindran R, Velikkakath AKG, Dekiwadia CD, Paul W, Laloraya M, Srinivasula SM, Bhosale SV, Jayasree RS. [Vanadium pentoxide nanoparticle mediated perturbations in cellular redox balance and the paradigm of autophagy to apoptosis.](#) Free Radic Biol Med. 2020 Oct 13;161:198-211. doi: 10.1016/j.freeradbiomed.2020.10.008. Online ahead of print. PMID: 33065180(IF- 6.17)
- 2) Joseph A, Nair LCR, Johnson BS, Thomas PL, Padmanabhan RA, Puthumadathil N, **Laloraya M.** [Transcriptional Regulation of Nos2 via STAT5B Binding to Nos2 Gene Promoter Mediates Nitric Oxide Production: Relevance in  \$\beta\$ -Cell Maintenance.](#) Cell Physiol Biochem. 2019;52(1):141-155. doi: 10.33594/00000010. Epub 2019 Feb 18. (IF- 5.500)
- 3) Mohan JJ, Narayan P, Padmanabhan RA, Joseph S, Kumar PG, **Laloraya M.** [Silencing of dedicator of cytokinesis \(DOCK180\) obliterates pregnancy by interfering with decidualization due to blockage of nuclear entry of autoimmune regulator \(AIRE\).](#) Am J Reprod Immunol. 2018 Mar 8. 80(1), 1-14. doi: 10.1111/aji.12844. [Epub ahead of print] (IF- 2.745)
- 4) Krishna MB, Joseph A, Thomas PL, Dsilva B, Pillai SM, **Laloraya M.** [Impaired Arginine Metabolism Coupled to a Defective Redox Conduit Contributes to Low Plasma Nitric Oxide in Polycystic Ovary Syndrome.](#) Cell Physiol Biochem. 2017 Oct 20;43(5):1880-1892. doi: 10.1159/000484107. Epub 2017 Oct 20.
- 5) **Laloraya M** and Padmanabhan AR (2016) Forbearance of the Immune System during Pregnancy: Fetal Parasite Takes an Estrogenic Way! Reproductive Immunol Open Acc 1:21.
- 6) Soumya V, Padmanabhan RA, Titus S, **Laloraya M.** [Murine uterine decidualization is a novel function of autoimmune regulator-beyond immune tolerance.](#) Am J Reprod Immunol. 2016 Sep;76(3):224-34. doi: 10.1111/aji.12538. Epub 2016 Jul 19.
- 7) Padmanabhan RA, **Laloraya M.** [Estrogen-Initiated Protein Interactomes During Embryo Implantation.](#) Am J Reprod Immunol. 2016 Mar;75(3):256-62. doi: 10.1111/aji.12455. Epub 2015 Dec 14.
- 8) Indu S, Sekhar SC, Sengottaiyan J, Kumar A, Pillai SM, **Laloraya M,** Kumar PG. [Aberrant expression of Dynein light chain 1 is associated with human male factor infertility.](#) Mol Cell Proteomics. 2015 Oct 2. pii: mcp.M115.050005. [Epub ahead of print]. PMID: 26432663
- 9) Krishna MB, Joseph A, Subramaniam AG, Gupta A, Pillai SM, **Laloraya M.** [Reduced Tregs in Peripheral Blood of PCOS Patients - a Consequence of Aberrant Il2 Signaling.](#) J Clin Endocrinol Metab. 2015 Jan;100(1):282-92. doi: 10.1210/jc.2014-2401.
- 10) Renjini AP, Titus S, Narayan P, Murali M, Jha RK, **Laloraya M.** STAT3 and Mcl-1 unite to cause mesenchymal epithelial transition Journal of Cell Science J Cell Sci. 2014 Apr 15;127(Pt 8):1738-50. doi: 10.1242/jcs.138214. Epub 2014 Jan 30.
- 11) Maurya VK, Jha RK, Kumar V, Joshi A, Chadchan S, Mohan JJ, **Laloraya M.** [Transforming growth factor-beta 1 \(TGF-B1\) liberation from its latent complex during embryo implantation and its](#)

regulation by estradiol in mouse. Biol Reprod. 2013 Oct 10;89(4):84. doi: 10.1095/biolreprod.112.106542.

- 12) [Padmanabhan RA, Nirmala L, Murali M, Laloraya M.](#) (2011) CrkL is a Co-Activator of Estrogen Receptor {alpha} That Enhances Tumorigenic Potential in Cancer. Mol Endocrinol. 2011 Sep;25(9):1499-512. Epub 2011 Jun 23.
- 13) [Brahmaraju M, Bhagya KP, Titus S, Sebastian A, Devi AN, Laloraya M, Kumar PG .](#) (2011) AIRE1A might be involved in cyclin B2 degradation in testicular lysates. Biochem Cell Biol. Aug;89(4):411-22. doi: 10.1139/O11-029.
- 14) [Chandrasekhar A, Laloraya M, Kumar PG.](#) (2011) Modulation of nicotinamide adenine dinucleotide phosphate oxidase activity through sequential posttranslational modifications of p22 phagocytic oxidase during capacitation and acrosome reaction in goat spermatozoa. J Anim Sci. 2011 Oct;89(10):2995-3007. Epub 2011 May 6.
- 15) [Chandrakuntal K, Shah AK, Thomas NM, Karthika V, Laloraya M, Kumar PG and Laloraya MM](#) (2010) Blue light exposure targets NADPH oxidase to plasma membrane and nucleus in wheat coleoptiles. J Plant Growth Reg 29, 232-241.
- 16) [Shoeb M, Laloraya M and Kumar PG](#) (2010) Progesterone-induced reorganization of NOX-2 components in membrane rafts is critical for sperm functioning in *Capra hircus*. Andrologia 2010 Dec; 42(6), 356-65.
- 17) [Brahmaraju M, Laloraya M and Kumar PG](#) (2009) Immunodominant sperm antigens and their role in male infertility. In: Current Paradigm of Reproductive Immunology, 2009: 59-81. **(book chapter)**
- 18) [S. Purohit, M. Laloraya & P. G. Kumar](#) (2008) Distribution of N- and O-linked oligosaccharides on surface of spermatozoa from normal and infertile subjects Andrologia. 2008 Feb;40(1):7-12.
- 19) [Mohan JJ, Jha RK, Kumar PG, Dharmarajan AM and Laloraya M](#) (2007) Secreted Frizzles-Related Protein (sFRP4) can abrogate pregnancy – a new dimension in its biological role. J. Endocrinol. Reprod. 11(1), 41-44.
- 20) [Chandran U, Laloraya M and Kumar PG](#) (2007) Identification of testis-expressed cell cycle regulating proteins with special reference to meiosis. J. Endocrinol. Reprod. 11(1), 45-48.
- 21) [Selot R, Kumar V, Shukla S, Chandrakuntal K, Brahmaraju M, Dandin SB, Laloraya M, Kumar PG.](#) (2007) Identification of a soluble NADPH oxidoreductase (BmNOX) with antiviral activities in the gut juice of Bombyx mori. Biosci Biotechnol Biochem. 2007 Jan;71(1):200-5.
- 22) [Jha RK, Titus S, Saxena D, Kumar PG, Laloraya M.](#) (2006) Profiling of E-cadherin,  $\beta$ -catenin and Ca<sup>2+</sup> in embryo uterine interactions at implantation. FEBS Lett. 2006 Oct 16;580(24):5653-60.
- 23) [Chandrakuntal K, Thomas NM, Kumar PG, Laloraya M, Laloraya MM.](#) (2006) Fluorescence Resonance Energy Transfer Between Polyphenolic Compounds and Riboflavin Indicates a Possible Accessory Photoreceptor Function for Some Polyphenolic Compounds. Photochem Photobiol. 2006 Sep-Oct;82(5):1358-64.
- 24) [Laloraya M, Davoodi-Semiromi A, Kumar GP, McDuffie M, She JX.](#) (2006) Impaired Crkl expression contributes to the defective DNA binding of Stat5b in nonobese diabetic mice. Diabetes. 2006 Mar;55(3):734-41. [Shukla S, Jha RK, Laloraya M, Kumar PG.](#) (2005) Identification of non-

mitochondrial NADPH oxidase and the spatio-temporal organization of its components in mouse spermatozoa. *Biochem Biophys Res Commun.* 2005 Jun 3;331(2):476-83.

- 25) [Purohit S, Kumar PG, Laloraya M, She JX.](#) (2005) Mapping DNA-binding domains of the auto-immune regulator (AIRE) protein. *Biochem Biophys Res Commun.* 2005 Feb 18;327(3):939-44.
- 26) [Nautiyal J, Kumar PG, Laloraya M.](#) Mifepristone (ru486) antagonizes monocyte chemotactic protein-3 down-regulation at early mouse pregnancy revealing immunomodulatory events in ru486 induced abortion. *Am J Reprod Immunol.* 2004 Jul;52(1):8-18.
- 27) [Chandrakuntal K, Kumar PG, Laloraya M, Laloraya MM.](#) (2004) Direct involvement of hydrogen peroxide in curvature of wheat coleoptile in blue-light treated and dark-grown coleoptiles. *Biochem Biophys Res Commun.* 2004 Jul 9;319(4):1190-6.
- 28) [Nautiyal J, Kumar PG, Laloraya M.](#) (2004) 17 $\beta$ -estradiol induces nuclear translocation of Crk-L at the window of embryo implantation. *Biochem Biophys Res Commun.* 2004 May 21;318(1):103-12.
- 29) [Brahmaraju M, Shoeb M, Laloraya M, Kumar PG.](#) (2004) Spatio-temporal organization of Vam6P and SNAP on mouse spermatozoa and their involvement in sperm-zona pellucida interactions. *Biochem Biophys Res Commun.* 2004 May 21;318(1):148-55
- 30) [Davoodi-Semiromi A\\*, Laloraya M\\*, Kumar GP, Purohit S, Jha RK, She JX.](#) (2004) A mutant *Stat5b* with weaker DNA binding affinity defines a key defective pathway in non-obese diabetic (NOD) mice. *J Biol Chem.* 2004 Mar 19;279(12):11553-61. \*Equal contribution
- 31) [Purohit S, Brahmaraju M, Palta A, Shukla S, Laloraya M, Kumar PG.](#) Impaired E-cadherin expression in human spermatozoa in a male factor infertility subset signifies E-cadherin-mediated adhesion mechanisms operative in sperm-oolemma interactions. *Biochem Biophys Res Commun.* 2004 Apr 9;316(3):903-9.
- 32) [Shoeb M, Laloraya M, Kumar PG.](#) (2004) Formation and Dynamic Alterations of Horizontal Microdomains in sperm Membranes During Progesterone-Induced Acrosome Reaction. *Biochem Biophys Res Commun.* 2004 Mar 12;315(3):763-70.
- 33) [Kumar PG, Laloraya M, She JX.](#) (2002) Population genetics and functions of the autoimmune regulator (AIRE) In: *Endocrinology and Metabolism Clinics of North America.* Eisenbarth GD, ed. Harcourt, PA, USA, 2002 Jun;31(2):321-38, vi.
- 34) [Chatterjee S, Laloraya M, Kumar GP.](#) (2001) Regional Variations in Thiol Distribution Pattern and Superoxide Dismutase Activity of the Male Reproductive Tract of the Rat Modulate the Transport of Spermatozoa through the Epididymis and Vas deferens. *Urol Int.* 2001;66(2):100-4.
- 35) [Kumar PG, Laloraya M, Wang CY, Ruan QG, Davoodi-Semiromi A, Kao KJ, She JX.](#) (2001) The Autoimmune Regulator (AIRE) Is a DNA-binding Protein *J. Biol. Chem.*, Vol. 276, Issue 44, 41357-41364.
- 36) [Chatterjee S, Rahman MM, Laloraya M, Kumar GP.](#) (2001) Sperm disposal system in spermatid granuloma: a link with superoxide radicals. *Int J Androl.* 2001 Oct;24(5):278-83.
- 37) [Jain S, Saxena D, Kumar GP, Laloraya M.](#) (2000) NADPH dependent superoxide generation in the ovary and uterus of mice during estrus cycle and early pregnancy. *Life Sci.* 66, 1139-1146.
- 38) [Purohit SB, Saxena D, Laloraya M, Kumar G P.](#) (2000) Altered molecular dynamics and antioxidant status in the spermatozoa in a testosterone induced oligozoospermia model. *Mol*

Reprod. Dev. 55(3), 316-325.

- 39) [Saxena D, Purohit SB, Kumer GP, Laloraya M.](#) (2000) Increased appearance of inducible nitric oxide synthase in the uterus and embryo at implantation. *Nitric Oxide : Biology and Chemistry* 4(4), 384-391.
- 40) [Laloraya MM, Chandra-kuntal K, Kumar GP, Laloraya M.](#) (1999) Active oxygen species in blue light mediated signal transduction in coleoptile tips. *Biochem. Biophys. Res. Commun.* 256(2), 293-298.
- 41) [Agnihotri S, Purohit SB, Laloraya M, Kumar GP.](#) (1999) Regional Heterogeneity in Intracellular Distribution of Superoxide and Hydrogen Peroxide within the sperm and its relation to Sperm Development. *Archives of Andrology*, 43, 113-121.
- 42) [Jain S, Saxena D, Kumar PG, Koide SS, Laloraya M.](#) (1999). Effect of estradiol and selected antiestrogens on pro- and anti-oxidant pathway in mammalian uterus. *Contraception* 60, 111-118.
- 43) [Purohit SB, Laloraya M, Kumar GP.](#) (1999) Role of ions and ion channels in capacitation and acrosome reaction of spermatozoa. *Asian J. Androl.* 1: 95-107.
- 44) [Prem P, Parihar MS, Malini L, Pradeep KG.](#) (1998) Starvation-induced hypothyroidism involves perturbations in thyroid superoxide-SOD system in pigeons. *Biochem. Mol. Biol. Int.* 45(1), 73-83.
- 45) [Purohit SB, Laloraya M, Kumar GP.](#) (1998) Acrosome reaction inducers impose alterations in repulsive strain and hydration barrier in human sperm membranes. *Biochem. Mol. Biol. Intl.* 45(2), 227-235.
- 46) [Purohit SB, Laloraya M, Kumar PG.](#) (1998) Bicarbonate-dependent lipid ordering and protein aggregation are part of non-genomic action of progesterone on capacitated spermatozoa. *J. Androl.* 19(5),608-618.
- 47) [Khanna-Chopra R, Dalal M, Kumar GP, Laloraya M.](#) (1998) A genetic system involving superoxide causes F-1 necrosis in wheat (*T. aestivum L.*) *Biochem. Biophys. Res. Commun.* 248(3), 712-715.
- 48) [Prakash P, Kumar GP, Laloraya M, Hemnani T, Parihar MS](#) (1998) Superoxide anion radical generation as a temperature stress response in the gills of fresh water catfish *Heteropneustes fossilis*: role in mucus exudation under elevated temperature. *Comp. Biochem. Physiol. C. Pharmacol. Toxicol. Endocrinol.* 119(2), 211-216.
- 49) [Prakash P, Laloraya M, Kumar P.](#) (1998) Influence of a melatonin implant on the free radical load in avian thyroid and its relation with thyroid hormonogenesis. *Biochem. Mol. Biol. Intl.* 46(6), 1249-1258.
- 50) [Chatterjee S, Laloraya M, Kumar PG.](#) (1997) Free radical induced liquefaction of ejaculated human semen: A new dimension in semen biochemistry. *Arch. Androl.* 38 (2), 107-111.
- 51) [Laloraya M, Thomas M, Jain S, Jafri F, Kumar P.](#) (1997) Activity profile of placental superoxide-superoxide dismutase system in pregnant mice and its possible relation with placental steroidogenesis. *Biochem. Mol. Biol. Intl.* 42(5) 983-990.
- 52) [Thomas M, Jain S, Kumar GP, Laloraya M.](#) (1997) A programmed oxyradical burst causes hatching of mouse blastocysts. *J. Cell Science* 110, 1597-1602.
- 53) Prakash PP, Kumar GP, [Laloraya M](#), Javeri T and Parihar MS (1997) Superoxide Anion Radical

production as a cadmium-mediated mechanism of toxicity in avian thyroid: an electron spin resonance study by spin trapping. *Comp. Biochem. Physiol.* 118C(l) 89-95.

- 54) [Chatterjee S, Purohit SB, Laloraya M, Kumar P.](#) (1997) Vasectomy induced SOD inactivation in the male reproductive tract of rat : A prerequisite for spermatic granuloma formation. *Urologia Internationalis.* 59(1), 23-25.
- 55) [Chatterjee S, Laloraya M, Kumar PG.](#) (1997) Superoxide anion radical mediated dissection of rat sperm: An in vitro study. *Arch. Androl.* 39 (2), 101-104.
- 56) [Chatterjee S, Reddy AL, Laloraya M, Kumar PG.](#) (1997) Free radical mediated sperm load management in the vagina of rat. *Arch Androl.* 1997 Sep-Oct;39(2):127-33.
- 57) [Singh PP, Kumar P, Laloraya M.](#) (1997) Regulation of superoxide anion radical-superoxide dismutase system in the avial thyroid by TSH with reference to thyroid hormonogenesis. *Biochem. Biophys. Res. Commun.* 239 (1), 212-216.
- 58) Kumar GP and [Laloraya M](#) (1997) *Contraception In: Oxidative stress in male infertility* (Ochsendorf FR and Fuchs J, eds.), Gardez! Verlag, St. Augustin, Germany, pp. 185-196.
- 59) Negishi H, Kumar GP, [Laloraya M](#) and Koide SS (1996) Neutralization of pregnancy preventing activity of cabergoline, a dopamine agonist, with progesterone. *Theriogenology* 48, 241-246.
- 60) [Laloraya M, Jain S, Thomas M, Kopergaonkar S, Pradeep Kumar G.](#) (1996) Estrogen surge: A regulatory switch for superoxide radical generation at implantation. *Biochem. Mol.Biol. Intl.* 39(5), 933-940.
- 61) [Nivsarkar M, Kumar GP, Laloraya M.](#) (1996) Metal binding and resultant loss of phototoxicity of alpha-terthienyl: metal detoxification versus alpha-terthienyl inactivation. *Bull. Environ. Contain. Toxicol.* 56, 183-189.
- 62) [Kumar G P, Laloraya M, Koide SS.](#) (1996) Characterization of a uterine luminal fluid protein ULF-250 using N-terminal microsequencing and RT-PCR identifies a novel estrogen-regulated gene in the rat uterus. *FEB S Letters.* 3 99, 3 3 -3 6.
- 63) Thomas M, Jain S, Kumar G.P. and [Laloraya M.](#) (1995) Variation in reactive sulfhydryl group in mouse uterus in early pregnancy. *Acta Histochem. et cytochim.* 28(3), 1995.
- 64) [Sinha S, Kumar GP, Laloraya M.](#) (1994) Abnormal physical architecture of the lipophilic domains of human sperm membrane in oligospermia: a logical cause for low fertility profiles. *Biochem Biophys Res Commun.* 1994 Jan 14;198(1):266-73.

- 65) [Thomas M, Jain S, Kumar GP, Laloraya M.](#) (1994) Transient thiol expression and thiol-disulphide cluster-receptor communications-a molecular basis for blastocyst-uterine interactions. *Biochem. Biophys. Res. Commun.* 198(l),150-157.
- 66) [Sinha S, Kumar GP, Laloraya M.](#) (1994) The topography of thiol-distribution on sperm surface : A sensitive marker for human fertility diagnosis. *Clinica Chimica Acta* 225, 83-84.
- 67) [Nivsarkar M, Kumar GP, Laloraya M.](#) (1994) Photophysical alterations of erythrocyte membrane by 4,5',8-trimethyl psoralen : Membrane response towards psoralen phototherapy. *Biochem. Biophys. Res. Commun.* 199(3), 1413 -142 1.
- 68) [Chatterjee S, Laloraya M, Kumar GP.](#) (1994) Free Radical Bombing of Spermatozoa in Spermatid Granuloma: An Attempt to Prevent Autoimmune Switch-On. *Became. Beefiest. Res. Common.* 201(l), 472-477.
- 69) [Laloraya MM, Pradeep KG, Laloraya M.](#) (1994) Photochemical reaction sequences of blue light activated flavins: sensory transduction through free radical messengers. *Biochem. Mol. Biol. Intl.* 33(3), 543-551.
- 70) [Jain S, Thomas M, Kumar P, Laloraya M.](#) (1994) Appearance of homogeneous smectic multilamellar microenvironments in biomembranes undergoing superoxide initiated lipid peroxidation: lipid dienyl radical accumulation and fluidity management in lipid bilayers. *Biochem.. Mol. Biol. Intl.* 33(5), 853-862.
- 71) [Purohit S, Kumar GP, Laloraya M, Laloraya MM.](#) (1994) Involvement of superoxide radical in signal transduction regulating stomatal movements. *Biochem. Biophys. Res. Commun.* 205(l), 30-37.
- 72) Nivsarkar M, Pradeep Kumar G, [Laloraya M](#) and Laloraya MM (1993) Effect of ultraviolet activated alpha terthienyl upon anal gill membranes of mosquito larvae : A spin label study. *Biochem. Syst. Ecol.* 21(4), 441-447.
- 73) [Jain S, Thomas M, Kumar GP, Laloraya M.](#) (1993) Programmed lipid peroxidation of biomembranes generating kinked phospholipids permitting local molecular mobility : A peroxidative theory of fluidity management. *Biochem. Biophys. Res. Commun.* 195(2).574-580.
- 74) [Sinha S, Kumar P, Laloraya M.](#) (1993) Methyl xanthines and altered biomembrane dynamics : Demonstration of protein mobility and enzyme inhibition by caffeine in sperm model system. *Biochem. Mol. Biol. Intl.* 31(6), 1141-1148.
- 75) [Chatterjee S, Laloraya M, Kumar GP.](#) (1993) Exorbitantly enhanced protein gyration and erroneous membrane modification programs after vasectomy: A biophysical basis for low infertility revival after vasectomy. *Biochem Biophys Res Commun.* 1993 Dec 15;197(2):450-456.
- 76) [Nivsarkar M, Kumar GP, Laloraya M, Laloraya MM.](#) (1992) Generation of superoxide anion radical by alpha-terthienyl in the anal gills of mosquito larvae *Aedes aegyptii* : A new aspect in alpha terthienyl phototoxicity. *Arch. Insect Biochem. Physiol.* 19(4) 261-270.
- 77) [Purohit S, Kumar P, Laloraya M, Bharti S, Laloraya MM.](#) (1992) ABA-induced lipid melting and its reversal by umbelliferone in the plasmalemma of the guard cell protoplast : A breakthrough in plant hormone-receptor binding and hormone action. *Biochem. Biophys.. Res. Common.* 182(2), 652-658.
- 78) [Sinha S, Pradeep KG, Laloraya M, Warikoo D.](#) (1991) Overexpression of superoxide dismutase and lack of surface thiols in spermatozoa : Inherent defects in oligospermia. *Biochem. Biophys. Res. Commun.* 174(2), 510-519.



- 79) [Nivsarkar M, Kumar GP, Laloraya M, Laloraya MM.](#) (1991) Superoxide dismutase in the anal gills of the larvae of mosquito *Aedes aegyptii*: its inhibition by alpha-terthienyl. Arch. Insect Biochem. Physiol. 16(4), 249-255.
- 80) [Kumar PG, Laloraya M, Laloraya MM.](#) (1991) Superoxide radical level and superoxide dismutase activity changes in maturing mammalian spermatozoa. Andrologia 23(2),171-175.
- 81) [Laloraya M, Kumar GP, Laloraya MM.](#) (1991) Changes in the superoxide anion radical and superoxide dismutase levels in the uterus of *Rattus norvegicus* during the estrous cycle and a possible for superoxide radical in uterine oedema and cell proliferation at proestrus. Biochem. Cell Biol. 69 (4), 313-316.
- 82) [Verma S, Kumar P, Laloraya M, Nivsarkar M, Singh A.](#) (1991) Superoxide dismutase activation in thyroid and suppression in adrenal : Novel pituitary regulatory routes. FEBS Letters 282(2), 310-312.
- 83) [Singh A, Kumar P, Laloraya M, Verma S, Nivsarkar M.](#) (1991) Superoxide activity regulation by spermine : A new dimension in spermine biochemistry and sperm development. Biochem. Biophys. Res. Commun. 177(l), 420-426.
- 84) Nivsarkar M, Pradeep Kumar G, [Laloraya M](#) and Laloraya MM (1991) Superoxide dismutase inactivation by alpha-terthienyl : A novel observation in thiophene photochemistry. Pesticide Biochem. Physiol. 41(l), 53-59.
- 85) [Pradeep Kumar G, Sinha S, Laloraya M, Nivsarkar M.](#) (1991) Enhanced axial symmetry at the Fe(III)-heme centre of peroxidase by ascorbate : A basis for the ascorbate dependent peroxidase action. Biochem. Biophys. Res. Commun. 180(2), 597-601.
- 86) [Laloraya M.](#) (1990) Fluidity of Phopholipid bilayer of the endometrium at the time of implantation of the blastocyst-a spin-label study. Biochem. Biophys. Res. Commun. 167(2), 561-567.
- 87) [Kumar GP, Laloraya M, Laloraya MM.](#) (1990) Powerful anti-sperm motility action of cobaltous ion and its recovery by a sulfhydryl compound. Contraception 41, 633-639.
- 88) [Laloraya M,](#) Pradeep Kumar G, Nivsarkar M and Laloraya MM (1990) Localization of superoxide dismutase in the ovary and uterus of mice during pregnancy with special reference to steroidogenesis and implantation. Acta Histochem. et Cytochem. 23(3), 271-279.
- 89) [Verma S, Kumar PG, Laloraya M, Singh A, Nivsarkar M, Bharti S.](#) (1990) Discovery of a novel and alternate hydrogen peroxide generation machinery in the mammalian thyroid gland that modulates iodination of tyrosine. Biochem. Biophys. Res. Commun. 169(l), 1-7.
- 90) [Verma S, Kumar GP, Laloraya M, Singh A.](#) (1990) Activation of iodine into a free radical intermediate by superoxide: A physiologically significant step in the iodination of tyrosine. Biochem. Biophys. Res. Commun. 170(3), 1026-1034.
- 91) [Kumar GP, Tillo N, Laloraya M, Nivsarkar M, Verma S, Singh A.](#) (1990) Superoxide anion radical induces lipid phase transitions that mimics temperature induced phase transition phenomena of membrane lipids. Biochem. Biophys. Res. Commun. 172(2), 601-607.
- 92) [Pradeep KG, Seerwani N, Laloraya M, Nivsarkar M, Verma S, Singh A.](#) (1990) Superoxide dismutase as a regulatory switch in mammalian testicular steroidogenesis. Biochem. Biophys. Res. Commun. 173(l), 302-308.
- 93) [Kumar P, Laloraya M., Laloraya MM.](#) (1989) The effect of some of the polyphenolic compounds on sperm motility in vitro: a structure-activity relationship. Contraception., 39, 531-539.

- 94) [Laloraya M, Kumar GP, Laloraya MM.](#) (1989) A possible role of superoxide anion radical in the process of blastocyst implantation in *Mus musculus*. *Biochem. Biophys. Res. Commun.* 161(2), 762-770.
- 95) [Kumar GP, Laloraya M, Laloraya MM.](#) (1989) Coupling of a proton pump with superoxide radical-superoxide dismutase systems in mammalian spermatozoa and its association with sperm motility. *Biochem. Biophys. Res. Commun.* 161(2), 771-775.
- 96) [Laloraya M., Kumar GP, Laloraya MM.](#) (1989) Histochemical study of superoxide in the ovary of the rat during the oestrous cycle. *J. Reprod. Fertil.* 86(2), 583-587.
- 97) [Kumar GP, Laloraya M, Agrawal P, Laloraya MM.](#) (1989) The involvement of surface sugars of mammalian spermatozoa in epididymal maturation and *in vitro* sperm-zona recognition. *Andrologia.* 22(2), 179-183.
- 98) [Laloraya M, Pradeep KG, Laloraya MM.](#) (1988) Changes in the levels of superoxide radical and superoxide dismutase during the estrous cycle of *Rattus norvegicus* and induction of superoxide dismutase by activity by lutropin. *Biochem. Biophys. Res. Commun.* 157(1),146-153.