Collaborative Opportunities for Research in Neurosurgery

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Abstract
Functional neurosurgery to treat movement disorders and pain provides a unique opportunity to study the nervous system. In this presentation, we will discuss neurosurgical techniques such as deep brain stimulation, spinal cord stimulation, and stereotactic procedures to lesion the nervous system during which there are opportunities to stimulation and record from the brain and spinal cord. The currently available technologies will be reviewed along with key areas for collaborative research with biomedical engineering.

Biosketch
Ashwin Viswanathan is a Professor of Neurosurgery and the Director of the Functional Neurosurgery Program at Baylor College of Medicine. He practices at Baylor St. Luke’s Medical Center, The Michael E. DeBakey VA Medical Center and MD Anderson Cancer Center. Ashwin’s practice focuses on the surgical management of movement disorders and intractable pain. Techniques used to treat these conditions include deep brain stimulation, spinal cord stimulation, intrathecal drug delivery, and radiofrequency ablation.