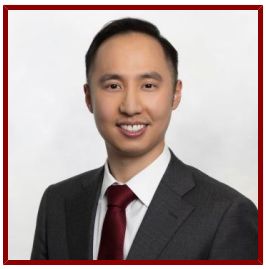
Stanford



Joseph Liao, MD

Clinical Assistant Professor, Anesthesiology, Perioperative and Pain Medicine

CLINICAL OFFICE (PRIMARY)

- **Pain Management**

  300 Pasteur Dr Rm A408

  MC 5340

  Stanford, CA 94305

  Tel (650) 498-6787 **Fax** (650) 721-3417

Bio

BIO

Dr. Joseph Liao, M.D., is a double board-certified pain management specialist and anesthesiologist at the Stanford University School of Medicine, where he brings a wealth of expertise to the Department of Anesthesiology, Perioperative and Pain Medicine.

His clinical interests span a wide range of pain conditions with an emphasis on back pain, neck pain, joint pain, nerve pain, cancer-related pain, chronic post-surgical pain, and chronic post-traumatic pain. He specializes in neuromodulation, such as spinal cord stimulation, peripheral nerve stimulation, restorative neuromodulation, and dorsal root ganglion stimulation. Dr. Liao's expertise extends to minimally invasive surgical spine interventions, using techniques like radiofrequency ablation, basivertebral nerve ablation, percutaneous decompression, sacroiliac joint fusion, and steroid injections. He is skilled in using ultrasonography and fluoroscopy to address spine, degenerative joint, and musculoskeletal diseases, as well as neurolysis and ablation for cancer-related pain.

In his research, Dr. Liao focuses on innovative therapies through neuromodulation and minimally invasive spine interventions, with his work published in prestigious peer-reviewed journals such as Anesthesiology and Pain Medicine. He serves as an ad hoc reviewer for multiple pain and anesthesiology journals. He is actively engaged in presenting and teaching at national and international conferences.

Dr. Liao is an avid patient and physician advocate. He takes pride in facilitating safe care and enjoys teaching other physicians how to safely deliver anesthetics and pain care and limit injuries in various forums. He adheres to the philosophy of applying the right treatment for the right patient at the right time. His goal is to utilize minimally invasive interventions to enhance functionality, elevate quality of life, and alleviate pain.

He serves on leadership boards and is affiliated with numerous esteemed medical associations such as the American Society of Interventional Pain Physicians, American Society of Pain and Neuroscience, North American Neuromodulation Society, International Association for the Study of Pain, American Academy of Pain Medicine, Pacific Spine and Pain Society, California Society of Interventional Pain Physicians, American Society of Anesthesiologists, American Association for the Surgery of Trauma, Society of Critical Care Medicine, and World Academy of Pain Medicine United.

CLINICAL FOCUS

- Pain Management
- Minimally Invasive Spine Interventions
- Neuromodulation
- Interventional Pain

ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Anesthesiology, Perioperative and Pain Medicine

PROFESSIONAL EDUCATION

- Board Certification: Pain Management, American Board of Anesthesiology (2024)
- Board Certification, American Board of Anesthesiology , Pain Management (2024)
- Board Certification: Anesthesia, American Board of Anesthesiology (2024)
- Fellowship: Stanford University Pain Management Fellowship (2023) CA
- Residency: University of Texas Health at Houston Anesthesiology Residency (2022) TX
- Medical Education: University of Arizona College of Medicine Office of the Registrar (2017) AZ

Publications

PUBLICATIONS

- **Translating microbiota analysis for clinical applications** *Nature Reviews Bioengineering*
  Lee, J., Chin, S., Mach, K. E., Bobenchik, A. M., Liao, J. C., Yang, S., Wong, P.
  2024; 2 (4): 284-286
- **PlexusNet: A Neural Network Architectural Concept for Medical Image Classification** *Computers in Biology and Medicine*
  Eminaga, O., Abbas, M., Shen, J., Laurie, M., Brooks, J. D., Liao, J., Rubin, D. L.
  2023: 106594
- **Potential of educational cystoscopy atlas for augmented intelligence**
  Eminaga, O., Laurie, M., Lee, T., Jia, X., Liao, J. C.
  2023
- **Sequential modeling for cystoscopic image classification**
  Laurie, M., Eminaga, O., Shkolyar, E., Jia, X., Lee, T., Long, J., Islam, M., Lau, H., Xing, L., Liao, J. C.
  2023
- **Flat lesion detection of white light cystoscopy with deep learning**
  Jia, X., Shkolyar, E., Eminaga, O., Laurie, M., Zhou, Z., Lee, T., Islam, M., Meng, M. Q., Liao, J. C., Xing, L.
  2023
- **Bladder Cancer and Artificial Intelligence: Emerging Applications** *Urologic Clinics North America*
  Laurie, M., Zhou, S. R., Islam, M., Shkolyar, E., Xing, L., Liao, J. C.
  2023