

Dr. Bindu M. Kutty

Professor, Dept. of Neurophysiology, NIMHANS, Bangalore



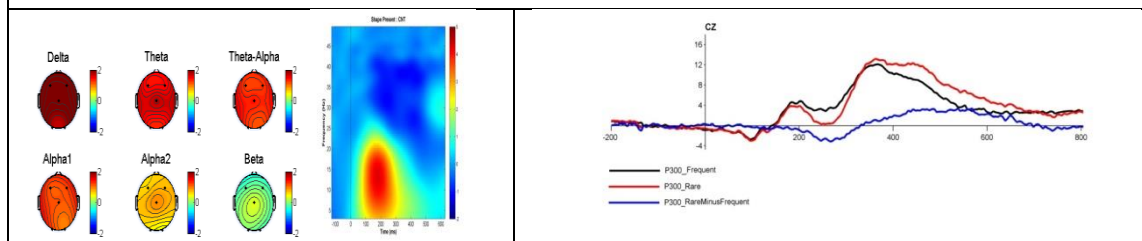
Professor & Head – 2011-2013 , Dept. of Neurophysiology, NIMHANS
Teaching Faculty, NSMC (National Sleep Medicine Course – An initiative of ISSR to propagate sleep education)
Member, Indian Board for Certification of Sleep Medicine,
General Secretary, ISSR (Indian Society for Sleep Research),
Member , Institute Ethics Committee , NIMHANS ,
Former Member , Board of Studies , University of Calicut,
Former member , Board of Studies , Institute Animal ethics Committee , NIMHANS
Member, Program Advisory Committee, Health Sciences, DST-SERB
Member, Expert committee of Translational Neuroscience, ICMR
Executive Committee Member, Cognitive Neuroscience Society, India
Executive Committee Member, International J.of Clinical and Exeprmental Physiology
Reviewer , Scientific journals (National & International)
Vice President, Association of Physiologists, India

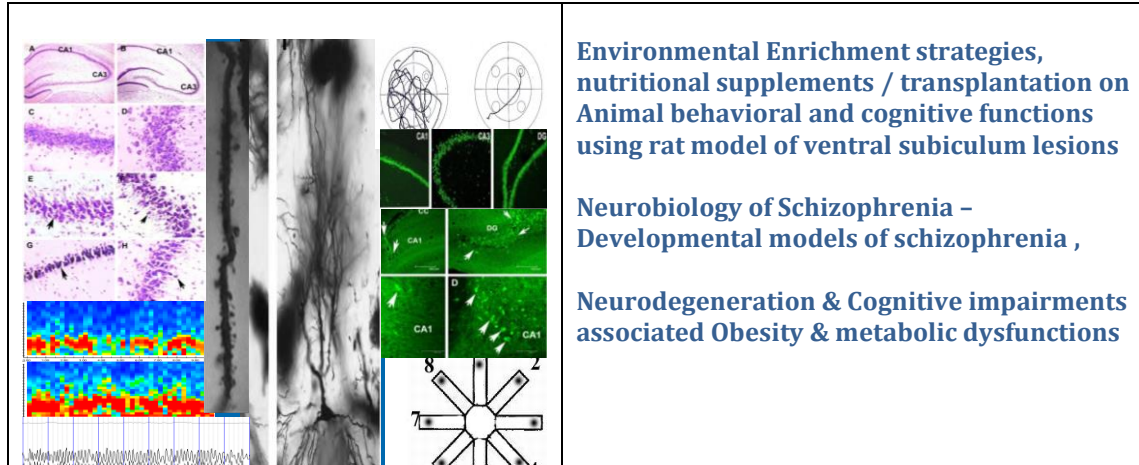
Major Objectives:

- I. To understand the ‘cognitive reserve’ capacities of the brain
- II. To understand the Neurobiology of consciousness along the illness to wellness spectrum.
 - Neurobiology of sleep associated with neuropsychiatric disorders
 - Neural correlates of meditative practices, cognition, consciousness and well –being
 - Role of subiculum in spatial learning and memory functions,
 - Strategies of environmental stimulation and transplantation in establishing functional recovery in conditions of CNS insults
 - Neurobiology of Schizophrenia using appropriate animal models

Human Sleep Research Lab, Cognitive and Consciousness Research Lab ,

Understanding the brain functions from a sleeping brain perspectives, Neural correlates of consciousness at different mental states , Brain functions associated with cognition in Schizophrenia, meditation etc





**Environmental Enrichment strategies,
nutritional supplements / transplantation on
Animal behavioral and cognitive functions
using rat model of ventral subiculum lesions**

**Neurobiology of Schizophrenia –
Developmental models of schizophrenia ,**

**Neurodegeneration & Cognitive impairments
associated Obesity & metabolic dysfunctions**

Life member Membership In Professional Societies

of Indian Academy of Neuroscience (IAN)

Life member of Society for Neurochemistry (India)

Life member of Association of Physiologists & Pharmacologists India (APPI),

Life Member of the Indian Society for Sleep Research (ISSR)

Member of International Brain Research Organization (IBRO)

Member of the Society for Neuroscience (SFN)

Collaborators :

Dr. John P. John, Addtl. Professor, Dept. of Psychiatry, NIMHANS

Dr. Seema Mehrotra , Addtl. Professor, Dept. of Clinical Psychology, NIMHANS

Dr. Sarada Subramanian, Addtl. Professor, Dept. of Neurochemistry, NIMHANS

Dr. Sunao Uchida, Director, Sports Medicine & Prof. of Psychiatry , Waseda University, Japan

Dr. Sangeetha Menon, NIAS, Bangalore

Dr. Dr. Binoy , NIAS, Bangalore

Important Publications

Shweta Rastogi, Sumithra Unni, Sumit Sharma , Laxmi T. Rao , and **Bindu M. Kutty (2014)**. Cholinergic Immunotoxin 192 IgG - SAPORIN Alters Subicular Theta-Gamma Activity and Impairs Spatial Learning in Rats. *Neurobiology of Learning and Memory* . 114:117-126

Harsha N. Halahalli, John P. John, Ammu Lukose, Sanjeev Jain & Bindu M. Kutty (2014) . Endogenous-cue prospective memory involving incremental updating of working memory: an fMRI study. *Brain Structure and Function* , DOI 10.1007/s00429-014-0877-7

Arun Sasidharan, Sathiamma Sulekha and **Bindu M. Kutty (2014)** . **Current understanding on the neurobiology of sleep and wakefulness.** *Int.J.Clinical , Experimental Physiology* , 1 : 3-9

Ravindra P.N., Nirmala, M, **Bindu M. Kutty (2012)** “Meditation and its regulatory role on sleep” in *Frontiers in Sleep and Chronobiology* 54(3),1-3

Basavaraj R. Tubaki, Channapatna R. Chandrashekar, Deverakonda Sudhakar, Talakad N. Sathya Prabha, Gandhidas S. Lavekar, and **Bindu M. Kutty (2012)** . Clinical efficacy of mansamitra vataka (an ayurvedic medicine) on Generalised Anxiety Disorder with comorbid generalized social phobia : A Randomised control study . *The J.of Alternative and Complementary Medicine* . 18(6): 612-621.

Rekha J, Veena L.R. Kalai Vabi P, Rupum Choudhury, Phalguni AA, Maulishri A, Raju, T.R., **Bindu M.Kutty (2011)** NIH-3T3 fibroblast transplants enhance host regeneration and improve spatial learning in ventral subicular lesioned rats. *Behavioural Brain Research* , 218 (2011) 315–324

Ravindra P.N., Sulekha S, Sathyaprabha T.N, Pradhan N, Raju T.R, **Bindu M.Kutty (2010)** Practitioners of vipassana meditation exhibit enhanced slow wave sleep and REM sleep states across different age groups . **Sleep and Biological Rhythm** , **8: 34-41.**