

Name : Dr. Dadasaheb M. Kokare Designation: Professor Qualification : M. Pharm., Ph.D., Post-Doct. (UIC, Chicago, USA) Specialization: Pharmacology E mail : kokaredada@yahoo.com Phone : 09850318502

Experience:

Teaching
experienceUndergraduate: 20 years- Teaching Pharmacology, Biochemistry and Physiology.Postgraduate: 19 years- Teaching Biological Evaluation and Toxicology and
Advanced Physiology and Pathophysiology.

My research interests are focused on neuroscience related work with special emphasis on the behavioral pharmacology. Using predominantly rodent behavioral paradigms, immunohistochemistry, microdialysis, HPLC-ECD, molecular and epigenetic techniques, we study the role of different peptidergic biomolecules in the energy homeostasis, drug addiction coupled with reward and reinforcement, and also in the mechanism of action of certain psychopharmacological agents. We are actively examining how these endogenous peptidergic molecules modulate the different stages of addiction inclusive of acute, tolerance, dependence and withdrawal. We have also studied the participation of neurosteroid allopregnenolone in alcoholism and in the anxiolytic action of etifoxine. We have also been working on other abuse substances such as diazepam, caffeine and nicotine with some neuropeptides. Our studies have been published in peer reviewed journals like Pharmacology, Biochemistry and Behavior, Neuropsychopharmacology, Brain Research, Appetite, British Journal of Pharmacology, Neuropharmacology and Addiction Biology.

Research areas:

- Neuroscience
- Neuropharmacology
- Reward and reinforcement

Research

- ✓ S <u>https://scholar.google.com/citations?hl=en&user=nSNhzXkAAAAJ</u>
- R⁶ <u>https://www.researchgate.net/profile/Dadasaheb-Kokare</u>
- Scopus <u>https://www.scopus.com/authid/detail.uri?authorId=8624992100</u>
- Publications: 83 (International)
- Patents:04 (1 Granted, 2 Published, 1 Filed)
- Presentations: 156 (International & National)
- Book Chapters : 04
- Government funded projects: 09

Recent project

Principal Investigator in **SERB-CRG** project (CRG/2020/004971) entitled "Role of chromatin remodelling in the regulation of cocaine- and amphetamine-regulated transcript peptide (CARTp) during reward and reinforcement" (2021-2024). The total fund sanctioned for this project is Rs. 75,32,800/- (Joint Project) and provision for one Project Assistant.

Conferences/Workshops/Seminars attended- 50

Academic activities

Ph. D. awarded: 07

M. Pharm. awarded: 54

Presently supervising research work of 04 Ph. D. and 03 M. Pharm. students.

Awards

 Received Second prize in virtual experiment presentation organized by R.T.M. Nagpur University, Nagpur (NSD - 2021) during National Science Day Celebration for the work entitled "Surgery for neuropathic Pain" by Kawade HM, Shirsat N, Kokare DM. (February 28, 2021).

- ✓ Received First prize in poster presentation at School of Pharmacy and School of Chemical Sciences Jointly Organized International Conference on Drug discovery and Development: Lab to Clinic (DDD LC-2020), SRTM University, Nanded for the research work entitled "Studies on the modulation of cocaine- and amphetamine-regulated transcript (CART) peptide following deep brain stimulation of medial forebrain bundle in the chronic stress induced depression in rat" by Dudhe TA, Chopde TV, Dudhbhate BB, Choudhary AG, Kokare DM (January 2020).
- Received Second prize in poster presentation at School of Pharmacy and School of Chemical Sciences Jointly Organized International Conference on Drug discovery and Development: Lab to Clinic (DDD LC-2020), SRTM University, Nanded for the research work entitled "Participation of TRPV3 channels in the acute, chronic and withdrawal effect of ethanol for reward and reinforcement" by Katariya RA, Khare KB, Kawade HM, Kokare DM (January 2020).
- ✓ Received First prize in oral research presentation at Annual Young Scholar Conference organized by R.T.M. Nagpur University, Nagpur (AYSC - 2018) during National Science Day Celebration for the research work entitled "Cocaine- and amphetamine-regulated transcript peptide (CART) alleviates the symptoms of MK-801 induced schizophrenic dementia-like condition in rats" by Borkar CD, Bharne AP, Nagalakshmi B, Sakharkar A, Subhedar NK, Kokare DM. (February 28, 2018).
- ✓ Conferred with Best Scientist award by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur on the occasion of Teachers Day celebration on September 5, 2017 at Gurunanak Hall, Nagpur
- ✓ Conferred with Best Poster presentation award for the research work entitled Plumbagin ameliorates memory dysfunction in streptozotocin induced Alzheimer's disease like condition in mice by Kokare DM, Nakhate KT, Aru D, Bharne A, Subhedar NK. Presented at 7th World Ayurveda Congress in International Conclave on Ethnopharmacology at Science City, Kolkata (2016). Pg. No. 33
- ✓ Conferred with Uvnas Prize at 49th Annual Conference of Indian Pharmacological Society organized by PGIMER, Chandigarh (2016) for the research article published in Addiction Biology (2016; 21, 766–775) entitled "Neuropeptide Y system in accumbens shell mediates ethanol self-administration in posterior ventral tegmental area" by Borkar CD, Upadhya MA, Shelkar GP, Subhedar NK, Kokare DM.
- ✓ Conferred with First Prize in Poster presentation at 21st Annual National Convention of Association of Pharmaceutical Teachers of India (APTI) on "Roadmap for quality

pharmacy education and research" held at Manipal (2016) for the research work entitled "Role of energy homeostasis in reproductive behavior: Involvement of cocaine- and amphetamine-regulated transcript peptide (CART)" by **Kokare DM**, Awathale SN, Borkar CD, Subhedar NK.

- ✓ Conferred with Association of Pharmaceutical Teachers of India (APTI) Young Pharmacy Teacher of the Year Award at 21st Annual National Convention of APTI at Manipal on October 2016.
- ✓ UGC Raman Post-Doctoral Research Fellowship awarded for the year 2014-15 to conduct research work at Department of Psychiatry, University of Illinois at Chicago, Illinois, USA during January 20, 2015 to July 19, 2015.
- ✓ Conferred with Association of Pharmaceutical Teachers of India (APTI), Maharashtra Branch Smt. Kishoritai Bhoyar College of Pharmacy Young Teacher Award at Annual Convention of APTI at Pune on December 2014.
- ✓ Received Olson award instituted by the International Neuropeptide Society and given to the authors of the outstanding contribution made to the journal Peptides published by Elsevier Publishing Company for the research article entitled "Nicotine evoked improvement in learning and memory is mediated through NPY Y1 receptors in rat model of Alzheimer's disease" by Rangani RJ, Upadhya MA, Nakhate KT, Kokare DM, Subhedar NK, *Peptides 33; 317-328 (2012)*.
- ✓ Conferred with First Prize in Poster presentation at One-day National conference on "Pharmaceutical Science for Shaping the Future of India" held at Nagpur (2012) for the research work entitled "Influence of melanocortin system on ethanol self-administration in high fat diet fed rats" by Shelkar GP, Kale AD, Kokare DM, Singru PS, Subhedar NK.
- ✓ Conferred with Uvnas Prize at 44th Annual Conference of Indian Pharmacological Society and Challenges Ahead in Translational Pharmacology, Manipal (2011) for the research article published in *British Journal of Pharmacology* (2011, 164; 704-718) entitled "Agmatine in the Hypothalamic Paraventricular Nucleus Stimulates Feeding in Rats: Involvement of Neuropeptide Y" by Taksande BG, Kotagale NR, Nakhate KT, Mali PD, Kokare DM, Hirani K, Subhedar NK, Chopde CT, Ugale RR.

Professional Memberships

- ✓ Life Member, Indian Pharmaceutical Association (IPA)
- ✓ Life Member, Indian Pharmacological Society (IPS)

- ✓ Life Member, The Indian Science Congress Association (ISCA)
- ✓ Life Member, Association of Pharmaceutical Teachers of India (APTI)
- ✓ Life Member, Indian Society of Comparative Endocrinology (ISCE)
- ✓ Member, International Federation of Comparative Endocrine Societies (IFCES)
- ✓ Member, International Society for Neurochemistry (ISN)
- ✓ Member, Vidarbha Pharmacological Society (VPS)
- ✓ Member, Society for Ethnopharmacology (SFE), Indian Chapter

Recent Publications

- ✓ Awathale SN, Waghade AM, Kawade HM, Jadhav G, Choudhary AG, Sagarkar S, Sakharkar AJ, Subhedar NK, Kokare DM (2021). Neuroplastic changes in the superior colliculus and hippocampus in self-rewarding paradigm: Importance of visual cues. *Molecular Neurobiology* Nov 19. doi: 10.1007/s12035-021-02597-2.
- ✓ Awathale SN, Choudhary AG, Subhedar NK, Kokare DM (2021). Neuropeptide CART modulates dopamine turnover in the nucleus accumbens: Insights into the anatomy of rewarding circuits. *Journal of Neurochemistry* Jul 21. doi: 10.1111/jnc.15479.
- ✓ Sagarkar S, Choudhary AG, Balasubramanian N, Awathale SN, Somalwar AR, Pawar N, Kokare DM, Subhedar NK, Sakharkar AJ (2021). LSD1-BDNF activity in lateral hypothalamus-medial forebrain bundle area is essential for reward seeking behavior. *Progress in Neurobiology* 202:102048. doi: 10.1016/j.pneurobio.2021.102048.
- ✓ Balasubramanian N, Sagarkar S, Choudhary AG, Kokare DM, Sakharkar AJ (2021). Epigenetic Blockade of Hippocampal SOD2 Via DNMT3b-Mediated DNA Methylation: Implications in Mild Traumatic Brain Injury-Induced Persistent Oxidative Damage. *Molecular Neurobiology* 58(3):1162-1184.
- ✓ Awathale SN, Dudhbhate BB, Rahangdale RR, Borkar CD, Subhedar NK, Kokare DM (2020). Denial of food to the hungry rat: A novel paradigm for induction and evaluation of anger-like emotion. *Journal of Neuroscience Methods* 341:108791.
- ✓ Upadhya MA, Upadhya HM, Borkar CD, Choudhary AG, Singh U, Chavan P, Sakharkar A, Singru P, Subhedar NK, Kokare DM (2020). Nicotine-induced brain stimulation reward is modulated by melanocortin-4 receptors in ovariectomized rats. *Neuroscience* 431:205-221.
- ✓ Kawade HM, Borkar CD, Shambharkar AS, Singh O, Singru PS, Subhedar NK, Kokare DM (2020). Intracellular mechanisms and behavioral changes in mouse model of attention deficit hyperactivity disorder: Importance of age-specific NMDA receptor blockade. *Pharmacology, Biochemistry and Behavior* 188:172830.