



St. Xavier's College

Dr. Camil Bulcke Path, Ranchi

Faculty Profile

Name of Faculty Member	:	Dr. N. Venkat Appa Rao
Gender	:	Male
Email ID	:	venkatapparao@sxcran.org
Name of Department	:	Department of Zoology
Designation	:	Associate Professor
Level of Teaching	:	Undergraduate and Postgraduate
Academic Qualification	:	M.Sc., Ph.D.
Total Teaching Experience	:	27 Years and 06 Months
UGC NET/SET Qualified	:	No

Research Papers Published:

A. Foreign Journals:

- 1) **Venkat Appa Rao, N.**, Macchi, C., Tortorella, C., M. Firoz Ahmad, and Nussdorfer G. G. **2007**. Neuropeptide-Y and glucocorticoid secretion guinea-pig adrenal gland: An *in vivo* and *in vitro* study. ***Int. J. Mol. Medicine***. **20**:345-349.
- 2) Raha, D, Shamshun . N, Bhola, P., Rebuffat, P., Neri, G., Ranu.,N., Kiran, K., Raza, B., **Venkat Appa Rao, N.**, Macchi, C., Sen, N.S., Nussdorfer. G. G. and M. Firoz Ahmad. **2007**. IGF-I enhances cortisol secretion from guinea-pig adrenal gland: *In vivo* and *in vitro* study. ***Int. J. Mol. Medicine*** **20**: 91-95.
- 3) **Venkat Appa Rao, N.**, Bushra Raza, Jugal K. Prasad, S. Safdar Razi, Lucia Gottardo, M. Firoz Ahmad and Gastone G. Nussdorfer, **2001**. Melatonin decreases glucocotocoid blood concentration in the rat and palm squirrel, acting directly on adrenal gland. ***Biomedical Research***, **22(2)**: 115-117.
- 4) M. Firoz Ahmad, **Venkat Appa Rao**, Anita Prasad, A. Alim and G. G. Nussdorfer **2000**, Vasoactive intestinal peptide (VIP) increases cortisol blood concentration in

the palm squirrel (*Funambulus pennanti*, Wroughton): evidence of a direct effect of VIP on adrenal gland. ***Biomedical Research***. **21(3)**: 173-175.

- 5) **Venkat Appa Rao, N.**, N. S. Sen, P. D. Sinha and M. Firoz Ahmad. **1994**. Effect of methionine enkephalin in the cortisol profile of palm squirrel, *Funambulus pennanti* (Wroughton). ***Eurp. Arch. Biol.***, **105**: 7-11.
- 6) A. Alim, K. P. Mishra, **Venkat Appa Rao, N.**, and M. Firoz Ahmad. **1992**. The taste receptors in the oesophagus of the omnivorous hill stream loach, *Lepidocephalichthys guntea* (Ham.). ***Ciencia e Cultura***, **43**: 67-68.

B. Indian Journals:

- 1) Ritesh Kumar Shukla, **Venkat Appa Rao. N.** **2021**. CRISPR technology, a silver lining in combating COVID-19 pandemic. ***The Applied Biology and Chemistry Journal***. **2(1)**: 18-21.
- 2) Ritesh Kumar Shukla, **Venkat Appa Rao. N.** **2020**. Immunocytochemistry as an important tool for exploring the insights of various aspects of gastro- intestinal tract. ***The Applied Biology and Chemistry Journal***. **1(2)**: 72-82.
- 3) Ritesh Kumar Shukla, Balarko Chakraborty, **Venkat Appa Rao.N.** and M. Firoz Ahmad. **2015**. Immunocytochemical localization of gastrin cells (G-cells) in the Alimentary Canal of a skipper frog, *Euphlyctis cyanophlyctis* (Schneider). ***Proc. Zool. Soc.*** **68**:48-51 (Springer,Verlag).
- 4) **Venkat Appa Rao.N** and & Ritesh Kumar Shukla. **2014**. Occurrence of cannibalism in adult *Euphlyctis cyanophlyctis*, (Anura;Ranidae): Is it induced or opportunistic?, ***International Research Journal of Natural and Applied Sciences***. **1(6)**: 186-190.
- 5) **Venkat Appa Rao. N.** and Ritesh Kumar Shukla **2013**. Disribution of Gastrin Immune Reactive cells in the Alimentary Canal of a hill stream loach, *Lepidocephalus guntea* (Hamilton): An Immuno-Histochemical Study. ***Proc. Nat. Acad. Sci. Section (B)*** **83(4)**: 603-607. (Springer, Verlag).
- 6) **Venkat Appa Rao. N.**, Balarko Chakraborty, Ritesh Kumar Shukla and P. J. Rao. **2012**. Synthetic Glucocorticoid Dexamethasone Alters the Blood parameters in Albino Rats: An Evidence of the suppression of Adaptive Immunity. ***Columban J. Life Sci.*** **13(1&2)**: 43-46.
- 7) **Venkat Appa Rao. N**, Rakhee Dubey and Balarko Chakraborty. **2012**. Evidence for the Alteration of Plasma Calcium by Synthetic Glucocorticoid Dexamethasone. ***Asian J. Exp. Sci.*** **26(2)**: 25-30.

- 8) Ritesh Kumar Shukla and **Venkat Appa Rao.N. 2012**. A Comparative study of Cryo and Paraffin Sections in Localizing Gastrin Cells (G-Cells) in the Stomach of *Rana cyanophlyctis* (Schneider) using Immunocytochemical Technique. **The Bioscan 7(1):** 149-152.
- 9) M. Firoz Ahmad, Dilip Kumar Prasad and **Venkat Appa Rao. N. 2010**. Ultra structure of the Corpuscles of Stannius of an air breathing catfish *Clarias batrachus* (Linn.). **Proc. Nat. Acad. Sci. India. Sect. B Vol. 80 Pt. III:** 230-234.
- 10) Ritesh Kumar Shukla and **Venkat Appa Rao.N. 2009**. Effect of Synthetic Progesterone (Depo-medroxy Progesterone Acetate) on Blood Calcium level in Guinea Pigs. **Trans. Zool. Soc. East. India. 13 (1&2):** 93-99.
- 11) M. Firoz Ahmad, Alim, A., Sen N. S. and **Venkat Appa Rao. N. 2009** Corpuscles of Stannius of air breathing teleost: Ultrastructure and cellular composition; In **New Frontiers of Zoology**, Narendra publishing House, Delhi, India. pp 273-283.
- 12) **Venkat Appa Rao N.**, Luxmi Sah, Nirdosh Tete and M. Firoz Ahmad. **2007**. Effect of orexigenic neuropeptide-Y (NPY) on cortisol secretion. A direct effect of NPY on adrenal gland. **Natl. Acad. Sci. Lett., 30 (3&4):** 121-124.
- 13) M. Firoz Ahmad, A. Alim, Anita Prasad, N. S. Sen, **Venkat Appa Rao, N.**, A. Hore, R. Naskar, K.P.Mishra and S.E. Wendelaar Bonga. **2004**. Apoptosis as a novel mode of secretion in endocrine corpuscles of stannius of a teleost (*Clarias batrachus*). **Curr. Sci. 86(2):** 265-266.
- 14) Dipali Raha and **Venkat Appa Rao, N., 2004**. A medullary control of cortisol secretion in adrenal gland of guinea pigs via dopamine: An evidence of medulla cortex interaction. **Ran. Univ. J. Sci. & Tech. (RUJOST) 1 (1):** 13-15.
- 15) M. Firoz Ahmad, A. Alim, A. Hore, N. S. Sen, **Venkat Appa Rao, N.**, B.Chakraborty, S. S. Razi and K. Swarup. **2003**. Ultra structure of the corpuscles of stannius of a fresh water teleost, *Barbus sarana*. **Proc. Nat. Acad. Sci. 73; B (iii & iv) :** 255-259.
- 16) **Venkat Appa Rao, N.**, Anita Prasad, Laxmi Shah, M. N. Akhtar and M. Firoz Ahmad. **2003**. Stimulation of cortisol secretion by α - MSH in palm squirrel, *Funambulus pennanti* (Wroughton). **Proc Zool. Soc. 56(2):** 103- 107.
- 17) M. Firoz Ahmad, A. Alim, N. S. Sen, G. Lakra, K. P. Mishra, Bushra Raza, B. Chakraborty, **Venkat Appa Rao, N.**, and S. E. Wendelaar Bonga. **2002**. Electron microscopic studies of the corpuscles of stannous of an airbreathing teleost (*Heteropneustis fossilis*). **J. Biosci. 5:** 509-513.

- 18) Keshav Prasad Mishra, A. Alim **Venkat Appa Rao, N.**, and M. Firoz Ahmad **1999**. Functional histology of the oesophagus of some teleosts in relation to their food preference. **Trans. Zool. Soc. East. India 3(2):** 27-32.
- 19) Bushra Raza, **Venkat Appa Rao, N.**, N. S. Sen and M. Firoz Ahmad **1999**. α -MSH stimulates the cortisol secretion in *Clarias batrachus*. **National Acad. Sci. Letters** 66-69.
- 20) Bushra Raza, **Venkat Appa Rao, N.**, Anita Prasad, N. S. Sen and M. Firoz Ahmad **1999**. Evidence for a stimulatory role of Oxytocin in cortisol regulation in a teleost, *Clarias batrachus*. **Trans. Zool. Soc. East. India 3(1):** 11- 12.
- 21) Bushra Raza, **Venkat Appa Rao, N.**, N. S. Sen and M. Firoz Ahmad **1998**. Adrenaline stimulates Cortisol secretion in the teleost, *Clarias batrachus*. **Trans. Zool. Soc. India, 2(2).** 13- 17.
- 22) Bushra Raza, **Venkat Appa Rao, N.**, and M. Firoz Ahmad **1998**. Some evidences of non- classical regulatory mechanism of cortisol in *Clarias batrachus*. **Trans. Zoo. Soc. India, 2(1):** 55- 59.
- 23) N. S. Sen, A. Naqvi, **Venkat Appa Rao, N.**, and M. Firoz Ahmad, **1993**. Distribution, growth and trophic significance of water Hyacinth, *Eichhornia crassipes* (Kunth.) **In Adv. In Limnology** (ed. H.R. Singh), Narendra Publishing House, Delhi, India pp 93 – 106.
- 24) **Venkat Appa Rao, N.**, Meena Kumari, and M. Firoz Ahmad **1991**. Short and long term treatment of dexamethasone on serum cortisol profile of an air breathing catfish, *Clarias batrachus* **J. Freshwater Boil. 4(2):** 113-116.
- 25) K. P. Mishra, **Venkat Appa Rao, N.**, A. Alim and M. Firoz Ahmad **1991**. Functional peculiarities of the alimentary canal of *Lepidocephalichthys guntea* (Ham.) **J. Inland fish. Soc. India 23(1):** 59-63.
- 26) B. Chakraborty, **Venkat Appa Rao, N.**, M. Firoz Ahmad and J.K Prasad **1991**. Juxtglomerular apparatus and position of macula densa in two teleosts *Esomus danrica* (Ham.) and *Chela bacaila* (Ham.) **Indian Zoologist**, 15: 1-4.
- 27) **Venkat Appa Rao, N.**, and M. Firoz Ahmad. **1989**. Juxtglomerular (JG) cells in the kidney of some Indian major carps. **Proc. Nat. Sem. Fresh wat. Aqua.** 135(pp).

Participation in UGC-HRDC Course/FDP/OC/RC:

- 1) Undergone training in "Research methodology in Reproductive Biomedicine" at National Institute of Health and Family Welfare, New Delhi.

Seminar/Conference attended/Paper Presented (National/International):

- Attended many Conferences and Symposia and presented papers.
- Organized '**National Conference on Endocrinology**', at St. Xavier's College, Ranchi, 2000.

Experience of Ph, D, Guidance:

- 1) One Candidate has been awarded Ph.D. degree under my supervision.
- 2) Three Research Scholars are registered under my supervision for Ph.D. degree.

Minor Project Completed:

- 1) Role of Neuropeptide-Y in the regulation of adrenocortical cells Sanctioned by UGC, Minor project Sanctioned by UGC, ERO vide letter No.PSB-004/00-01.2000
- 2) A comparative study of the Immunocytochemical localization of secretin producing cells in the gut of a hill stream loach *Lepidocephalichthyes guntea* and *Clarias batrachus*. Minor project Sanctioned by UGC, ERO vide letter No. F.PSJ-29/11-12, UGC, ERO.

Guest Lecture/Special Lecture Delivered:

- 1) Invited as speaker to deliver a lecture on '**REGULATION OF STRESS INDICATOR; CORTISOL: A NON-CLASSICAL PERCEPTION**' at 20th All India Congress of Zoology and National Seminar on Bioresources and its Management for Food, Livelihood and Environmental Security & National Helminthological Congress during December 29-31, 2009 held at CIFE Mumbai.

Any Special Award/Achievement/Recognitions:

- 1) Collaborated with Prof. G.G.Nussdorfer of Italy in scientific experiments.
- 2) Resource person, Academic Staff college, Ranchi University, Ranchi.
- 3) Resource person, Academic Staff college, Guru Ghasi Das University, Raipur.
- 4) External Expert, Board of Studies, Zoology Vinoba Bhave University for NEP(FYUGP).
- 5) External Expert, Screening of candidates for Ph.D program, Kolhan University, Chaibasa.
- 6) Invited as Symposium Speaker at 16th International Congress of comparative endocrinology held at Hongkong, June, 22-26., 2009.
- 7) Honoured with Gold Medal conferring the Senior Scientist Award, 2009 by International Consortium of contemporary biologists (ICCB) & Madhawi-Shyam Educational Trust.

Administrative Responsibilities:

- 1) Member, Board of studies (Zoology, St. Xavier's College, Ranchi.
- 2) Co-Ordinator, NAAC Steering committee, St. Xavier's College, Ranchi (3rd Cycle).
- 3) Member, NAAC Steering committee, St. Xavier's College, Ranchi (4th Cycle).
- 4) Member Secretary, Academic Council of St. Xavier's College, Ranchi.

[Dr. N. Venkat Appa Rao]