

# Stanford

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## Jaime Lopez, MD

Professor of Neurology (Adult Neurology) and, by courtesy, of Neurosurgery  
Neurology & Neurological Sciences

### **CLINICAL OFFICE (PRIMARY)**

- **Stanford Neuroscience Health Center**

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### **Bio**

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#### **CLINICAL FOCUS**

- Intraoperative Neurophysiologic Monitoring
- Botulinum Toxin Treatment
- Electromyography
- Clinical Neurophysiology

#### **ACADEMIC APPOINTMENTS**

- Professor - University Medical Line, Neurology & Neurological Sciences
- Professor - University Medical Line (By courtesy), Neurosurgery
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

#### **PROFESSIONAL EDUCATION**

- Board Certification: Neurology, American Board of Psychiatry and Neurology (1995)
- Fellowship: Stanford University Clinical Neurophysiology Fellowship (1992) CA
- Residency: Stanford University Neurology Residency (1991) CA
- Internship: Stanford University Internal Medicine Residency (1988) CA
- Medical Education: University of Washington School of Medicine (1987) WA
- MD, University of Washington , Medicine (1987)

#### **LINKS**

- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

My clinical interests are in the areas of Intraoperative Neurophysiologic Monitoring (IOM), clinical neurophysiology, electromyography and in the use of botulinum toxins in the treatment of neurologic disorders. Our IOM group's research is in the development of new and innovative techniques for monitoring the nervous system during surgical and endovascular procedures and how these alter surgical management and patient outcomes. I am also active in formulating national IOM practice guidelines.

## Publications

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### PUBLICATIONS

- **Sharps Injuries Related to Subdermal Needles in the Orbicularis Oris During Intraoperative Neurophysiologic Monitoring.** *Journal of clinical neurophysiology : official publication of the American Electroencephalographic Society*  
Joshi, A., Aissa, Y., Le, S., Cho, S. C., Lee, L., Lopez, J. R.  
2021
- **Intraoperative Neuromonitoring for Cerebral Arteriovenous Malformation Embolization: A Propensity-Score Matched Retrospective Database Study.** *Cureus*  
Feng, A. Y., Sussman, E. S., Jin, M. C., Wong, S., Lopez, J., Pulli, B., Heit, J. J., Telischak, N.  
2021; 13 (1): e12946
- **Longitudinal alteration of cortical thickness and volume in high-impact sports.** *NeuroImage*  
Mills, B. D., Goubran, M. n., Parivash, S. N., Dennis, E. L., Rezaii, P. n., Akers, C. n., Bian, W. n., Mitchell, L. A., Boldt, B. n., Douglas, D. n., Sami, S. n., Mouchawar, N. n., Wilson, et al  
2020: 116864
- **Plasma nitrite as an indicator of cerebral ischemia during extracranial/intracranial bypass surgery in moyamoya patients.** *Journal of stroke and cerebrovascular diseases : the official journal of National Stroke Association*  
Silver, J. H., Jaffe, R. A., López, J. R.  
2020; 29 (9): 104830
- **Longitudinal Changes in Hippocampal Subfield Volume Associated with Collegiate Football** *JOURNAL OF NEUROTRAUMA*  
Parivash, S. N., Goubran, M., Mills, B. D., Rezaii, P., Thaler, C., Wolman, D., Bian, W., Mitchell, L. A., Boldt, B., Douglas, D., Wilson, E. W., Choi, J., Xie, et al  
2019
- **Cerebral Oximetry Fails as a Monitor of Brain Perfusion in Cardiac Surgery: A Case Report A & A PRACTICE**  
McAvoy, J., Jaffe, R., Brock-Utne, J., Lopez, J., Brodt, J.  
2019; 12 (12): 441–43
- **Superselective methohexitol challenge prior to intracranial endovascular embolization** *JOURNAL OF CLINICAL NEUROSCIENCE*  
Bican, O., Cho, C., Suarez-Roman, A., Viet Nguyen, Lee, L., Le, S., Heit, J., Dodd, R., Lopez, J.  
2019; 63: 68–71
- **Intraoperative Transcranial Motor-evoked Potential Stimulation Does Not Seem to Cause Seizures.** *Journal of neurosurgical anesthesiology*  
Burbridge, M. A., Nguyen, V. n., Min, J. G., Jaffe, R. A., Ahuja, B. n., Shah, A. D., Lee, L. H., Cho, C. n., Sandoval, B. n., López, J. R.  
2019
- **Novel Mapping Method for the Intraoperative Neurophysiologic Monitoring of Sexual Function During Prostate Surgery** *JOURNAL OF CLINICAL NEUROPHYSIOLOGY*  
Martin-Palomeque, G., Cabanes-Martinez, L., de Blas Beorlegui, G., Moreno Galera, M., Lopez, J. R., Javier Burgos, F., Regidor Bailly-Bailliere, I.  
2018; 35 (6): 463–67
- **Positive pharmacologic provocative testing with methohexitol during cerebral arteriovenous malformation embolization** *CLINICAL IMAGING*  
Bican, O., Cho, C., Lee, L., Viet Nguyen, Le, S., Heit, J., Lopez, J.  
2018; 51: 155–59

- **Intraoperative neurophysiologic monitoring (IONM) changes associated with a case of delayed thalamic infarct: Implications for postoperative management.** *Journal of clinical neuroscience : official journal of the Neurosurgical Society of Australasia*  
Ghavami, F., Choudhri, O., Marks, M., Lopez, J. R.  
2017
- **Intraoperative Tonic-Clonic Seizure Under General Anesthesia Captured by Electroencephalography: A Case Report.** *A & A case reports*  
Burbridge, M. A., Jaffe, R. A., Doufas, A. G., Lopez, J. R.  
2017
- **Large Amplitude Cortical Evoked Potentials in Nonepileptic Patients. Reviving an Old Neurophysiologic Tool to Help Detect CNS Pathology** *JOURNAL OF CLINICAL NEUROPHYSIOLOGY*  
Martin-Palomeque, G., Castro-Ortiz, A., Pamplona-Valenzuela, P., Saiz-Sepulveda, M. A., Cabanes-Martinez, L., Lopez, J. R.  
2017; 34 (1): 84-91
- **Intraoperative Tonic-Clonic Seizure Under General Anesthesia Captured by Electroencephalography: A Case Report** *A and A Case Reports*  
Burbridge, M. A., Jaffe, R. A., Doufas, A. G., Lopez, J. R.  
2017: 9-12
- **EMG in Pediatric Brachial Plexopathy** *CLINICAL NEUROPHYSIOLOGY IN PEDIATRICS: A PRACTICAL APPROACH TO NEURODIAGNOSTIC TESTING AND MANAGEMENT*  
Lopez, J. R., Galloway, G. M.  
2016: 161-79
- **Six Degree-of-Freedom Measurements of Human Mild Traumatic Brain Injury** *ANNALS OF BIOMEDICAL ENGINEERING*  
Hernandez, F., Wu, L. C., Yip, M. C., Laksari, K., Hoffman, A. R., Lopez, J. R., Grant, G. A., Kleiven, S., Camarillo, D. B.  
2015; 43 (8): 1918-1934
- **Detection of acute femoral artery ischemia during neuroembolization by somatosensory and motor evoked potential monitoring** *INTERVENTIONAL NEURORADIOLOGY*  
Purger, D., Feroze, A. H., Choudhri, O., Lee, L., Lopez, J., Dodd, R. L.  
2015; 21 (3): 397-400
- **Detection of inferolateral trunk syndrome by neuromonitoring during catheter angiography with provocative testing.** *Journal of neurointerventional surgery*  
Le, S., Dodd, R., López, J., Nguyen, V., Cho, S. C., Lee, L.  
2013; 5 (2)
- **Evidence-Based Guideline Update: Intraoperative Spinal Monitoring with Somatosensory and Transcranial Electrical Motor Evoked Potentials** *JOURNAL OF CLINICAL NEUROPHYSIOLOGY*  
Nuwera, M. R., Emerson, R. G., Galloway, G., Legatt, A. D., Lopez, J., Minahan, R., Yamada, T., Goodin, D. S., Armon, C., Chaudhry, V., Gronseth, G. S., Harden, C. L.  
2012; 29 (1): 101-108
- **Evidence-based guideline update: Intraoperative spinal monitoring with somatosensory and transcranial electrical motor evoked potentials Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology and the American Clinical Neurophysiology Society** *NEUROLOGY*  
Nuwera, M. R., Emerson, R. G., Galloway, G., Legatt, A. D., Lopez, J., Minahan, R., Yamada, T., Goodin, D. S., Armon, C., Chaudhry, V., Gronseth, G. S., Harden, C. L.  
2012; 78 (8): 585-589
- **Neurophysiologic Intraoperative Monitoring of the Oculomotor, Trochlear, and Abducens Nerves** *JOURNAL OF CLINICAL NEUROPHYSIOLOGY*  
Lopez, J. R.  
2011; 28 (6): 543-550
- **Neurophysiologic Intraoperative Monitoring of Pediatric Cerebrovascular Surgery** *JOURNAL OF CLINICAL NEUROPHYSIOLOGY*  
Lopez, J. R.  
2009; 26 (2): 85-94
- **Visual field preservation after curative multi-modality treatment of occipital lobe arteriovenous malformations** *NEUROSURGERY*  
Sinclair, J., Marks, M. P., Levy, R. P., Adler, J. R., Chang, S. D., Lopez, J. R., Do, H. M., Bell-Stephens, T. E., Lim, M., Steinberg, G. K.  
2005; 57 (4): 655-666

- **Wrist hyperextension leads to median nerve conduction block - Implications for intra-arterial catheter placement** *ANESTHESIOLOGY*  
Chowet, A. L., Lopez, J. R., Brock-Utne, J. G., Jaffe, R. A.  
2004; 100 (2): 287-291
- **The use of evoked potentials in intraoperative neurophysiologic monitoring.** *Physical medicine and rehabilitation clinics of North America*  
López, J. R.  
2004; 15 (1): 63-84
- **Neurophysiological monitoring in the endovascular therapy of aneurysms** *AMERICAN JOURNAL OF NEURORADIOLOGY*  
Liu, A. Y., Lopez, J. R., Do, H. M., Steinberg, G. K., Cockcroft, K., Marks, M. P.  
2003; 24 (8): 1520-1527
- **Hyperperfusion syndrome with hemorrhage after angioplasty for middle cerebral artery stenosis** *AMERICAN JOURNAL OF NEURORADIOLOGY*  
Liu, A. Y., Do, H. M., Albers, G. W., Lopez, J. R., Steinberg, G. K., Marks, M. P.  
2001; 22 (8): 1597-1601
- **AAEM news and comments** *Muscle & nerve*  
Chang, Lopez, Steinberg  
2000; 23 (9): 1450-1451
- **Reply** *Muscle & nerve*  
Chang, Lopez, Steinberg  
2000; 23 (9): 1446-?
- **Microsurgical resection of brainstem, thalamic, and basal ganglia angiographically occult vascular malformations** *NEUROSURGERY*  
Steinberg, G. K., Chang, S. D., Gewirtz, R. J., Lopez, J. R.  
2000; 46 (2): 260-270
- **The treatment of giant intracranial arteriovenous malformations using multimodality therapy**  
Chang, S. D., Lopez, J. R., Levy, R. P., Marks, M. P., Steinberg, G. K.  
LIPPINCOTT WILLIAMS & WILKINS.2000: 324-24
- **Treatment of intracranial arteriovenous malformations in the elderly population**  
Chang, S. D., Lopez, J. R., Marks, M. P., Levy, R. P., Adler, J. R., Steinberg, G. K.  
LIPPINCOTT WILLIAMS & WILKINS.2000: 325-25
- **Intraoperative electrical stimulation for identification of cranial nerve nuclei** *45th Annual Meeting of the American-Association-for-Electrodiagnostic-Medicine*  
Chang, S. D., Lopez, J. R., Steinberg, G. K.  
JOHN WILEY & SONS INC.1999: 1538-43
- **The usefulness of electrophysiological monitoring during resection of central nervous system vascular malformations.** *Journal of stroke and cerebrovascular diseases : the official journal of National Stroke Association*  
Chang, S. D., Lopez, J. R., Steinberg, G. K.  
1999; 8 (6): 412-422
- **Embolization of rolandic cortex arteriovenous malformations** *NEUROSURGERY*  
Paulsen, R. D., Steinberg, G. K., Norbash, A. M., Marcellus, M. L., Lopez, J. R., Marks, M. P.  
1999; 44 (3): 479-484
- **The use of electrophysiological monitoring in the intraoperative management of intracranial aneurysms** *JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY*  
Lopez, J. R., Chang, S. D., Steinberg, G. K.  
1999; 66 (2): 189-196
- **The use of electrophysiologic monitoring during intracranial cerebrovascular surgery: A cost-benefit analysis**  
Chang, S. D., Lopez, J. R., Steinberg, G. K.  
LIPPINCOTT WILLIAMS & WILKINS.1999: 257-57
- **Evoked potential monitoring and EKG: A case of a serious "cardiac arrhythmia"** *ANESTHESIOLOGY*

Diachun, C. A., Brock-Utne, J. G., Lopez, J. R., Ceranski, J. A.  
1998; 89 (5): 1270-1272

● **Cranial nerve nuclei monitoring during resection of brainstem cavernous malformations: Preliminary results**

Chang, S. D., Lopez, J. R., Steinberg, G. K.  
LIPPINCOTT WILLIAMS & WILKINS.1998: 276–76

● **The use of electrophysiologic monitoring during resection of arteriovenous malformations and angiographically occult vascular malformations**

Chang, S. D., Lopez, J. R., Steinberg, G. K.  
LIPPINCOTT WILLIAMS & WILKINS.1997: 172–72

● **Intraoperative neurophysiological monitoring *INTERNATIONAL ANESTHESIOLOGY CLINICS***

Lopez, J. R.  
1996; 34 (4): 33-54

● **ENTOMOPIA - A REMARKABLE CASE OF CEREBRAL POLYOPIA *NEUROLOGY***

Lopez, J. R., Adornato, B. T., Hoyt, W. F.  
1993; 43 (10): 2145-2146