

## PACIFIC STROKE & NEUROVASCULAR CENTER AT PACIFIC NEUROSCIENCE INSTITUTE

The Pacific Stroke & Neurovascular Center offers advanced treatment options for all complex neurovascular diseases, including stroke, brain aneurysms and vascular malformations. Our four centers across Los Angeles perform advanced endovascular and neurosurgical treatment and are designated as LA County EMS Comprehensive Stroke Centers. With the Get With The Guidelines® – Stroke Gold Plus Quality Achievement Award and Target: Stroke Elite Plus Honor Roll, our specialists are recognized for our success in implementing high standards of stroke patient care meeting national, evidence-based recommendations across our hospital affiliates.

Utilizing the latest endovascular and open microvascular techniques, our highly-skilled stroke neurologists, neurocritical care doctors, interventional neuroradiologists and vascular neurosurgeons comprise the core of our multidisciplinary team providing comprehensive, personalized care. This includes immediate access to IV thrombolysis, as well as advanced endovascular thrombectomy for stroke which has revolutionized stroke care. Patients suffering intracranial hemorrhage or aneurysmal subarachnoid hemorrhage are treated in a highly personalized manner with minimally invasive stereotactic clot evacuation, minimally invasive endovascular embolization, or microvascular neurosurgery.

To identify optimal treatments for cerebral aneurysms, our medical specialists provide a customized treatment plan for each aneurysm patient. This includes close monitoring and medication optimization, minimally invasive endovascular therapy by flow diversion or coiling, or microsurgical aneurysm treatment.

### PATIENT & CAREGIVER SUPPORT GROUPS

Facilitated by an amazing stroke survivor, the support groups at PNI-Santa Monica help stroke survivors and family caregivers deal with the aftermath of a stroke. These groups provide a safe forum for talking with other survivors and caregivers, obtaining information on stroke recovery, gathering useful resources and learning new coping skills.

### CONDITIONS WE TREAT/EVALUATE:

- Arteriovenous Malformations (AVMs)
- Brain Aneurysms: Ruptured and Unruptured
- Carotid Artery Disease and Stenosis
- Carotid Cavernous Fistula
- Chronic Subdural Hemorrhage
- Dural Arteriovenous Fistula (DAVF)
- Idiopathic Intracranial Hypertension
- Intracranial Atherosclerosis
- Epistaxis
- Pulsatile Tinnitus
- Spinal AVMs and Spinal DAVFs
- Venous Sinus Occlusive Disease
- Head, Neck and Facial Vascular Malformations
- Stroke - Acute Ischemic & Hemorrhagic

### PROCEDURES WE PERFORM:

- Brain Aneurysm Embolization (Coiling, Stents, Flow-diversion)
- Carotid Stenting/Angioplasty
- Intracranial Stenting/Angioplasty
- Transcatheter Embolization for Vascular Malformations
- Transcatheter Embolization for Epistaxis
- Middle Meningeal Artery Embolization for Subdural Hemorrhage
- Thrombectomy for Acute Large Vessel Occlusion Stroke
- Pre-operative Tumor Embolizations
- Transvenous Catheterization, Stenting/Angioplasty
- Sclerotherapy
- Balloon Test Occlusion
- Wada Testing
- Diagnostic Spinal Arteriography
- Diagnostic Cerebral Angiography

**PACIFIC  
NEUROSCIENCE  
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**SANTA MONICA** | 310-829-8319

**TORRANCE** | 424-212-5340

**BURBANK** | 818-847-6049

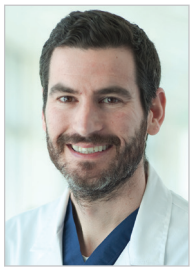
**MISSION HILLS** | 818-847-6570



## COMPREHENSIVE STROKE CENTER (CSC)

During acute ischemic stroke, 1.9 million brain cells are dying every minute. Rapid access to a Comprehensive Stroke Center is essential to minimize disability and death. Our Comprehensive Stroke Centers have worked closely with Los Angeles County EMS to provide State of the art Stroke care at Providence Saint John's Health Center In Santa Monica, Providence Saint Joseph Medical Center in Burbank, Providence Little Company of Mary Medical Center in Torrance, and Providence Holy Cross Medical Center. This care includes every advanced aspect of stroke care available including thrombectomy.

Thrombectomy is a minimally invasive procedure that can be used to treat acute ischemic stroke for up to 24 hours after stroke onset. Acute ischemic stroke is often the result of a blood clot traveling to the brain, obstructing normal blood flow and quickly causing brain damage or death. To perform thrombectomy, a narrow catheter is navigated from the femoral artery (in the groin) to the arteries of the brain, where one or more specialized techniques are used to mechanically remove the blood clot(s), thereby restoring normal blood flow and saving brain tissue.



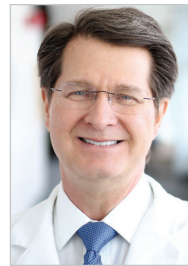
**JASON TARPLEY, MD, PHD**  
DIRECTOR, STROKE & NEUROVASCULAR CENTER  
Dr. Tarpley specializes in minimally invasive endovascular treatment of complex neurovascular disorders with special expertise in stroke, brain aneurysms, carotid artery stenosis, vascular malformations, and chronic subdural hemorrhage. He is an investigator in many phase 2 and phase 3 stroke clinical studies and serves as the Clinical Lead for the Providence system-wide Clinical Stroke Research Program. [pacificneuro.org/tarpley](http://pacificneuro.org/tarpley)



**SAMUEL HOU, MD, PHD**  
INTERVENTIONAL NEURORADIOLOGIST  
Dr. Hou specializes in surgical techniques for the endovascular treatment of acute ischemic stroke, brain aneurysms, arteriovenous malformations and arteriovenous fistulas of the brain and spine. Both a clinician and scientist, Dr. Hou advances and optimizes patient care through minimally invasive treatment of complex neurovascular diseases. [pacificneuro.org/hou](http://pacificneuro.org/hou)



**ADI IYER, MD, MS**  
NEUROSURGEON & INTERVENTIONAL NEURORADIOLOGIST  
Dr. Iyer is a fellowship-trained neurosurgeon with a focus on vascular diseases of the brain and spine. As one of California's few dual-trained neurosurgeons, Dr. Iyer is able to offer both minimally invasive open surgical techniques as well as incisionless catheter based procedures to treat patients with strokes, aneurysms, AVMs, tumors and pain. [pacificneuro.org/iyer](http://pacificneuro.org/iyer)



**CHRISTOPHER PUTMAN, MD**  
INTERVENTIONAL NEURORADIOLOGIST  
Dr. Putman treats complex intracranial, head and neck, and spine vascular conditions including acute stroke, cervical and intracranial stenosis, vascular malformations, cerebral aneurysm and venous occlusive diseases. He specializes in brain aneurysm treatment, carotid artery stenting, middle meningeal artery embolization for chronic subdural hemorrhage, dural arteriovenous fistula (DAVF) treatment, and arteriovenous malformation (AVM) treatment. [pacificneuro.org/putman](http://pacificneuro.org/putman)



**SANDRA NARAYANAN, MD**  
INTERVENTIONAL NEURORADIOLOGIST  
Dr. Narayanan is a board-certified vascular neurologist and neurointerventional surgeon. Skilled in a wide range of adult and pediatric diagnostic and neuroendovascular procedures, she is also experienced in prehospital and acute stroke diagnosis and management, telestroke assessments, and secondary stroke prevention. [pacificneuro.org/narayanan](http://pacificneuro.org/narayanan)

**PROVIDENCE SAINT JOHN'S HEALTH CENTER**  
2125 Arizona Ave., Santa Monica, CA 90404 | 310-829-8319

**PROVIDENCE LITTLE COMPANY OF MARY MEDICAL CENTER TORRANCE**  
4201 Torrance Blvd., #520, Torrance, CA 90503 | 424-212-5340

**PROVIDENCE SAINT JOSEPH MEDICAL CENTER**  
501 S. Buena Vista Ave., Burbank, CA 90505 | 818-847-6049

**PROVIDENCE HOLY CROSS MEDICAL CENTER**  
11550 Indian Hills, #261, Mission Hills, CA 91345 | 818-847-6570

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