Vrajesh Tripathi

Professor,
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Academic Qualifications:

S.No.	Degree	Institution	Year
1.	B.Sc.	Banaras Hindu University	1987
2.	M.Sc.	Banaras Hindu University	1989
3.	Ph.D.	Banaras Hindu University	1995

Brief write up on Area of Specialization

My specialization is Reproductive biology and research interest centre particularly around understanding role of some paracirne / autocrine regulators, especially in reproductive physiology of vertebrates. Our study for the role of GnRH, Inhibin family, and Nitric Oxide Synthase in human testis and their relationship with sterility highlights the importance of paracrine regulators. Extending the work, first the time in ectothermic vertebrate, we have identified all three nitric oxide synthases (NOS) isoforms and shown the role of the NOS / NO system in the fish ovary. In recent years, we have reported the effect and the role of the NOS / NO system on *in vitro* development of Buffalo ovarian follicles also.

Fellowship/ Awards etc.

I have received 'UGC Research Award 2002 (viz. Career Award)': From University Grant Commission, Govt. of India, New Delhi and CSIR-JRF-NET (JRF/SRF) fellowship from CSIR, New Delhi during doctoral work.

Project Undertaken as PI/ Co PI:

S.No.	Name of the Project	Source of Funding	Duration	Amount of Funding (Rs)
1.	Localization of Nitric Oxide Syntheses and role of nitric oxide in ovarian steroidogenesis and maturation in catfish *Heteropneustes fossilis* (Bloch.)	DST (PI)	2008 – 11	24.87 lakhs
2.	The role of GnRH, Inhibin family, and Nitric Oxide Synthase in human testis and their relationship with sterility.	UGC (PI)	2002 – 05	10.5 lakhs
3.	Computer aided drug design and development: Potential antitumor and antihypertensive agents.	AICTE (Co-PI)	1997 – 00	5 lakhs
4.	Role of ascorbic acid and calcium in amelioration of fluoride induced toxicity.	UGC (minor) (PI)	1996 -98	0.12 lakhs

List of 05 best Publications:

- R. Agarwal, K.V.H. Sastry, **V. Tripathi,** R. Singh, R. Saxena, J. Mohan and R.P. Singh. Expression profile of Luteinizing hormone receptor gene in hierarchal follicles and regressing oviduct tissues of white leghorn hens during moulting. 2013. Reproduction in Domestic Animals, 48(2): 278–283

- Renu, A.S. Yadav, **V. Tripathi**, and R.P. Singh. Antimicrobial resistance profile of Salmonella present in poultry and poultry environment in north India. 2013. Food Control, 33: 545-548

- P.K. Dubey, **V. Tripathi**, R.P. Singh, G. Saikumar, A. Nath, M.D. Pratheesh, N. Gade, G. T. Sharma. Expression of nitric oxide synthase isoforms in different stages of buffalo (*Bubalus bubalis*) ovarian follicles: effect of nitric oxide on *in vitro* development of preantral follicle. 2012. Theriogenology: 77 (2): 280-291

- P.K. Dubey, **V. Tripathi**, R.P. Singh, and G. Taru Sharma. Influence of nitric oxide on *in vitro* growth, survival, steroidogenesis, and apoptosis of follicle stimulating hormone stimulated buffalo (*Bubalus bubalis*) preantral follicles. 2011. Journal of Veterinary Science, 12(3): 257-265

- **V. Tripathi** and A. Krishna. Changes in nitric oxide (NO) synthase isoforms and NO in the ovary of *Heteropneustes fossilis* (Bloch.) during the reproductive cycle. 2008. Journal of Endocrinology, 199: 307–316

- A. Acharya and **V. Tripathi.** Novel peptides enhance the production of nitric oxide and inducible nitric oxide synthase (iNOS) gene expression in Murine macrophage. 2003. International Journal of Immunopathology and Pharmacology, 16 (3): 241-6

A. Full List of the Publications:

1. Amar Singh and **V. Tripathi**. Sublethal effect of carbafuran on nitric oxide content in testes and serum of catfish. Heteropneustes fossilis (Bloch). 2015, Biochem. Cell. Arch. 15(2), 405-408

2. Amar Singh and **V. Tripathi**. Biological action of nitric oxide in fish physiology. 2014. Global J. Multidisciplinary studies, 3(11). 137-143.

3. R Saxena, V.K. Saxena, **V. Tripathi**, R Agarval and B.P. Singh. Effect of dietary protein and energy on intestinal Mucin-2 expression and posthatch growth in Naked Neck broiler. 2013, Indian Journal of Poultry Science, 48(3): 286-290

4. R. Agarwal, K.V.H. Sastry, **V. Tripathi,** R. Singh, R. Saxena, J. Mohan and R.P. Singh. Expression profile of Luteinizing hormone receptor gene in hierarchal follicles and regressing oviduct tissues of white leghorn hens during moulting. 2013. Reproduction in Domestic Animals, 48(2): 278–283

5. Renu, A.S. Yadav, **V. Tripathi**, and R.P. Singh. Antimicrobial resistance profile of Salmonella present in poultry and poultry environment in north India. 2013. Food Control, 33: 545-548

6. P.K. Dubey, **V. Tripathi**, R.P. Singh, G. Saikumar, A. Nath, M.D. Pratheesh, N. Gade, G. T. Sharma. Expression of nitric oxide synthase isoforms in different stages of buffalo (*Bubalus bubalis*) ovarian follicles: effect of nitric oxide on *in vitro* development of preantral follicle. 2012. Theriogenology, 77 (2): 280-291

7. L.V. Singh, **V. Tripathi**, R. Sharma, A.K. Pandey, A. Maitra, and B.P. Singh. Genetic polymorphism of *CAP1* gene in Sirohi goat. 2012. International Journal of Meat Science, 2(1): 13-19

8. L.V. Singh, R. Sharma, A.K. Pandey, **V. Tripathi,** A. Maitra, and B.P. Singh. Genetic variation in CAP1 gene in Sirohi breed goat. 2012. Indian Journal of Veterinary Research, 21(2): 1-4

9. Renu, A.S. Yadav, **V. Tripathi** and R.P. Singh. Seasonal effect on the shedding pattern of Salmonella, *Escherichia coli* and Campylobacter in poultry. 2011, Journal of Veterinary Public Health, 9(1): 13-17

10. L. V. Singh, R Sharma, A.K. Pandey, A. Maitra, S.P. Dixit, **V. Tripathi**, and B.P. Mishra. Identification of four novel single nucleotide polymorphisms of CAPN1 gene in Indian goat. 2011. Indian Journal of Animal Science, 81 (12): 1239–1243

11. P.K. Dubey, **V. Tripathi**, R.P. Singh, and G. Taru Sharma. Influence of nitric oxide on *in vitro* growth, survival, steroidogenesis, and apoptosis of follicle stimulating hormone stimulated buffalo (*Bubalus bubalis*) preantral follicles. 2011. Journal of Veterinary Science, 12(3): 257-265

12. P.K. Dubey, **V. Tripathi**, R.P. Singh, K.V.H. Sastry and G. Taru Sharma. Influence of nitric oxide on steroid synthesis, growth and apoptosis of buffalo (*Bubalus bubalis*) granulosa cells *in vitro*. 2011. Asian-Australian Journal of Animal Science, 24 (9): 1204- 1210

13. Renu, A.S. Yadav, **V. Tripathi**, and R.P. Singh. *Salmonella* occurrence in chicken eggs and environmental samples and their sero-prevalence in laying hens. 2011. Indian Journal of Animal Science, 81 (11): 1087–1088

14. **V. Tripathi**. Profile of prostaglandin E1 and F2α during different phases of reproductive cycle and their effect on sex steroid production in *Heteropneustes fossilis* (Bloch.). 2011. Journal of Experimental Zoology India, 14: 213-219

15. P.K. Dubey, **V. Tripathi,** R.P. Singh, and G. Taru Sharma. Expression of neuronal nitric oxide synthase in buffalo (*Bubalus bubalis*) ovarian antral follicle. 2010. Biochemical and Cellular Archive, 10: 231-235

16. **V. Tripathi**. Effect of E and F prostaglandins on testosterone and 17α, 20β-dihydroxy-4-pregnen-3-one production *in vitro* in post-vitellogenic follicle of *Heteropneustes fossilis*. 2010. Biochemical and Cellular Archive, 10: 255-259

17. **V. Tripathi**, A. Singh and B. Lal. Effect of prolactin on hepatic lipogenesis in relation to treatment time in female freshwater catfish, *Heteropneustes fossilis* (Bloch.). 2010. Journal of Experimental Zoology India, 13: 181-185.

18. P.K. Dubey, **V. Tripathi,** R.P. Singh, and G. Taru Sharma. Localization and expression of inducible nitric oxide synthase in buffalo (*Bubalus bubalis*) ovary and effect of NO in growth, survival and apoptosis of preantral follicles. Pp 161-165, In Proceedings of International. conference on 'Physiological capacity building in livestock under changing climate scenario', Nov.11-13, 2010, IVRI, India

19. A. Singh and **V. Tripathi.** Pesticides and fishes. 2010. Agrobios, 9(6): p.20

20. **V. Tripathi** and A. Krishna. Changes in nitric oxide (NO) synthase isoforms and NO in the ovary of *Heteropneustes fossilis* (Bloch.) during the reproductive cycle. 2008. Journal of Endocrinology, 199: 307–316

21. **V. Tripathi** and A. Krishna. Expression of nitric oxide synthase isoforms in the ovary of *Heteropneustes fossilis* (Bloch.) during follicular development, and oocytes maturation. 2008. Cybium, *32(2) suppl.: 22*

22. A. Acharya and **V. Tripathi.** Novel peptide treated macrophage induces apoptosis in tumour cell line P815. 2004. European Journal of Inflammation, 2 (2): 77-84.

23. **V. Tripathi**, A. Krishna, U. S. Diwedi, R. Sridaran. Relationship between GnRH, Bradykinin and Inhibin/Activin (beta A and beta B subunits) and apoptosis in testes of infertile and aging men. 2004. Fertility & Sterility: 82 (Supl 2): S308

24. **V. Tripathi**, R.K. Srivastava, and A. Krishna. Inhibin in male reproduction and its clinical relevance. 2003. Journal of Endocrinology & Reproduction, 7 (1&2):1-17.

25. A. Acharya and **V. Tripathi.** Novel peptides enhance the production of nitric oxide and inducible nitric oxide synthase (iNOS) gene expression in Murine macrophage. 2003. International Journal of Immunopathology and Pharmacology, 16 (3): 241-6.

26. **V. Tripathi** and TP. Singh. Eflect of some steroids and prostaglandins on GVBD and ovulation in Catfish *H. fossilis.* 1995, pp378. Proceedings of 5th International Symposium on Reproductive Physiology of Fish", July 2-8, Austin, Texas, U.S.A

27. B. Lal, **V. Tripathi**, S. Harikrishnan and T.P.Singh. Changes in steroidogenesis following pinealectomy and 5-Methoxyindols treatments under different photo-thermal conditions in the Catfish, *Clarias batrachus.* 1992. Neuroendocrinology Letters, 14(6):394

28. B. Lal, **V. Tripathi**, S. Harikrishnan and T.P.Singh. Effect of pinealectomy and replacement therapy by 5-Methoxyindols on prostaglandin (PGF) in the Catfish, *Clarias batrachus.* 1992. Neuroendocrinology Letters, 14(6):393

B. Book:

- A. Krishna and **V. Tripathi.** Fertility Management; 2010. Publisher- Vinayak Publications, Delhi (ISBN:978-81-905050-4-8)

C. Book Chapter:

1. **V. Tripathi**, R.K. Srivastava, and A. Krishna. Clinical application of inhibin in male fertility. 2010. P.119-137, Fertility Management (Ed. A. Krishna & V. Tripathi), Vinayak Publications, Delhi

2. **V. Tripathi**. Involvement of radicals in atmospheric reaction and chemical toxicity: An overview.2001. P. 194 – 208, In: Modern trends in environmental Biology" (Ed G. Tripathi), CBL Publishers, New Delhi.

3. KM. Tripathi, N.K Chaubey and **V. Tripathi.** Environmental legislations: Indian context.2001. p. 281 – 88. In: Modern trends in environmental Biology" (Ed G. Tripathi), CBL Publishers, New Delhi.

Ph.D.: Five