

CURRICULUM VITAE

M.M. Srinivas Bharath, Ph.D.
Professor and Head of the Department
NIMHANS, Bengaluru

Official Address

Department of Clinical Psychopharmacology and Neurotoxicology
National Institute of Mental Health and Neurosciences (NIMHANS)
P.B. No. 2900, Hosur Road, BENGALURU-560029
Karnataka state, INDIA.
Telephone: (080) 26995113/ 26995111 Fax: (080) 26564830
Email: bharath@nimhans.ac.in, thathachar2010@gmail.com
Website: <https://nimhans.ac.in/psychopharmacology/about-us-psychopharmacology/>

Date of birth: October 10, 1971

Nationality: Indian

PROFESSIONAL EXPERIENCE

Year	Position	Institution
2000 (Oct-Dec)	Visiting Student Fellow	Department of Biochemistry and Molecular Biology, University of Melbourne, Melbourne, Australia.
2001 (Feb) -2004 (Dec)	Postdoctoral Research Fellow	Buck Institute for Age Research, Novato, CA, USA.
2005 (Jan-June)	Staff Research Investigator	Buck Institute for Age Research, Novato, CA, USA.
2005 (June) -2009 (June)	Assistant Professor	Department of Neurochemistry, NIMHANS
2009 (July)- 2012 (June)	Associate Professor	Department of Neurochemistry, NIMHANS
2012 (July)- 2018 (June)	Additional Professor	Department of Neurochemistry, NIMHANS
2015 (Nov)- 2018 (May)	Adjunct Faculty	Department of Clinical Neurosciences, NIMHANS
2018 Jul- 2018 Dec	Professor	Department of Neurochemistry, NIMHANS
2018 Dec- till date	Professor	Department of Clinical Psychopharmacology and Neurotoxicology, NIMHANS
2019 April- till date	Head of the Department	Department of Clinical Psychopharmacology and Neurotoxicology, NIMHANS

Subject area: **Biochemistry** Specialization: **Neuroscience**

Area of research: *Redox and mitochondrial dynamics in muscle and brain during health and disease and neurotoxicological paradigms*

Education

Degree	Year	University/Institution
B.Sc. (Biochemistry, Botany, Microbiology)	1992	University of Mysore, Karnataka, India
M.Sc. (Biochemistry)	1994	University of Mysore, Karnataka, India
Ph.D. (Biochemistry)	2002	Department of Biochemistry, Indian Institute of Science, Bangalore, Karnataka, India

Awards and Honors

2020	KT Shetty memorial Oration, Indian Academy of Neurosciences
2019	Sir CV Raman State Award for Young Scientists, Karnataka State Council for Science and Technology, Govt. of Karnataka
2015-16	Member, National Academy of Sciences, India (NASI), Allahabad
2011-12	Young investigator award by the Asia-Pacific Society for Neurochemistry
2010-11	Young investigator award by the International Society for Neurochemistry
2010	Best presentation award in the Kannada Science Congress held at Bangalore
2007-2008	Technical advisor, Cell Works Research India Pvt. Ltd., Bangalore.
2005-2007	International research grant from Parkinson's disease foundation, USA.
2004-2005	National Parkinson Foundation postdoctoral fellowship (USA).
2003-2004	Parkinson's Disease Foundation-National Parkinson Foundation joint postdoctoral fellowship (USA). American Parkinson Disease Association postdoctoral fellowship (USA) (declined).
1994-1999	Junior and Senior Research Fellow (Indian Institute of Science)
1994	First rank and gold medalist in M.Sc. Qualified Graduate Aptitude Test in Engineering (GATE), India
1992	Third rank in B.Sc. for the University with Best Student award in Botany
1987	Merit certificate (48 th rank) in S.S.L.C (X std)

Publications

1. Ranganayaki S, Jamshidi N, Aiyaz M, Rashmi SK, Gayathri N, Harsha PK, Padmanabhan B, Srinivas Bharath MM. Inhibition of mitochondrial complex II in neuronal cells triggers unique pathways culminating in autophagy with implications for neurodegeneration. *Sci Rep.*, 2021;11:1483. doi: 10.1038/s41598-020-79339-2. PMID: 33452321
2. Sunitha B, Kumar M, Gowthami N, Unni S, Gayathri N, Keshava Prasad TS, Nalini A, Polavarapu K, Vengalil S, Preethish-Kumar V, Padmanabhan B, **Srinivas Bharath MM***. Human muscle pathology is associated with altered phosphoprotein profile of mitochondrial proteins in the skeletal muscle. *J Proteomics*, 2020; 211:103556. PubMed PMID: 31655151.
3. Manjula R, Gokhale N, Unni S, Deshmukh P, Reddyrajula R, **Srinivas Bharath MM**, Dalimba U, Padmanabhan B. Design, synthesis, in-vitro evaluation and molecular

docking studies of novel indole derivatives as inhibitors of SIRT1 and SIRT2. *Bioorg Chem.*, 2019; 92:103281. PubMed PMID: 31561106.

4. Unni S, Thiagarajan S, **Srinivas Bharath MM***, Padmanabhan B. Tryptophan Oxidation in the UQCRC1 Subunit of Mitochondrial Complex III (Ubiquinol-Cytochrome C Reductase) in a Mouse Model of Myodegeneration Causes Large Structural Changes in the Complex: A Molecular Dynamics Simulation Study. *Sci Rep.* 2019; 9:10694. PubMed PMID: 31337785.
5. Gowthami N, Sunitha B, Kumar M, Keshava Prasad TS, Gayathri N, Padmanabhan B, **Srinivas Bharath MM***. Mapping the protein phosphorylation sites in human mitochondrial complex I (NADH: Ubiquinone oxidoreductase): A bioinformatics study with implications for brain aging and neurodegeneration. *J Chem Neuroanat.* 2019; 95:13-28. PubMed PMID: 29499254
6. Debashree B, Kumar M, Keshava Prasad TS, Natarajan A, Christopher R, Nalini A, Bindu PS, Gayathri N, **Srinivas Bharath MM***. Mitochondrial dysfunction in human skeletal muscle biopsies of lipid storage disorder. *J Neurochem.* 2018;145: 323-341 (COVER PAGE ARTICLE). PubMed PMID: 29424033
7. Bindu PS, Sonam K, Chiplunkar S, Govindaraj P, Nagappa M, Vekhande CC, Aravinda HR, Ponmalar JJ, Mahadevan A, Gayathri N, **Bharath MS**, Sinha S, Taly AB. Mitochondrial leuko encephalopathies: A border zone between acquired and inherited white matter disorders in children? *Mult Scler Relat Disord.* 2018; 20: 84-92. PubMed PMID: 29353736
8. Bindu PS, Sonam K, Govindaraj P, Govindaraju C, Chiplunkar S, Nagappa M, Kumar R, Vekhande CC, Aravinda HR, Gayathri N, **Srinivas Bharath MM**, Ponmalar JNJ, Philip M, Vandana VP, Khan NA, Nunia V, Paramasivam A, Sinha S, Thangaraj K, Taly AB. Outcome of epilepsy in patients with mitochondrial disorders: Phenotype genotype and magnetic resonance imaging correlations. *Clin Neurol Neurosurg.* 2018; 164:182-189. PubMed PMID: 29272804
9. Lavanya C, Venkataswamy MM, Sibin MK, **Srinivas Bharath MM**, Chetan GK. Down regulation of human telomerase reverse transcriptase (hTERT) expression by BIBR1532 in human glioblastoma LN18 cells. *Cytotechnology* 2018; 70: 1143-1154. PMID: 29546682
10. Shinomol GK, Ranganayaki S, Joshi AK, Gayathri N, Gowda H, Muralidhara, **Srinivas Bharath MM***. Characterization of age-dependent changes in the striatum: Response to the mitochondrial toxin 3-nitropropionic acid. *Mech Ageing Dev.* 2017;161:66-82. PubMed PMID:27143313
11. **Srinivas Bharath MM***. Post-Translational Oxidative Modifications of Mitochondrial Complex I (NADH: Ubiquinone Oxidoreductase): Implications for Pathogenesis and Therapeutics in Human Diseases. *J Alzheimers Dis.* 2017; 60 (s1): S69-S86. PubMed PMID: 28582861
12. Mythri RB, Raghunath NR, Narwade SC, Pandareesh MDR, Sabitha KR, Aiyaz M, Chand B, Sule M, Ghosh K, Kumar S, Shankarappa B, Soundararajan S, Alladi PA,

- Purushottam M, Gayathri N, Deobagkar DD, Laxmi TR, **Srinivas Bharath MM***. Manganese- and 1-methyl-4-phenylpyridinium-induced neurotoxicity display differences in morphological, electro physiological and genome-wide alterations: implications for idiopathic Parkinson's disease. *J Neurochem.* 2017;143: 334-358 (**COVER PAGE ARTICLE**). PubMed PMID: 28801915
13. Nagappa M, Bindu PS, Chiplunkar S, Govindaraj P, Narayanappa G, Krishnan A, **Bharath MM**, Swaminathan A, Saini J, Arvinda HR, Sinha S, Mathuranath PS, Taly AB. Hypersomnolence-hyperkinetic movement disorder in a child with compound heterozygous mutation in 4-amino butyrate amino transferase (ABAT) gene. *Brain Dev.* 2017; 39:161-165. PubMed PMID: 27596361
 14. Sonam K, Bindu PS, **Srinivas Bharath MM**, Govindaraj P, Gayathri N, Arvinda HR, Chiplunkar S, Nagappa M, Sinha S, Khan NA, Nunia V, Paramasivam A, Thangaraj K, Taly AB. Mitochondrial oxidative phosphorylation disorders in children: Phenotypic, genotypic and biochemical correlations in 85 patients from South India. *Mitochondrion.* 2017; 32:42-49. PubMed PMID: 27826120
 15. Shilpa BM, Bhagya V, Harish G, **Srinivas Bharath MM**, Shankaranarayana Rao BS. Environmental enrichment ameliorates chronic immobilisation stress-induced spatial learning deficits and restores the expression of BDNF, VEGF, GFAP and glucocorticoid receptors. *Prog Neuropsychopharmacol Biol Psychiatry.* 2017; 76:88-100.
 16. Chiplunkar S, Bindu PS, Nagappa M, Panikulam BB, Arvinda HR, Govindaraj P, **Srinivas Bharath MM**, Gayathri N, Jessiena Ponmalar JN, Mathuranath PS, Sinha S, Taly AB. Novel magnetic resonance imaging findings in a patient with short chain acyl CoA dehydrogenase deficiency. *Metab Brain Dis.* 2017; 32: 967-970. PubMed PMID: 28374236
 17. Sharma A, Varghese AM, Vijaylakshmi K, Sumitha R, Prasanna VK, Shruthi S, Chandrasekhar Sagar BK, Datta KK, Gowda H, Nalini A, Alladi PA, Christopher R, Sathyaprabha TN, Raju TR, **Srinivas Bharath MM***. Cerebrospinal Fluid from Sporadic Amyotrophic Lateral Sclerosis Patients Induces Mitochondrial and Lysosomal Dysfunction. *Neurochem Res.* 2016; 41: 965-84. PubMed PMID: 26646005
 18. Sunitha B, Gayathri N, Kumar M, Keshava Prasad TS, Nalini A, Padmanabhan B, **Srinivas Bharath MM***. Muscle biopsies from human muscle diseases with myopathic pathology reveal common alterations in mitochondrial function. *J Neurochem.* 2016; 138:174-191. (**COVER PAGE ARTICLE**) PubMed PMID: 27015874
 19. Pandareesh MD, Shrivash MK, Naveen Kumar HN, Misra K, **Srinivas Bharath MM***. Curcumin Monoglucoside Shows Improved Bioavailability and Mitigates Rotenone Induced Neurotoxicity in Cell and Drosophila Models of Parkinson's Disease. *Neurochem Res.* 2016; 41:3113-3128. PubMed PMID: 27535828
 20. Bindu PS, Govindaraju C, Sonam K, Nagappa M, Chiplunkar S, Kumar R, Gayathri N, **Bharath MS**, Arvinda HR, Sinha S, Khan NA, Govindaraj P, Nunia V, Paramasivam A, Thangaraj K, Taly AB. Peripheral neuropathy in genetically characterized patients with

- mitochondrial disorders: A study from south India. *Mitochondrion*. 2016; 27: 1-5. PubMed PMID: 26762927
21. Prasad SN, **Bharath MM**, Muralidhara. Neurorestorative effects of eugenol, a spice bioactive: Evidence in cell model and its efficacy as an intervention molecule to abrogate brain oxidative dysfunctions in the streptozotocin diabetic rat. *Neurochem Int*. 2016; 95: 24-36. PubMed PMID: 26519099
 22. Manuel J-M, Ghosh D, Narasinga Rao KVL, Sibin MK, Venkatesh HN, Lavanya Ch, Arati S, Dhananjaya I Bhat, **Srinivas Bharath MM**, Chetan GK. Role of concurrent methylation pattern of MGMT, TP53 and CDKN2A genes in the prognosis of high grade glioma. *J Carcinog Mutagene* 2016; 7: 250. DOI: 10.4172/2157-2518.1000250
 23. Chiplunkar S, Bindu PS, Nagappa M, Bineesh C, Govindaraj P, Gayathri N, **Bharath MM**, Arvinda HR, Mathuranath PS, Sinha S, Taly AB. Huppke-Brendel syndrome in a seven months old boy with a novel 2-bp deletion in SLC33A1. *Metab Brain Dis*. 2016; 31:1195-1198. PubMed PMID: 27306358
 24. Lavanya C, Sibin MK, **Srinivas Bharath MM**, Manoj MJ, Venkataswamy MM, Bhat DI, Narasinga Rao KV, Chetan GK. RNA interference mediated down-regulation of human telomerase reverse transcriptase (hTERT) in LN18 cells. *Cytotechnology*. 2016; 68:2311-2321. PubMed PMID: 27757712
 25. Harish G, Mahadevan A, Pruthi N, Sreenivasamurthy SK, Puttamallesh VN, Keshava Prasad TS, Shankar SK, **Srinivas Bharath MM***. Characterization of traumatic brain injury in human brains reveals distinct cellular and molecular changes in contusion and pericontusion. *J Neurochem*. 2015;134: 156-72. (COVER PAGE ARTICLE). PubMed PMID: 25712633
 26. Pandareesh MD, Mythri RB, **Srinivas Bharath MM***. Bioavailability of dietary polyphenols: Factors contributing to their clinical application in CNS diseases. *Neurochem Int*. 2015; 89:198-208. PubMed PMID: 26163045
 27. Nalini A, Polavarapu K, Sunitha B, Kulkarni S, Gayathri N, **Srinivas Bharath MM**, Modi S, Preethish-Kumar V. A prospective study on the immunophenotypic characterization of limb girdle muscular dystrophies 2 in India. *Neurol India*. 2015; 63: 548-60. PubMed PMID: 26238890
 28. Bindu PS, Arvinda H, Taly AB, Govindaraju C, Sonam K, Chiplunkar S, Kumar R, Gayathri N, **Bharath MMS**, Nagappa M, Sinha S, Khan NA, Govindaraj P, Nunia V, Paramasivam A, Thangaraj K. Magnetic resonance imaging correlates of genetically characterized patients with mitochondrial disorders: A study from south India. *Mitochondrion*. 2015; 25:6-16. PubMed PMID: 26341968
 29. Mythri RB, Joshi AK, **Bharath MMS***. Nutraceuticals and other natural products in Parkinson's disease therapy: Focus on clinical applications. In: Watson RR, Preedy VR (eds.) *Bioactive Nutraceuticals and Dietary Supplements in Neurological and Brain Disease*. Elsevier Inc. 2015; 421-426.

30. Ramadasan-Nair R, Gayathri N, Mishra S, Sunitha B, Mythri RB, Nalini A, Subbannayya Y, Harsha HC, Kolthur-Seetharam U, **Srinivas Bharath MM***. Mitochondrial alterations and oxidative stress in an acute transient mouse model of muscle degeneration: implications for muscular dystrophy and related muscle pathologies. *J Biol Chem*. 2014; 289: 485-509. (COVER PAGE ARTICLE). PubMed PMID: 24220031
31. Shankar SK, Mahadevan A, Harish G, **Srinivas Bharath MM**. Human brain tissue repository: A national facility fostering neuroscience research. *Proc. Natl Acad Sci (India) Section B: Biol Sciences*. 2014; 84: 239-250. DOI: <https://doi.org/10.1007/s40011-013-0212-8>
32. Francis A, Sunitha B, Vinodh K, Polavarapu K, Katkam SK, Modi S, **Bharath MM**, Gayathri N, Nalini A, Thangaraj K. Novel TCAP mutation c.32C>A causing limb girdle muscular dystrophy 2G. *PLoS One*. 2014; 9: e102763. PubMed PMID: 25055047
33. Bindu PS, Taly AB, Sonam K, Govindaraju C, Arvinda HR, Gayathri N, **Bharath MM**, Ranjith D, Nagappa M, Sinha S, Khan NA, Thangaraj K. Bilateral hypertrophic olivary nucleus degeneration on magnetic resonance imaging in children with Leigh and Leigh-like syndrome. *Br J Radiol*. 2014; 87: 20130478. PubMed PMID: 24470583
34. Sonam K, Khan NA, Bindu PS, Taly AB, Gayathri N, **Bharath MM**, Govindaraju C, Arvinda HR, Nagappa M, Sinha S, Thangaraj K. Clinical and magnetic resonance imaging findings in patients with Leigh syndrome and SURF1 mutations. *Brain Dev*. 2014; 36: 807-12. PubMed PMID: 24262866
35. Harish G, Venkateshappa C, Mahadevan A, Pruthi N, **Bharath MM***, Shankar SK. Mitochondrial function in human brains is affected by pre- and post mortem factors. *Neuropathol Appl Neurobiol*. 2013; 39: 298-315. PubMed PMID: 22639898.
36. Harish G, Mahadevan A, **Srinivas Bharath MM***, Shankar SK. Alteration in glutathione content and associated enzyme activities in the synaptic terminals but not in the non-synaptic mitochondria from the frontal cortex of Parkinson's disease brains. *Neurochem Res*. 2013; 38: 186-200. PubMed PMID: 23070472
37. Shinomol GK, Raghunath N, **Bharath MM**, Muralidhara. Prophylaxis with Bacopa monnieri attenuates acrylamide induced neurotoxicity and oxidative damage via elevated antioxidant function. *Cent Nerv Syst Agents Med Chem*. 2013; 13: 3-12. PubMed PMID: 23092408.
38. Varghese AM, Sharma A, Mishra P, Vijayalakshmi K, Harsha HC, Sathyaprabha TN, **Bharath SM**, Nalini A, Alladi PA, Raju TR. Chitotriosidase - a putative biomarker for sporadic amyotrophic lateral sclerosis. *Clin Proteomics*. 2013; 10: 19. PubMed PMID: 24295388
39. Venkateshappa C, Harish G, Mythri RB, Mahadevan A, **Bharath MM***, Shankar SK. Increased oxidative damage and decreased antioxidant function in aging human substantia nigra compared to striatum: implications for Parkinson's disease. *Neurochem Res*. 2012; 37: 358-69. PubMed PMID: 21971758

40. Renjini R, Gayathri N, Nalini A, **Srinivas Bharath MM***. Oxidative damage in muscular dystrophy correlates with the severity of the pathology: role of glutathione metabolism. *Neurochem Res.* 2012; 37: 885-898. PubMed PMID: 22219131
41. Shinomol GK, Mythri RB, **Srinivas Bharath MM**, Muralidhara. Bacopa monnieri extract offsets rotenone-induced cytotoxicity in dopaminergic cells and oxidative impairments in mice brain. *Cell Mol Neurobiol.* 2012; 32:455-465. PubMed PMID: 22160863
42. Shinomol GK, **Bharath MM**, Muralidhara. Pretreatment with Bacopa monnieri extract offsets 3-nitropropionic acid induced mitochondrial oxidative stress and dysfunctions in the striatum of prepubertal mouse brain. *Can J Physiol Pharmacol.* 2012; 90: 595-606. PubMed PMID: 22472017
43. Renjini R, Gayathri N, Nalini A, **Srinivas Bharath MM***. Analysis of calpain-3 protein in muscle biopsies of different muscular dystrophies from India. *Indian J Med Res.* 2012 Jun;135(6):878-86. PubMed PMID: 22825607
44. Mythri RB, **Bharath MM***. Curcumin: a potential neuroprotective agent in Parkinson's disease. *Curr Pharm Des.* 2012; 18:91-99. PubMed PMID: 22211691.
45. Shinomol GK, **Bharath MM**, Muralidhara. Neuromodulatory Propensity of Bacopa monnieri Leaf Extract Against 3-Nitropropionic Acid-Induced Oxidative Stress: In Vitro and In Vivo Evidences. *Neurotox Res.* 2012; 22:102-114. PubMed PMID: 22203611
46. Harish G, Venkateshappa C, Mahadevan A, Pruthi N, **Srinivas Bharath MM***, Shankar SK. Effect of Premortem and Postmortem Factors on the Distribution and Preservation of Antioxidant Activities in the Cytosol and Synaptosomes of Human Brains. *Biopreserv Biobank.* 2012; 10: 253-265. PMID: 24835064.
47. Venkateshappa C, Harish G, Mahadevan A, **Srinivas Bharath MM***, Shankar SK. Elevated oxidative stress and decreased antioxidant function in the human hippocampus and frontal cortex with increasing age: implications for neurodegeneration in Alzheimer's disease. *Neurochem Res.* 2012; 37: 1601-14. PubMed PMID: 22461064
48. Mythri RB, Harish G, **Bharath MM***. Therapeutic potential of natural products in Parkinson's disease. *Recent Pat Endocr Metab Immune Drug Discov.* 2012; 6:181-200. PubMed PMID: 22827714
49. Sharma P, Murthy P, **Bharath MM**. Chemistry, metabolism, and toxicology of cannabis: clinical implications. *Iran J Psychiatry.* 2012 Fall;7(4):149-56. PubMed PMID: 23408483.
50. Mythri RB, Harish G, Dubey SK, Misra K, **Bharath MM***. Glutamoyl diester of the dietary polyphenol curcumin offers improved protection against peroxynitrite-mediated nitrosative stress and damage of brain mitochondria in vitro: implications for Parkinson's disease. *Mol Cell Biochem.* 2011; 347:135-43. PubMed PMID: 20972609.

51. Sharma P, Murthy P, **Bharath MM**. Disulfiram in a 'traditional' medicine sold to patients with alcohol dependence in India. *Addiction*. 2011; 106:1870-1871. PubMed PMID: 21793969.
52. Shinomol GK, Muralidhara, **Bharath MM***. Exploring the role of "Brahmi" (*Bocopa monnieri* and *Centella asiatica*) in brain function and therapy. *Recent Pat Endocr Metab Immune Drug Discov*. 2011; 5:33-49. PubMed PMID: 22074576.
53. Mythri RB, Veena J, Harish G, Shankaranarayana Rao BS, **Srinivas Bharath MM***. Chronic dietary supplementation with turmeric protects against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-mediated neurotoxicity in vivo: implications for Parkinson's disease. *Br J Nutr*. 2011;106:63-72. PubMed PMID: 21473798
54. Mythri RB, Venkateshappa C, Harish G, Mahadevan A, Muthane UB, Yasha TC, **Srinivas Bharath MM***, Shankar SK. Evaluation of markers of oxidative stress, antioxidant function and astrocytic proliferation in the striatum and frontal cortex of Parkinson's disease brains. *Neurochem Res*. 2011; 36:1452-1463. PubMed PMID: 21484266
55. Harish G, Venkateshappa C, Mahadevan A, Pruthi N, **Srinivas Bharath MM***, Shankar SK. Glutathione metabolism is modulated by postmortem interval, gender difference and agonal state in postmortem human brains. *Neurochem Int*. 2011; 59:1029-1042. PubMed PMID: 21945455
56. Sultana Z, Paleologou KE, Al-Mansoori KM, Ardah MT, Singh N, Usmani S, Jiao H, Martin FL, **Bharath MM**, Vali S, El-Agnaf OM. Dynamic modeling of α -synuclein aggregation in dopaminergic neuronal system indicates points of neuroprotective intervention: experimental validation with implications for Parkinson's therapy. *Neuroscience* 2011; 199:303-317. PubMed PMID: 22056602.
57. Harish G, Venkateshappa C, Mahadevan A, Pruthi N, **Srinivas Bharath MM***, Shankar SK. Effect of Storage Time, Postmortem Interval, Agonal State, and Gender on the Postmortem Preservation of Glial Fibrillary Acidic Protein and Oxidatively Damaged Proteins in Human Brains. *Biopreserv Biobank*. 2011; 9: 379-387. PubMed PMID: 24836634.
58. Mythri RB, Harish G, Raghunath N, **Srinivas Bharath MM***. Therapeutic potential of polyphenols in Parkinson's disease. In "Parkinson's disease" (Ed. David I. Finkelstein) Intech Open access publisher, Rijeka, Croatia, 2011, pp115-150.
59. Harish G, Venkateshappa C, Mahadevan A, Pruthi N, **Bharath MM***, Shankar SK. Effect of storage time, postmortem interval, agonal state, and gender on the postmortem preservation of glial fibrillary acidic protein and oxidatively damaged proteins in human brains. *Biopreserv Biobank*. 2011; 9: 379-87. PubMed PMID: 24836634
60. Mythri RB, Harish G, Dubey SK, Misra K, Bharath MM. Glutamoyl diester of the dietary polyphenol curcumin offers improved protection against peroxynitrite-mediated nitrosative stress and damage of brain mitochondria in vitro: implications for Parkinson's disease. *Mol Cell Biochem*. 2011; 347:135-43. PubMed PMID: 20972609

61. Harish G, Venkateshappa C, Mythri RB, Dubey SK, Mishra K, Singh N, Vali S, **Bharath MM***. Bioconjugates of curcumin display improved protection against glutathione depletion mediated oxidative stress in a dopaminergic neuronal cell line: Implications for Parkinson's disease. *Bioorg Med Chem.* 2010; 18:2631-2638. PubMed PMID: 20227282.
62. Sharma P, **Bharath MM***, Murthy P. Qualitative high performance thin layer chromatography (HPTLC) analysis of cannabinoids in urine samples of Cannabis abusers. *Indian J Med Res.* 2010; 132:201-208. PubMed PMID: 20716821.
63. Chandana R, Mythri RB, Mahadevan A, Shankar SK, Srinivas Bharath MM. Biochemical analysis of protein stability in human brain collected at different post-mortem intervals. *Indian J Med Res.* 2009; 129: 189-99. PubMed PMID: 19293447.
64. Vali S, **Srinivas Bharath MM***. Dynamic virtual prototype of Parkinson's disease at the cellular and molecular abstraction level: Focus on neurodegeneration physiology. *Biobytes newsletter* 2009; 5:40-46.
65. Vali S, Chinta SJ, Peng J, Sultana Z, Singh N, Sharma P, Sharada S, Andersen JK, **Bharath MM***. Insights into the effects of alpha-synuclein expression and proteasome inhibition on glutathione metabolism through a dynamic in silico model of Parkinson's disease: validation by cell culture data. *Free Radic Biol Med.* 2008; 45: 1290-301. PubMed PMID: 18761401
66. Jagatha B, Mythri RB, Vali S, **Bharath MM***. Curcumin treatment alleviates the effects of glutathione depletion in vitro and in vivo: therapeutic implications for Parkinson's disease explained via in silico studies. *Free Radic Biol Med.* 2008;44: 907-17. PubMed PMID: 18166164.
67. Vali S, Mythri RB, Jagatha B, Padiadpu J, Ramanujan KS, Andersen JK, Gorin F, **Bharath MM***. Integrating glutathione metabolism and mitochondrial dysfunction with implications for Parkinson's disease: a dynamic model. *Neuroscience.* 2007; 149: 917-30. PubMed PMID: 17936517.
68. Mythri RB, Jagatha B, Pradhan N, Andersen J, **Bharath MM***. Mitochondrial complex I inhibition in Parkinson's disease: how can curcumin protect mitochondria? *Antioxid Redox Signal.* 2007; 9: 399-408. PubMed PMID: 17184173.
69. Ramesh S, **Bharath MM**, Chandra NR, Rao MR. A K52Q substitution in the globular domain of histone H1t modulates its nucleosome binding properties. *FEBS Lett.* 2006; 580: 5999-6006. PubMed PMID: 17052712.
70. Hsu M, **Srinivas B**, Kumar J, Subramanian R, Andersen J. Glutathione depletion resulting in selective mitochondrial complex I inhibition in dopaminergic cells is via an NO-mediated pathway not involving peroxynitrite: implications for Parkinson's disease. *J Neurochem.* 2005; 92: 1091-103.
71. **Bharath S**, Andersen JK. Glutathione depletion in a midbrain-derived immortalized dopaminergic cell line results in limited tyrosine nitration of mitochondrial complex I subunits: implications for Parkinson's disease. *Antioxid Redox Signal.* 2005; 7: 900-10. PubMed PMID: 15998245.

72. Schilling B, **Bharath MMS**^{\$}, Row RH, Murray J, Cusack MP, Capaldi RA, Freed CR, Prasad KN, Andersen JK, Gibson BW. Rapid purification and mass spectrometric characterization of mitochondrial NADH dehydrogenase (Complex I) from rodent brain and a dopaminergic neuronal cell line. *Mol Cell Proteomics*. 2005; 4: 84-96. PubMed PMID: 15591592.
73. **Bharath S**, Andersen JK. Catecholamines and protein deposition in Parkinson's and Alzheimer's disease: old medicine, new targets. *Rejuvenation Res*. 2004; 7: 92-4. PubMed PMID: 15312295.
74. **Bharath MM**, Chandra NR, Rao MR. Molecular modeling of the chromatosome particle. *Nucleic Acids Res*. 2003; 31: 4264-74. PubMed PMID: 12853645.
75. **Bharath MM**, Chandra NR, Rao MR. Prediction of an HMG-box fold in the C-terminal domain of histone H1: insights into its role in DNA condensation. *Proteins*. 2002; 49:71-81. PubMed PMID: 12211017.
76. **Bharath MM**, Ramesh S, Chandra NR, Rao MR. Identification of a 34 amino acid stretch within the C-terminus of histone H1 as the DNA-condensing domain by site-directed mutagenesis. *Biochemistry*. 2002; 41:7617-27. PubMed PMID: 12056893.
77. **Bharath S**, Hsu M, Kaur D, Rajagopalan S, Andersen JK. Glutathione, iron and Parkinson's disease. *Biochem Pharmacol*. 2002; 64: 1037-48. PubMed PMID: 12213603.
78. **Bharat S***, Cochran BC, Hsu M, Liu J, Ames BN, Andersen JK. Pre-treatment with R-lipoic acid alleviates the effects of GSH depletion in PC12 cells: implications for Parkinson's disease therapy. *Neurotoxicology*. 2002; 23: 479-86. PubMed PMID: 12428720.
79. **Bharath S**, Hsu M, Kaur D, Rajagopalan S, Andersen JK. Glutathione, iron and Parkinson's disease. *Biochem Pharmacol*. 2002; 64: 1037-48. PubMed PMID: 12213603.
80. Andersen JK, Kumar J, **Srinivas B**, Kaur D, Hsu M, Rajagopalan S. The hunt for a cure for Parkinson's disease. *Sci Aging Knowledge Environ*. 2001; 2001: re1. PubMed PMID: 14602952
81. **Bharath MM**, Khadake JR, Rao MR. Expression of rat histone H1d in Escherichia coli and its purification. *Protein Expr Purif*. 1998; 12: 38-44. PubMed PMID: 9473455.

*Corresponding author

^{\$}Joint first author

RESEARCH GRANTS RECEIVED FROM: ICMR, DST, DBT, SERB (India) and National Parkinson Foundation (USA)

SCIENTIFIC PRESENTATIONS: Around 50

SCIENTIFIC PRESENTATIONS IN KANNADA:

1. Invited speaker at the 5th Kannada Science congress conducted by Mangalore University at Mangalore (Sep 15-17), 2009. **Title of the talk:** “Neurodegeneration in Parkinson’s disease: Role of oxidative stress” (Parkinsan rogadoalli narashithileekarana: utkarshana ottadada paatra)
2. Invited speaker at the 6th Kannada Science congress conducted by Veterinary college, Bangalore (Sep 15-17), 2009. **Title of the talk:** “Curcumin: A novel therapeutic molecule for Parkinson’s disease?” (Curcumin: Parkinsan rogakka hosa oushadhave?)

11. Contribution to National/International issues; If any.

i. Establishment of “Neurotoxicology” as a new field/discipline in neuroscience in NIMHANS: Instrumental in establishing the “Neurotoxicology laboratory” in the Neurobiology Research Center (NRC), NIMHANS in May 2012 and serving as Faculty-in-Charge of the laboratory till date.

During the past decades, there has been increasing recognition of the role of neurotoxicology in the fields of Neurology and Psychiatry. With a view to develop the study of neurotoxicology at NIMHANS, the Neurotoxicology Laboratory at NRC was amalgamated with the Department of Psychopharmacology and rechristened as “Department of Clinical Psychopharmacology and Neurotoxicology (CPNT)” in July 2019 with Prof. M.M. Srinivas Bharath heading the Department. This is ***the only Department in the country*** that engages in basic and clinical neurotoxicology work (Diagnostics, Training and Research).

ii. Introduction of novel diagnostic tests:

a. Biochemical test for mitochondrial diseases and related neurological disorders:

Involved in establishing mitochondrial enzyme assays for mitochondrial disorders using muscle biopsies. These are offered as diagnostic tests by the Neuromuscular lab, NRC, NIMHANS. The assays include mitochondrial complex I, II, III, IV and Citrate synthase.

b. Biochemical test for muscle proteins in patients with muscular dystrophies:

Involved in establishing western blot assay for muscle proteins in muscle biopsies from suspected muscular dystrophy cases. This test is offered by the Neuromuscular lab, NRC, NIMHANS. The proteins tested include Calpain-3, Dysferlin, Telethonin, and alpha-dystroglycan.

*This is **one-of-its-kind diagnostic facility offering both set of tests in the country** that receives samples from NIMHANS and other Hospitals in Bangalore and other cities in India.*

iii. Popularization of science

a. Television programmes

1. Brain bank (miduLu bank), 30 min programme **in Kannada** on Doordarshan-Chandana, Bangalore (Oct 20, 2009)

2. Parkinson's disease (paarkinsan rOga), 30 min programme **in Kannada** on Doordarshan-Chandana, Bangalore (Jan 17, 2010)
3. Documentary programme **in English** titled “What happens in a Brain bank” in the series “A Question of Science Television” on Doordarshan-National (DD-1) (May 14, 2014).
4. Programme **in Kannada** titled “Brain bank and brain donation” on the daily Talk show “Morning with Murali” on Suvarna channel (Dec 12, 2014).
5. Documentary programme **in English** titled “Turmeric, a pinch of sunshine” in the documentary series “Wise spice” under “Spices of India” on Doordarshan-National (DD1), (Oct 17, 2015).

b. Educational videos in English and Kannada:

Contributed to the conceptualization, coordination, editing and Direction of “Brain and Behaviour”, an educational video series on Neuroscience and Mental Health:

This series in **English and Kannada** is an ongoing programme of NIMHANS, that aims to provide scientific education and create public awareness about concepts in neuroscience and mental health including diseases of the central nervous system. Faculty members and Residents/Students of various departments of NIMHANS are resource persons in these videos.

Following are the links to the videos:

1. NIMHANS website: <https://nimhans.ac.in/health-information-nimhans/brain-behaviour-educational-videos/>
2. YouTube: <https://www.youtube.com/channel/UCzCR6-SeLnDIPd12wXgu5lg>

Following are the details of the individual videos:

No.	Video Title and YouTube link
1.	What are neuroinfections? Link: https://youtu.be/7925fIEk1GY
2.	What is Neurocysticercosis Link: https://youtu.be/qXzNEAJ5CgU
3.	What is Neuro tuberculosis? Link: https://youtu.be/V-bKKbTpFkw
4.	Importance of hand hygiene in community and healthcare to prevent infection Link: https://youtu.be/KqXvNZB7NAU
5.	What is Post-partum depression Link: https://youtu.be/Jrfcqi-1PaU
6.	Music and Brain Link: https://youtu.be/DCZhXXnbgSU
7.	Can music help persons who have neurological and psychiatric conditions? Link: https://youtu.be/J82eKKIRWOA
8.	Developmental disabilities among young children in India Link: https://youtu.be/J6txNPDygK0
9.	Fetal programming of paediatric diseases Link: https://youtu.be/pijFnV6dypE
10.	How to minimize stigma associated with mental illness?

	Link: https://youtu.be/llrkDEhZK2U
11.	Does childhood stress affect the behaviour of people? Link: https://youtu.be/OV32_G-abg
12.	Importance of rehabilitation for persons with mental illness Link: https://youtu.be/XCz_p-MLPWs
13.	Specific learning disorders Link: https://youtu.be/gIyEpbMNaYw
14.	Deliberate self-harm Link: https://youtu.be/bDToZJvnBiw
15.	How to handle temper tantrums in children Link: https://youtu.be/SthCYKCrL7w
16.	Does your gut influence your brain? Link: https://youtu.be/u_UDxFB7Xo4
17.	Diabetes during pregnancy Link: https://youtu.be/Nefnuu9NxjA
18.	Your child's refusal to go to school Link: https://youtu.be/CROxP57l4WI
19.	Anxiety in children Link: https://youtu.be/yksCtS8SVxI
20.	Developmental delay in children Link: https://youtu.be/duByIOE9BV4
21.	Attention Deficit Hyperactivity Disorder (ADHD) Link: https://youtu.be/Kj3887WoFMw
22.	Childhood depression Link: https://youtu.be/OqSiqh7mAQU
23.	Mobile/Internet addiction (In English) Link: https://youtu.be/idvdtvmvH1w
24.	Mobile/Internet addiction (In Kannada) Link: https://youtu.be/1ZZ3mkd7Zdc
25.	Music and mental health Link: https://youtu.be/qHChZjt0JXI
26.	How to lead a productive life after stroke Link: https://youtu.be/KNghox4YH-I
27.	How to lead a productive life after stroke? (In Kannada) Link: https://youtu.be/BCnZLih7IGo
28.	Ventilator- The machine that breathes for you Link: https://youtu.be/VGQFewtGLNM
29.	What is anaesthesia and how does it work? Link: https://youtu.be/AkYN3WzR1j4
30.	How to save a life? Learn CPR Link: https://youtu.be/HbtDLCAWIPU
31.	Cancer: Genetics and therapy Link: https://youtu.be/gamhdZzW3-E
32.	Can depression influence the way a person thinks? Link: https://youtu.be/bE1HP-znOg0
33.	Understanding children in conflict with law Link: https://youtu.be/Kwtsd6CGSRw
34.	Pain management Link: https://youtu.be/AJFCBTdO3hY

35.	Schizophrenia-An overview Link: https://youtu.be/vW8A8uXqLrQ
36.	Can different arms of Yoga be explained in the context of mental health? (In English) Link: https://youtu.be/9Tb5jpHI9hU
37.	Can different arms of Yoga be explained in the context of mental health? (In Kannada) Link: https://youtu.be/xifpMFt3H8s
38.	Are there references of mental health and psychology in Yoga shastra? (In English) Link: https://youtu.be/5RVcU-jLaKg
39.	Are there references of mental health and psychology in Yoga shastra? (In Kannada) Link: https://youtu.be/psDKAo3fOh8
40.	Is there a difference between the brain of a person practising Yoga vs. a person who is not? (In English) Link: https://youtu.be/u6N1bqErFtE
41.	Is there a difference between the brain of a person practising Yoga vs a person who is not? (In Kannada) Link: https://youtu.be/VgrxRqViLgo
42.	Does Yoga practice help in the treatment of Psychiatric diseases? (In English) Link: https://youtu.be/rGKqDykBUBw
43.	Does Yoga practice help in the treatment of Psychiatric diseases? (In Kannada) Link: https://youtu.be/Np1kSQZREXw
44.	Modern medicine vs. traditional medicine: Which is better? (In English) Link: https://youtu.be/pHyimA9rgQo
45.	Mental exercises to help people with psychiatric illnesses Link: https://youtu.be/a0OrKR9CAm
46.	CT scan of the brain Link: https://youtu.be/uXmNV2lnTuI
47.	Brain tumours Editing: https://youtu.be/ManwGsRv9XU
48.	Head injury Link: https://youtu.be/xOIh9Y-t7No
49.	How to test for drug abuse in people Link: https://youtu.be/fM8sfVJGJjA
50.	Skeletal muscle and human body Link: https://youtu.be/wg9HekTWGE4
51.	Testing of skeletal muscle in a hospital Link: https://youtu.be/tj6bnaRz7g8
52.	Parkinson's disease: Caucasians vs. Asian Indians Link: https://youtu.be/pwi4KS84dt8
53.	Biopsy of skeletal muscle Link: https://youtu.be/0CGRSrPXlSk
54.	Nutrition and Mental Health Link: https://youtu.be/yuGbKFAkGjI
55.	Is Parkinson's a genetic disease? Link: https://youtu.be/JLhxbzJpDRc
56.	Non-motor symptoms in Parkinson's disease

	Link: https://youtu.be/ROcrOd4-Zxg
57.	Treatment options in Parkinson's disease Link: https://youtu.be/UGBPV3WedGk
58	Male brain vs. Female brain Link: https://youtu.be/GDJnVBCAneo
59	Life style modifications advised for persons with Parkinson's disease Link: https://youtu.be/t1P3uO1-k-Y
60	Complementary therapies for drug treatment in patients with Parkinson's disease Link: https://youtu.be/BYpR0Rit21M
61	Human brain and sleep Link: https://youtu.be/5CQb4AuSfkU
62	Psychiatric problems in Parkinson's disease-Psychosis Link: https://youtu.be/x7by7Q8sXic
63	Series on Depression: Episode 1- Introduction Link: https://youtu.be/88llU-uAsik
64	Series on Depression: Episode 2- Prevalence in India Link: https://youtu.be/kgMjkBlaXQ8
65	Parkinson's disease-An introduction (In Kannada) Link: https://youtu.be/rs7VbE5g8H0
66	Parkinson's disease-How is this caused? (In Kannada) Link: https://youtu.be/aR7b2HSZEXo
67	Series on Depression- Episode 3- Treatment Link: https://youtu.be/qb9nr-FtdcM
68	Series on Depression-Episode 4- Electroconvulsive therapy (ECT) Link: https://youtu.be/kzMEa7ObjbE
69	Series on Depression-Episode 5- Psychotherapy for depression Link: https://youtu.be/z1-7ou7p2hI
70	Series on Depression-Episode 5- Psychotherapy for depression Link: https://youtu.be/CI0y-ruIW4E
71	Road safety and Precautions Link: https://youtu.be/7Yi1nH5hkco
72	Road traffic accident, head injury and role of a bystander Link: https://youtu.be/F7QXnrd0MOK
73	Road accidents and head injury-educational video/documentary film Link: https://youtu.be/mK1qHga-g50
74	Science Day 2019- NIMHANS, Bangalore Link: https://youtu.be/9x97bin2rPo
75	World Alzheimer's Day (September 21, 2020)- Let's talk about Dementia- prepared by NIMHANS Link: https://youtu.be/7MLyfh0b2dY
76	Series on Technology addiction: Episode 1- Introduction Link: https://youtu.be/vMbFUR8hG5c
77	Series on Technology addiction: Episode 2- Video gaming addiction Link: https://youtu.be/eHahjYTg7yg
78	Series on Technology addiction: Episode 3- Mobile phone addiction Link: https://youtu.be/C6Vo2qZUvVQ

79	Series on Technology addiction: Episode 4- Social media addiction Link: https://youtu.be/2yDsoblPV-k
80	Series on Dementia: Episode 1- Introduction Link: https://youtu.be/OecNao-wl6E
81	Series on Stroke: Episode 1- Introduction Link: https://youtu.be/8qDdWJDwRE
82	Series on Stroke: Episode 2- Risk factors of stroke Link: https://youtu.be/Q181z1Bc9Wk
83	Series on Stroke: Episode 3- Manifestation/ Symptoms of Stroke Link: https://youtu.be/ewUtMcrPVj0
84	Series on Stroke: Episode 4- Diagnosis of Stroke Link: https://youtu.be/GtTyX7cKl_c
85	Series on Stroke: Episode 5- Treatment of Stroke Link: https://youtu.be/iybk7UQc97g
86	Series on Stroke: Episode 6- Prevention of Stroke Link: https://youtu.be/nxLO0aawY9M
87	Series on Psychological problems in Traumatic Brain injury (TBI): Episode 1- Introduction Link: https://youtu.be/V2J0FsCrh0M
88	Series on Psychological problems in Traumatic Brain injury (TBI): Episode 2- Cognitive problems Link: https://youtu.be/MdunO1M9xt4
89	Series on Psychological problems in Traumatic Brain injury: Episode 3- Emotional-Behavioural Problems Link: https://youtu.be/KdlrVBt1o00
90	Series on Psychological problems in Traumatic Brain injury: Episode 4- How can we help Traumatic Brain Injury (TBI) patients cope with their psychological problems? Link: https://youtu.be/5ngX5T6t53Y
91	Series on Psychological problems in Traumatic Brain injury: Episode 5- Role of family members and caregivers in dealing with the psychological problems of TBI patients Link: https://youtu.be/ifJx1Q_RRCE
92	Series on Psychological problems in Traumatic Brain injury: Episode 6- Role of a Clinical Neuropsychologist/ Clinical Psychologist in healing the injured mind following TBI Link: https://youtu.be/BzDPi2nfWzU
93	Depression : Episode 1- introduction (Kannada) https://youtu.be/mOVqK1BWi1o
94	Depression: Episode 2- Classification (Kannada) Link: https://youtu.be/ZEHsrxpTXY0
95	Depression: Episode 3- Reasons and prevalence? (Kannada) Link: https://youtu.be/xts8i6KU8Dk
96	Series on Psychosocial support for patients with traumatic brain injury (TBI) and their caregivers: Episode 1- Role of Psychiatric Social Worker Link: https://youtu.be/JftNviN- AI
97	Depression: Episode 4- Treatment (Kannada) Link: https://youtu.be/D38WZzngohU
98	Series on Psychosocial support for patients with traumatic brain injury (TBI) and

	their caregivers: Episode 2: Crisis intervention for the caregivers of Traumatic Brain Injury (TBI) patients Link: https://youtu.be/EUzjxWa9Tgc
99	Series on Psychosocial support for patients with traumatic brain injury (TBI) and their caregivers: Episode 3: Psychological first aid for the caregivers of Traumatic Brain Injury (TBI) patients Link: https://youtu.be/CrUWafTRtbw
100	Depression: Episode 5– E.C.T (Electroconvulsive therapy (Kannada)) Link: https://youtu.be/NTIHqYFvjL4

c. Radio Programme:

1. One hour live programme on brain and its banking **in Kannada** as part of “Kakambi”, a weekly educational programme conducted by F.M. Rainbow, All India Radio, Bangalore (March 31, 2010).

d. Popular articles in Kannada:

1. M.M. Srinivas Bharath. Curcumin: Parkinson rogakke hosa oushadhave? (Is curcumin a new drug for Parkinson’s disease)? Arogya spoorthi (Kannada), Dec 2011.
2. M.M. Srinivas Bharath. Midulu bank (Brain Bank). Arogya spoorthi (Kannada), Jan 2012.
3. M.M. Srinivas Bharath. Manava Midulu bank (Human Brain Bank). Bala vignana, Karnataka Rajya Vignana Parishat, Bangalore, Jan 2016 (**adjudged as the best article of the year and awarded Yamunabai endowment prize**).
4. M.M. Srinivas Bharath MM. Can tea drinking protect against Parkinson’s disease (in Kannada). Souvenir issue (Vignatam Sampada) of the State level 27th National Children’s Science Conference, 2019; 39-44.
5. M.M. Srinivas Bharath. Brahmi: MiduLina paalina Amrutha (Brahmi: Nectar for the brain). Bala Vignana, Karnataka Rajya Vignana Parishat, Bangalore, 2020; 42 (4): 10-13
6. M.M. Srinivas Bharath. Sanjeeviniyannu Hudukutta- Ondu Vaijnaanika VishIEShaNe (In search of Sanjeevini- A Scientific analysis). Bala Vignana, Karnataka Rajya Vignana Parishat, Bangalore, 2020; 42 (5): 9-12.
7. M.M. Srinivas Bharath. Vrudhdharalli miduLina khaayilegaLu. KeTTa aamlajanaka kaaraNavE (Is bad oxygen responsible for age-associated brain diseases?) Bala Vignaana, Karnataka Rajya Vignana Parishat, Bangalore, June 2020
8. Harihareyadavara miduLu, maanasika aarOgya mattu samasyegaLu (Brain mental health and problems among adolescents) Bala Vignaana, Karnataka Rajya Vignana Parishat, Bangalore, August 2020
9. Seesa mattu miduLu (Lead and Brain) Bala Vignaana, Karnataka Rajya Vignana Parishat, Bangalore, September 2020
10. karuLu, miduLu mattu sookShmajeevaaNugaLa trikONa saMbaMdha (Tripartite relationship among the intestine, brain and microorganisms). Bala Vignaana, Karnataka Rajya Vignana Parishat, Bangalore, November 2020
11. kyaanabis mattu miduLu (Cannabis and brain) Bala Vignaana, Karnataka Rajya Vignana Parishat, Bangalore, March 2021.

- e. Children’s Comics book:** Authored a children’s comics book in Kannada titled “Eleyarigaagi miduLina kathe”, which has been published by M/s Navakarnataka

publications, Bangalore. This book explains the structure and function of the human brain with simple text and illustrations, easily understandable by children aged 10 years and above. For more details, visit: <https://www.navakarnatakaonline.com/eleyarigaagi-midulina-kathe>

f. Short stories in Kannada on various aspects of mental health and neuroscience:

1. shavapareekShe (Autopsy) (*Focuses on Head injury and post-mortem examination*)- Taranga, 2018.
2. taayi (Mother) (*Focuses on depression and suicidal tendency*) Krushi Samaya 2017
3. swaadheena (Under one's control) (*Focuses on Stroke*)- Priyanka 2020.
4. daana (Donation) (*Focuses on Brain tumor and organ donation*)- Taranga July 2020.
5. anuma Sanjeeni (Hanuman's Sanjeevini) (*Focuses on herbal extracts and wound healing*)- Taranga August 2020.

f. Public lectures:

- (i) Health talk titled "Parkinson's disease: Overview of disease mechanisms and therapy" in Rotary club northwest branch, Sheshadripuram, Bangalore, July 13, 2014.
- (ii) Guest lecture titled "Traditional medicine and Parkinson's disease: Researcher's quest" in Rotary club, Indiranagar, Bangalore, Feb 16, 2015.