Stanford



James M. Mok, MD

Clinical Associate Professor, Orthopaedic Surgery

CLINICAL OFFICE (PRIMARY)

- **Stanford Orthopaedic Spine Center in Redwood City**
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ACADEMIC CONTACT INFORMATION

- **Administrative Contact**
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Bio

BIO

Dr. Mok is a board-certified, fellowship-trained spine surgeon at the Stanford Medicine Spine Center in Redwood City, California. He serves as Chief of Spinal Endoscopy and is a Clinical Associate Professor in the Department of Orthopaedic Surgery at Stanford University School of Medicine.

Dr. Mok diagnoses and treats a wide range of degenerative spine conditions, including disc herniations, spinal stenosis, myelopathy, and spondylolisthesis, as well as patients who have had previous spine surgery. He specializes in minimally invasive surgical techniques and strives to perform the least invasive procedures with the highest chances of success. His surgical specialties include minimally invasive microdiscectomy and laminectomy, minimally invasive spinal fusion, and artificial disc replacement.

Prior to Stanford, Dr. Mok worked as an orthopaedic spine surgeon with the NorthShore Orthopaedic and Spine Institute, the only dedicated orthopedic specialty hospital in the Chicago region. He was previously Associate Professor of Orthopaedic Surgery and Rehabilitation Medicine at the University of Chicago.

Dr. Mok served on active duty in the United States Army Medical Corps with the rank of Major. His military experience included deployment to the Iraq theater as an orthopaedic surgeon and spine surgery consultant.

Dr. Mok has published work in many leading journals in his field, including The Spine Journal, Spine, and Journal of Bone and Joint Surgery. He has presented to his peers at international, national, and regional meetings, including annual meetings of the North American Spine Society, the Society for Minimally Invasive Spine Surgery, and the American Association of Orthopaedic Surgeons.

Dr. Mok is a member of the American Academy of Orthopaedic Surgeons, the American Orthopaedic Association, the North American Spine Society, the Scoliosis Research Society, and the Society for Minimally Invasive Spine Surgery.

CLINICAL FOCUS

- Orthopaedic Surgery of the Spine
- Minimally Invasive Spine Surgery
- Endoscopic Spine Surgery

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Orthopaedic Surgery

ADMINISTRATIVE APPOINTMENTS

- Chief of Spinal Endoscopy, Division of Spine Surgery, (2026- present)
- Unit Based Medical Director, 7L (Orthopaedic Surgery), Stanford Health Care, (2024- present)

PROFESSIONAL EDUCATION

- MBA, University of Chicago Booth School of Business (2018)
- Board Certification: Orthopaedic Surgery, American Board of Orthopaedic Surgery (2012)
- Fellowship: The Spine Institute (2010) CA
- Residency: UCSF Dept of Orthopedic Surgery (2009) CA
- Internship: UCSF Dept of General Surgery (2004) CA
- Medical Education: Columbia University College of Physicians and Surgeons (2003) NY

Research & Scholarship

CLINICAL TRIALS

- LimiFlex Clinical Trial for the Treatment of Degenerative Spondylolisthesis with Spinal Stenosis, Not Recruiting

Publications

PUBLICATIONS

- **Can We Anticipate Epidural Hematoma After Unilateral Biportal Endoscopic Surgery? Insights From Drain Output and Early Magnetic Resonance Imaging** *JOURNAL OF MINIMALLY INVASIVE SPINE SURGERY AND TECHNIQUE*
  Umarani, A., Park, C., Oh, J., Shin, J. H., Park, D., Mok, J., Park, S., Kumar, P.
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- **Dental Composite Offers Comparable or Greater Pullout and Shear Strength to Lateral Mass Screw Fixation in a Human Cadaveric Model.** *International journal of spine surgery*
  Wadhwa, H., Castro, J., Okoli, O., Chan, C., Ahmad, S. H., Karnowska, A., Hu, S. S., Koltsov, J. C., Bruckman, K. C., Mok, J. M.
  2026

- **Dental Cement Augmentation Increases Pullout Strength with Comparable Removal Torque for Lateral Mass Screws.** *Spine*
  Castro, J., Wadhwa, H., Okoli, O., Chan, C., Ahmad, S. H., Karnowska, A., Hu, S., Koltsov, J., Bruckman, K., Mok, J.
  2025

- **Biomechanical Comparison of Unilateral and Bilateral Pedicle Screw Fixation after Multilevel Lumbar Lateral Interbody Fusion.** *Global spine journal*
  Mok, J. M., Forsthoefel, C., Diaz, R. L., Lin, Y., Amirouche, F.
  2024; 14 (5): 1524-1531

- **Characterization of ion release from a novel biomaterial, Molybdenum-47.5Rhenium, in physiologic environments.** *The spine journal : official journal of the North American Spine Society*
  Mok, J. M., Poelstra, K., Ammar, K., McGirt, M., Cormier, J., Hart, R., Bauman, J., Cowart, P., Sheth, I., Singh, P., Yadav, J.
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- **Biomechanical Comparison of Multilevel Stand-Alone Lumbar Lateral Interbody Fusion With Posterior Pedicle Screws: An In Vitro Study.** *Neurospine*
  Mok, J. M., Lin, Y., Tafur, J. C., Diaz, R. L., Amirouche, F.
  2023; 20 (2): 478-486
- **Anterior Transpsoas Approach for Removal of Cement Leakage after Sacroplasty.** *Spine surgery and related research*
  M Mok, J., A Strelzow, J., L Vallina, V., P Zebala, L.
  2022; 6 (5): 563-568
- **The impact of mental health on patient-reported outcomes in cervical radiculopathy or myelopathy surgery.** *Journal of clinical neuroscience : official journal of the Neurosurgical Society of Australasia*
  Diebo, B. G., Tishelman, J. C., Horn, S., Poorman, G. W., Jalai, C., Segreto, F. A., Bortz, C. A., Gerling, M. C., Lafage, V., White, A. P., Mok, J. M., Cha, T. D., Eastlack, et al
  2018; 54: 102-108
- **Transforaminal Lumbar Interbody Fusion: Traditional Open Versus Minimally Invasive Techniques.** *The Journal of the American Academy of Orthopaedic Surgeons*
  Lee, M. J., Mok, J., Patel, P.
  2018; 26 (4): 124-131
- **Direct Measurement of Tissue Oxygenation as a Method of Diagnosis of Acute Compartment Syndrome.** *Journal of orthopaedic trauma*
  Weick, J. W., Kang, H., Lee, L., Kuether, J., Liu, X., Hansen, E. N., Kandemir, U., Rollins, M. D., Mok, J. M.
  2016; 30 (11): 585-591
- **How Effective is Physical Therapy for Common Low Back Pain Diagnoses?: A Multivariate Analysis of 4597 Patients.** *Spine*
  Eleswarapu, A. S., Divi, S. N., Dirschl, D. R., Mok, J. M., Stout, C., Lee, M. J.
  2016; 41 (16): 1325-1329
- **Impact of a Bundled Payment System on Resource Utilization During Spine Surgery.** *International journal of spine surgery*
  Mok, J. M., Martinez, M., Smith, H. E., Sciubba, D. M., Passias, P. G., Schoenfeld, A., Isaacs, R. E., Vaccaro, A. R., Radcliff, K. E.
  2016; 10: 19
- **Characterization of scaffold carriers for BMP9-transduced osteoblastic progenitor cells in bone regeneration.** *Journal of biomedical materials research. Part A*
  Shui, W., Zhang, W., Yin, L., Nan, G., Liao, Z., Zhang, H., Wang, N., Wu, N., Chen, X., Wen, S., He, Y., Deng, F., Zhang, et al
  2014; 102 (10): 3429-38
- **Evaluation of immediate postoperative complications and outcomes among military personnel treated for spinal trauma in Afghanistan: a cohort-control study of 50 cases.** *Journal of spinal disorders & techniques*
  Schoenfeld, A. J., Mok, J. M., Cameron, B., Jackson, K. L., Serrano, J. A., Freedman, B. A.
  2014; 27 (7): 376-81
- **Morbidity of early spine surgery in the multiply injured patient.** *Archives of orthopaedic and trauma surgery*
  Galvin, J. W., Freedman, B. A., Schoenfeld, A. J., Cap, A. P., Mok, J. M.
  2014; 134 (9): 1211-7
- **Bone Morphogenetic Protein (BMP) signaling in development and human diseases.** *Genes & diseases*
  Wang, R. N., Green, J., Wang, Z., Deng, Y., Qiao, M., Peabody, M., Zhang, Q., Ye, J., Yan, Z., Denduluri, S., Idowu, O., Li, M., Shen, et al
  2014; 1 (1): 87-105
- **Effect of vacuum spine board immobilization on incidence of pressure ulcers during evacuation of military casualties from theater.** *The spine journal : official journal of the North American Spine Society*
  Mok, J. M., Jackson, K. L., Fang, R., Freedman, B. A.
  2013; 13 (12): 1801-8
- **Psychological distress in the active duty military spine patient.** *Military medicine*
  Brooks, D. E., Agochukwu, U. F., Arrington, E. D., Mok, J. M.
  2013; 178 (10): 1059-64
- **Lumbar plexus anatomy within the psoas muscle: implications for the transpsoas lateral approach to the L4-L5 disc.** *The Journal of bone and joint surgery. American volume*

Davis, T. T., Bae, H. W., Mok, J. M., Rasouli, A., Delamarter, R. B.
2011; 93 (16): 1482-7

- **Adjacent Segment Motion After Anterior Cervical Discectomy and Fusion Versus ProDisc-C Cervical Total Disk Arthroplasty** *SPINE*
  Kelly, M. P., Mok, J. M., Frisch, R. F., Tay, B. K.
  2011; 36 (15): 1171-1179
- **Dynamic Constructs for Spinal Fusion: An Evidence-Based Review** *ORTHOPEDIC CLINICS OF NORTH AMERICA*
  Kelly, M. P., Mok, J. M., Berven, S.
  2010; 41 (2): 203-+
- **Admitting service and morbidity and mortality in elderly patients after hip fracture: finding a threshold for medical versus orthopedic admission.** *American journal of orthopedics (Belle Mead, N.J.)*
  Mok, J. M., Durrani, S. K., Yamamoto, A., Kim, H. T.
  2010; 39 (2): 80-7
- **Delayed presentation of tetraparesis following posterior thoracolumbar spinal fusion and instrumentation for adolescent idiopathic scoliosis.** *Spine*
  Dapunt, U. A., Mok, J. M., Sharkey, M. S., Davis, A. A., Foster-Barber, A., Diab, M.
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- **Reoperation after primary fusion for adult spinal deformity: rate, reason, and timing.** *Spine*
  Mok, J. M., Cloyd, J. M., Bradford, D. S., Hu, S. S., Deviren, V., Smith, J. A., Tay, B., Berven, S. H.
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- **Clinical outcome of deep wound infection after instrumented posterior spinal fusion: a matched cohort analysis.** *Spine*
  Mok, J. M., Guillaume, T. J., Talu, U., Berven, S. H., Deviren, V., Kroeber, M., Bradford, D. S., Hu, S. S.
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- **Extravasation of rhBMP-2 with use of postoperative drains after posterolateral spinal fusion.** *Spine*
  Mok, J. M., Durrani, S. K., Piper, S. L., Hu, S. S., Deviren, V., Berven, S. H., Burch, S.
  2008; 33 (15): 1668-74
- **Monitoring of nerve root injury using transcranial motor-evoked potentials in a pig model.** *Spine*
  Mok, J. M., Lyon, R., Lieberman, J. A., Cloyd, J. M., Burch, S.
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- **Use of C-reactive protein after spinal surgery: comparison with erythrocyte sedimentation rate as predictor of early postoperative infectious complications.** *Spine*
  Mok, J. M., Pekmezci, M., Piper, S. L., Boyd, E., Berven, S. H., Burch, S., Deviren, V., Tay, B., Hu, S. S.
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- **Surgical strategies and choosing levels for spinal deformity: how high, how low, front and back.** *Neurosurgery clinics of North America*
  Mok, J. M., Hu, S. S.
  2007; 18 (2): 329-37
- **Chemical, structural properties, and osteoconductive effectiveness of bone block derived from porcine cancellous bone.** *Journal of biomedical materials research. Part B, Applied biomaterials*
  Kim, S. H., Shin, J. W., Park, S. A., Kim, Y. K., Park, M. S., Mok, J. M., Yang, W. I., Lee, J. W.
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  Goldstein, J. I., Mok, J. M., Simon, C. M., Leiter, J. C.
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