

DEEP BRAIN STIMULATION CENTER

Only center in Southern California to offer asleep MRI-guided deep brain stimulation procedures

Patients with movement disorders such as Parkinson's disease (PD), essential tremor (ET) and dystonia have for many years had the option to undergo surgery to receive deep brain stimulation (DBS), a procedure that can decrease the tremors, dyskinesia and other symptoms of these complex neurological diseases.

DBS surgery is commonly performed while the patient is awake but sedated, however a breakthrough technique using real-time MRI guidance allows for the patient be asleep for the entire procedure.

The only center in Southern California to offer asleep DBS, Keck Medicine of USC is a Parkinson's Foundation Center of Excellence.

Deep brain stimulation is just one part of a multidisciplinary program that can be life-changing for patients with movement disorders.

ARE YOU A CANDIDATE FOR DEEP BRAIN STIMULATION SURGERY?

DBS surgery is not a cure for movement disorders, but it can improve the severity and frequency of symptoms so that patients get their independence back and can live a more normal life.

But not everyone is a good candidate for successful surgery.

All Keck Medicine DBS candidates undergo a complete pre-operative evaluation, including neurological examinations, psychological and cognitive assessments and a brain MRI.

Additionally, patients must meet other criteria, including but not limited to:

- Confirmed diagnosis of PD, ET, or Dystonia
- No comorbidity present
- No history or current indication of vascular impairment
- Experiencing painful or disabling symptoms
- Excessive side effects to medications
- Good response to medications (PD patients only)

DEEP BRAIN STIMULATION CENTER

THE EXPERT TEAM

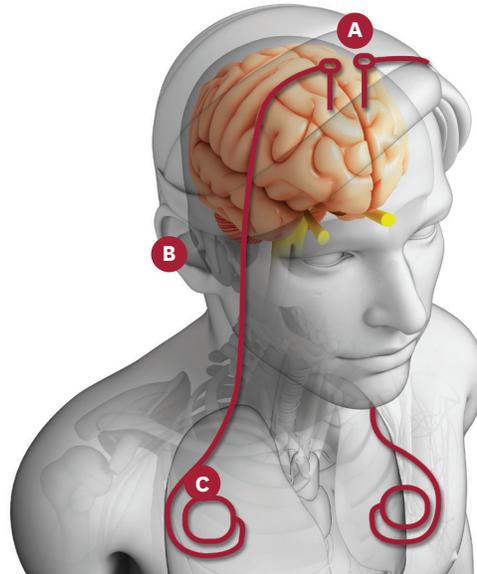
- **Danielle Feigenbaum, MD**
Clinical Assistant Professor of Neurology
Keck School of Medicine
- **Jennifer S. Hui, MD**
Assistant Professor of Clinical Neurology
Keck School of Medicine of USC
Director, Clinical DBS Program
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- **Brian Lee, MD, PhD**
Assistant Professor of Clinical Neurological Surgery
Keck School of Medicine
Director, Stereotactic and Functional Neurosurgery
Keck Hospital
- **Mark Andrew Liker, MD**
Clinical Assistant Professor of Neurological Surgery
Keck School of Medicine
- **Andrew Petkus, MD**
Assistant Professor of Clinical Neurology (Psychology)
Keck School of Medicine
- **Daniel M. Togasaki, MD, PhD**
Associate Professor of Clinical Neurology
Keck School of Medicine
Co-Director, Clinical DBS Program
Keck Hospital
- **Nasrin Esnaashari, MSN, CNP**
Instructor of Clinical Neurology
Keck School of Medicine

To make an appointment, call

(800) USC-CARE
(800) 872-2273

neuro.keckmedicine.org

DEEP BRAIN STIMULATION: HOW DOES IT WORK?



During deep brain stimulation surgery, devices are implanted that use carefully programmed electrical impulses to reduce the physical symptoms of Parkinson's disease, essential tremor and dystonia. While most patients have one implantable pulse generator (IPG), it is possible to have two implanted devices with wires on either side of the head.

- A DBS Leads** — Thin insulated wires are inserted into the brain through small holes in the skull.
- B Extension Wires** — The wires are threaded under skin and down the side of the head and neck, and connected to the battery pack.
- C Implantable Pulse Generator (IPG)** — This pacemaker-like device is implanted near the collar bone and sends pulses to targeted structures within the brain to help control tremors and other abnormal movements caused by the diseases in the body.

Keck Medicine of USC

BEYOND EXCEPTIONAL MEDICINE™

USC Neurosciences Deep Brain Stimulation Center

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