

Sankaranarayani Rajangam (Shankari)

313 Center for Neuroengineering
Nicolelis Lab
Duke University
Durham, NC 27710
Phone: 919-668-1233

Education

National Institute for Mental Health and Neurosciences (Bangalore, India)

Ph.D.: Neurophysiology (November 2011)

Thesis Title: ALS-CSF induced motor neuronal degeneration in adult rats: A morphological, electrophysiological and behavioral study

Areas of Specialization: Motor Cortical control

Advisors: Dr. T.R.Raju, Dr. Laxmi.T.Rao, Dr. A.Nalini

University of Madras, India

M.S. Neuroscience (March 2005)

Thesis Title: Effect of enriched environment on the dendritic branching order of somatosensory cortex of rat

Advisor: R.Muthusamy

The Tamilnadu Dr.MGR Medical University, India

Bachelor of Physiotherapy (December 2001)

Thesis title: Role of physical therapy in Cerebral Palsy

Research Experience

Summer 2012 – Present Duke University Postdoctoral Fellow (Durham, NC)

Topic: Continuous BMI control in nonhuman primates with wireless recording

Advisor: Prof. Miguel Nicolelis

2006 – 2011 - National Institute for Mental Health and Neurosciences (Bangalore, India)

Topic: ALS-CSF induced motor neuronal degeneration in adult rats

Methods: Rat motor cortex morphology, Motor behavioural testing, In vivo electrophysiology

Advisor: Prof. T.R.Raju

Publications

R. Sankaranarayani, Mohan Raghavan, A. Nalini, T. Rao Laxmi, T.R. Raju., Reach task associated excitatory overdrive of motor cortical neurons following infusion with ALS-CSF (Under Review)

R. Sankaranarayani, A. Nalini, T. Rao Laxmi, T.R. Raju., (2010) Behavioral Brain research, Altered neuronal activities in the motor cortex with impaired motor performance in adult rats observed after infusion of cerebrospinal fluid from amyotrophic lateral sclerosis patients. Volume 206, Issue 1, pages 109-119.

Gunasekaran R, Sankaranarayani R, Vijayalakshmi K, Alladi PA, Shobha K, Nalini A, Sathyaprabha TN, Raju TR., (2009) Brain Research., Exposure to cerebrospinal fluid of sporadic Amyotrophic Lateral Sclerosis patients alters Na(v)1.6 and K(v)1.6 channel expression in rat spinal motor neurons

Conference presentations and participation

Invited Guest Speaker at CME Physio JJMMC 2011 Motor Learning in Animal Models 29th November 2011, Davangere, Karnataka, India

Best Poster Award - R. Sankaranarayani, Laxmi.T.Rao, A.Nalini, T.R.Raju, at the International symposium on "Cellular and Molecular Basis of Brain Plasticity & Repair mechanisms" and Annual meeting of Society for Neuroscience (SfN)-Bangalore Chapter, held between 3-5th September 2010 in Leh, Ladakh, India

R. Sankaranarayani, Laxmi.T.Rao, A.Nalini, T.R.Raju, Cerebrospinal fluid from patients with Sporadic Amyotrophic Lateral sclerosis induced changes in adult male Wistar rats – A motor behavioral and Local field potential study. 39th Annual conference of the Society for Neuroscience in Chicago (17th-21st October 2009). Poster presentation

2nd IBRO school in Neurosciences "Physiology of nerve cells" IISC, Bangalore Feb 2nd -15th 2009

R.Sankaranarayani, Laxmi T. Rao , A. Nalini and T.R. Raju, ALS-CSF induced changes in rat motor cortex – a motor behavioral and electrophysiological study. Annual Conference of Indian Academy of Neuroscience, Cochin, 11th-13th December 2008. Oral presentation

IBRO VLTP course held in Nagpur between 6-13th February 2008 Nagpur, India

R.Sankaranarayani, Enriched Environment for the sensory deprived child causes plasticity in the damaged CNS., 12th-15th February 2005 Annual courses in Clinical Neurosciences, Chennai. Poster presentation

Awards & Travel grants

2009 - 2012 Senior Research Fellowship
Indian Council for Medical research,

2009 Travel grant to SFN 2009 funded by Council for Scientific and industrial Research,

2001 Best outgoing student award in Bachelor of Physical therapy degree

Professional Memberships

Society for Neuroscience
International Brain Research Organisation
Indian Academy of Neurosciences

References

Prof. Dr.T.R.Raju Senior Professor
Department of Neurophysiology
NIMHANS
Bangalore, India 560029
Ph: +91 08026995173
Email: trraju.nimhans@gmail.com

Dr.Bindu.M. Kutty Head of Department
Department of Neurophysiology
NIMHANS
Bangalore, India 560029
Ph: +91 08026995170
Email: bindu.nimhans@gmail.com