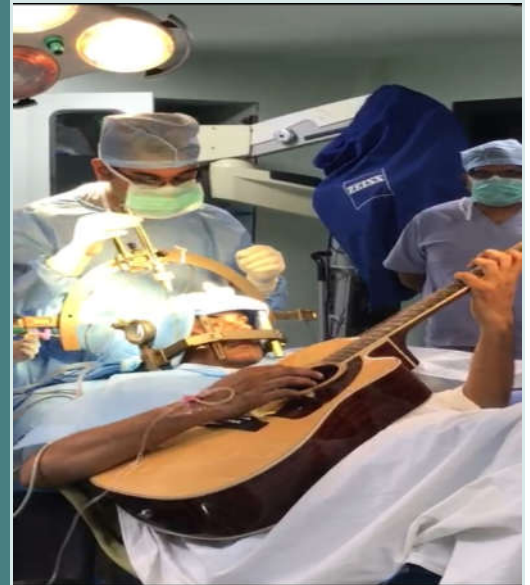


Effective Communication Seminar Series  
Department of Electrical Engineering

## Pushing the frontiers of Functional Neuroscience - touch with tech!

4<sup>th</sup> May, 4 - 5 pm, in Faculty Hall

DR. SHARAN SRINIVASAN



**Patient playing the guitar during surgery!**

### Abstract

A brain injury of any nature or cause is like the hard disc of your computer crashing. You will have to reload all the softwares and then try and restore all the saved files and folders so that your computer is back to where it was before the crash! But the biggest challenges are... who has these softwares? How do we reload it, and in what sequence? How do we restore the saved files? How do we even know what all files were saved? What do we do if the original programs don't take off or run well?

Brain Injury Rehabilitation (BIR) has remained an enigma for most people, including the Neuroscience professionals and experts. The physical healing of brain injuries never really translates to an automatic and complete functional recovery of brain functions to the premorbid levels of functioning. The complexity and uniqueness of every individual's brain functions (it is like each of us having our own customised operating systems!) and the fact that most of it cannot be measured easily and in a standardised way make this task onerous and near impossible! This lack of clarity at all levels resulted in the creation of a large number of neurologically disabled individuals who are now a 'liability' to the family, community and country.

Dr. Sharan Srinivasan is a Senior Neurosurgeon and the HOD of the Department of Neurosciences at the Bhagwan Mahaveer Jain Hospital, Bengaluru. He has performed over major 8000 brain and spine surgeries. His special interests are in Stereotactic & Functional neurosurgery (neurosurgeries for Movement Disorders, Spasticity, Pain, Psychiatry) and Stereotactic Radiosurgery. Along with Dr. Sanjiv (a neurologist), he runs an exclusive centre called Jain Institute of Movement Disorders & Stereotactic Neurosurgery. He was in the international news recently for performing the 'FIRST' Vo thalamotomy for a guitarist dystonia in India. The patient had 100% relief of his symptoms on the operating table. Media around the world (BBC, CNN, ToI, NDTV, Fox news, Dubai times, Singapore times, ANI, few FM radio stations in the US, etc.) covered this.

He is also very passionate about Neuro rehabilitation. After seeing the severe and complex neurological disabilities that critical patients who survived severe stroke, head or spinal cord injuries had, he started NewRo, a dedicated state-of-the-art neuro rehab center in 2012 to help such patients achieve their maximum possible level of functioning potential. This is probably the first 'stand-alone' neuro rehabilitation center in India.