



## David G. Mohler, MD

Clinical Professor, Orthopaedic Surgery

 Curriculum Vitae available Online

### CLINICAL OFFICE (PRIMARY)

- **Orthopaedic Musculoskeletal Tumor Surgery**

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### ACADEMIC CONTACT INFORMATION

- **Alternate Contact**

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## Bio

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### CLINICAL FOCUS

- Sarcomas
- Orthopaedic Surgery

### ACADEMIC APPOINTMENTS

- Clinical Professor, Orthopaedic Surgery

### ADMINISTRATIVE APPOINTMENTS

- Chief, Musculoskeletal Tumor Service, (2005- present)

### HONORS AND AWARDS

- Alpha Omega Alpha, Honor Medical Society (1983)
- National Research Service Award, NIH (1987)
- Saul Halpern, MD Orthopaedic Educator Award, Surgery Stanford University School of Medicine (2007)

### PROFESSIONAL EDUCATION

- Residency: Hospital For Special Surgery Hand Surgery Fellowship (1988) NY
- Internship: UCLA General Surgery Residency (1984) CA
- Medical Education: Weill Cornell Medical College (1983) NY
- Fellowship: Memorial Sloan-Kettering Cancer Center (1989) NY
- Board Certification: Orthopaedic Surgery, American Board of Orthopaedic Surgery (1991)
- MD, Memorial Sloan-Kettering , Bone Disease/Bone Tumor (1989)
- MD, Hospital for Special Surgery , Orthopaedic Surgery (1988)
- MD, UCLA , General Surgery (1984)
- MD, Cornell Univ. Medical College , Medicine (1983)

## LINKS

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

## Research & Scholarship

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### CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Mohler is involved in gene expression in sarcomas, and innovative anatomy-preserving surgical management of low grade chondrosarcomas.

### CLINICAL TRIALS

- Pilot Incisional Negative Pressure Wound Tx in Irradiated Lower Extremity Soft Tissue Sarcoma Wounds, Not Recruiting

## Publications

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### PUBLICATIONS

- **Decoding the evolutionary landscape of soft tissue sarcomas: From multiregion origins to therapy-driven adaptation**  
Soudi, S., Silvia, N., Subramanian, A., Nouth, S., Ryu, F., Kaneko, T., New, C., Kenney, D., Avedian, R., Steffner, R., Mohler, D., Kalbasi, A., Van De Rijn, et al  
AMER ASSOC CANCER RESEARCH.2025: B18
- **Prevention in non-oncologic intent sarcoma surgery.** *Surgical oncology*  
Wise, C. E., Le, C., Pham, N. S., New, C., Kenney, D. E., Avedian, R., Mohler, D., Steffner, R.  
2025; 62: 102273
- **Survival of Proximal Tibial Endoprostheses Using Compressive Osseointegration: A Multi-Institution Retrospective Study.** *Journal of surgical oncology*  
Day, Y., Thompson, A. R., Andaya, V. R., Smith, K., Doung, Y. C., Gundle, K. R., Hayden, J. B., Tran, T. H., Mohler, D. G., Avedian, R. S., New, C., Morse, L. J., Fang, et al  
2025
- **Whole genome-based circulating tumor DNA analysis as an ultrasensitive biomarker in pediatric sarcomas.**  
Johns, C., Subramanian, A., Soudi, S., Somani, A., Oladipo, E., Ryu, F., Kaneko, T., New, C., Kenney, D., Nouth, S., Avedian, R., Steffner, R., Mohler, et al  
LIPPINCOTT WILLIAMS & WILKINS.2025: 10053
- **Musculoskeletal Tumor Care Disparities Prior to Initiation of Treatment Among Newly Diagnosed Adult Patients.** *Cancers*  
Li, L. J., Bui, N., Moding, E. J., Steffner, R., Mohler, D., Ganjoo, K., Pan, M.  
2025; 17 (9)
- **Outcomes of Oncovascular Reconstruction in Patients With Extremity Sarcomas**  
Zahiri, A., Fereydooni, A., Eshraghian, E., Ho, M., Avedian, R. S., Mohler, D. G., Lee, J. T., Harris, E., George, E. L.  
MOSBY-ELSEVIER.2025
- **Association of Histologic Subtype With Radiation Response and Survival Outcomes in Synovial Sarcoma** *ADVANCES IN RADIATION ONCOLOGY*  
Matsui, J. K., Jackson, S., Fang, J., Mohler, D. G., Steffner, R. J., Charville, G. W., van de Rijn, M., Million, L., Chin, A. L., Hiniker, S. M., Kalbasi, A., Moding, E. J.  
2025; 10 (3)
- **Association of Histologic Subtype With Radiation Response and Survival Outcomes in Synovial Sarcoma.** *Advances in radiation oncology*  
Matsui, J. K., Jackson, S., Fang, J., Mohler, D. G., Steffner, R. J., Avedian, R. S., Charville, G. W., Rijn, M. v., Million, L., Chin, A. L., Hiniker, S. M., Kalbasi, A., Moding, et al  
2025; 10 (3): 101718
- **Evolutionary Pressures Shape Undifferentiated Pleomorphic Sarcoma Development and Radiotherapy Response.** *Cancer research*  
Blomain, E., Soudi, S., Wang, Z., Somani, A., Subramanian, A., Nouth, S. C., Oladipo, E., New, C., Kenney, D. E., Nemat-Gorgani, N., Kindler, T., Avedian, R. S., Steffner, et al  
2025

- **IlluminOss photodynamic bone stabilization system improves pain and function in the treatment of humeral metastatic disease.** *The bone & joint journal*  
Terek, R. M., McGough, R., Fabbri, N., Cheung, F., Brigman, B., Wittig, J., Emory, C., Abouafia, A., Avedian, R., Mayerson, J., Henshaw, R., Reimer, N., Eward, et al  
2024; 106-B (12): 1485-1492
- **IlluminOss photodynamic bone stabilization system improves pain and function in the treatment of humeral metastatic disease THE ILLUMINO S S LIGHTFIX TRIAL** *BONE & JOINT JOURNAL*  
Terek, R. M., IlluminOss Study Grp  
2024; 106B (12): 1485-1492
- **Sarcoma microenvironment cell states and ecosystems are associated with prognosis and predict response to immunotherapy.** *Nature cancer*  
Subramanian, A., Nemat-Gorgani, N., Ellis-Caleo, T. J., van IJzendoorn, D. G., Sears, T. J., Somani, A., Luca, B. A., Zhou, M. Y., Bradic, M., Torres, I. A., Oladipo, E., New, C., Kenney, et al  
2024
- **Patterns of local recurrence and risk of skin recurrence in soft tissue sarcomas after surgical resection.** *Practical radiation oncology*  
Ewongwo, A., Oladipo, E. D., Hui, C., Avedian, R. S., Steffner, R. J., Mohler, D. G., Kalbasi, A., Chin, A. L., Million, L., Hiniker, S. M., Moding, E. J.  
2023
- **Osteosarcoma PDX-Derived Cell Line Models for Preclinical Drug Evaluation Demonstrate Metastasis Inhibition by Dinaciclib through a Genome-Targeted Approach.** *Clinical cancer research : an official journal of the American Association for Cancer Research*  
Schott, C. R., Koehne, A. L., Sayles, L. C., Young, E. P., Luck, C., Yu, K., Lee, A. G., Breese, M. R., Leung, S. G., Xu, H., Shah, A. T., Liu, H. Y., Spillinger, et al  
2023: OF1-OF16
- **An osteoinductive and biodegradable intramedullary implant accelerates bone healing and mitigates complications of bone transport in male rats.** *Nature communications*  
Lin, S., Maekawa, H., Moeinzadeh, S., Lui, E., Alizadeh, H. V., Li, J., Kim, S., Poland, M., Gadomski, B. C., Easley, J. T., Young, J., Gardner, M., Mohler, et al  
2023; 14 (1): 4455
- **Long-term Outcomes of Diffuse or Recurrent Tenosynovial Giant Cell Tumor Treated with Postoperative External Beam Radiation Therapy.** *Practical radiation oncology*  
Baniel, C., Yoo, C. H., Jiang, A., von Eyben, R., Mohler, D. G., Ganjoo, K., Bui, N., Donaldson, S. S., Million, L., Rijn, M. v., Moon Oh, J., Hiniker, S. M.  
2022
- **Survival and failure modes of the Compress spindle and expandable distal femur endoprosthesis among pediatric patients: A multi-institutional study.** *Journal of surgical oncology*  
Tanaka, K. S., Andaya, V. R., Thorpe, S. W., Gundle, K. R., Hayden, J. B., Duong, Y., Avedian, R. S., Mohler, D. G., Morse, L. J., Zimel, M. N., O'Donnell, R. J., Fang, A., Randall, et al  
2022
- **Interactions in CSF1-driven Tenosynovial Giant Cell Tumors.** *Clinical cancer research : an official journal of the American Association for Cancer Research*  
van IJzendoorn, D. G., Matusiak, M., Charville, G. W., Spierenburg, G., Varma, S., Colburg, D. R., van de Sande, M. A., van Langevelde, K., Mohler, D. G., Ganjoo, K. N., Bui, N. Q., Avedian, R. S., Bovee, et al  
2022
- **Management of Patients with Newly Diagnosed Desmoid Tumors in a First-Line Setting.** *Cancers*  
Testa, S., Bui, N. Q., Charville, G. W., Avedian, R. S., Steffner, R., Ghanouni, P., Mohler, D. G., Ganjoo, K. N.  
2022; 14 (16)
- **Metastatic Pattern of Truncal and Extremity Leiomyosarcoma: Retrospective Analysis of Predictors, Outcomes, and Detection.** *Journal of personalized medicine*  
Tigchelaar, S. S., Frey, C., Sivaraj, D., Segovia, N. A., Mohler, D. G., Steffner, R. J., Avedian, R. S.  
2022; 12 (3)
- **Detection of MDM2 amplification by shallow whole genome sequencing of cell-free DNA of patients with dedifferentiated liposarcoma.** *PLoS one*

- Przybyl, J., Spans, L., Ganjoo, K., Bui, N., Mohler, D., Norton, J., Poultsides, G., Debiec-Rychter, M., van de Rijn, M.  
2022; 17 (1): e0262272
- **Anti-rotation pins for the compress implant do not increase risk of mechanical failure or impair osseointegration** *ANNALS OF JOINT*  
Campbell, S. T., Steffner, R. J., Finlay, A., Mohler, D. G., Avedian, R. S.  
2019; 4 (8)
  - **The Outcome of Patients With Localized Undifferentiated Pleomorphic Sarcoma of the Lower Extremity Treated at Stanford University** *AMERICAN JOURNAL OF CLINICAL ONCOLOGY-CANCER CLINICAL TRIALS*  
Kamat, N. V., Million, L., Yao, D., Donaldson, S. S., Mohler, D. G., van de Rijn, M., Avedian, R. S., Kapp, D. S., Ganjoo, K. N.  
2019; 42 (2): 166–71
  - **Genome-Informed Targeted Therapy for Osteosarcoma** *CANCER DISCOVERY*  
Sayles, L. C., Breese, M. R., Koehne, A. L., Leung, S. G., Lee, A. G., Liu, H., Spillinger, A., Shah, A. T., Tanasa, B., Straessler, K., Hazard, F. K., Spunt, S. L., Marina, et al  
2019; 9 (1): 46–63
  - **Cervical erector spinae plane block catheter using a thoracic approach: an alternative to brachial plexus blockade for forequarter amputation** *CANADIAN JOURNAL OF ANESTHESIA-JOURNAL CANADIEN D ANESTHESIE*  
Tsui, B. C. H., Mohler, D., Caruso, T. J., Horn, J.  
2019; 66 (1): 119–20
  - **The Outcome of Patients With Localized Undifferentiated Pleomorphic Sarcoma of the Lower Extremity Treated at Stanford University.** *American journal of clinical oncology*  
Kamat, N. V., Million, L., Yao, D., Donaldson, S. S., Mohler, D. G., van de Rijn, M., Avedian, R. S., Kapp, D. S., Ganjoo, K. N.  
2018
  - **Genome-Informed Targeted Therapy for Osteosarcoma.** *Cancer discovery*  
Sayles, L. C., Breese, M. R., Koehne, A. L., Leung, S. G., Lee, A. G., Liu, H., Spillinger, A., Shah, A. T., Tanasa, B., Straessler, K., Hazard, F. K., Spunt, S. L., Marina, et al  
2018
  - **Cervical erector spinae plane block catheter using a thoracic approach: an alternative to brachial plexus blockade for forequarter amputation.** *Canadian journal of anaesthesia = Journal canadien d'anesthesie*  
Tsui, B. C., Mohler, D. n., Caruso, T. J., Horn, J. L.  
2018
  - **Extraskelatal osteosarcoma of the hand: the role of marginal excision and adjuvant radiation therapy.** *Hand (New York, N.Y.)*  
Casey, D. L., van de Rijn, M., Riley, G., Tung, K., Mohler, D. G., Donaldson, S. S.  
2015; 10 (4): 602-606
  - **Sarcoma Resection With and Without Vascular Reconstruction: A Matched Case-control Study** *ANNALS OF SURGERY*  
Poultsides, G. A., Tran, T. B., Zambrano, E., Janson, L., Mohler, D. G., Mell, M. W., Avedian, R. S., Visser, B. C., Lee, J. T., Ganjoo, K., Harris, E. J., Norton, J. A.  
2015; 262 (4): 632-640
  - **Sarcoma Resection With and Without Vascular Reconstruction: A Matched Case-control Study.** *Annals of surgery*  
Poultsides, G. A., Tran, T. B., Zambrano, E., Janson, L., Mohler, D. G., Mell, M. W., Avedian, R. S., Visser, B. C., Lee, J. T., Ganjoo, K., Harris, E. J., Norton, J. A.  
2015; 262 (4): 632-40
  - **Antirotaion Pins Improve Stability of the Compress Limb Salvage Implant: A Biomechanical Study** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*  
Avedian, R. S., Chen, T., Lindsey, D., Palanca, A., Mohler, D.  
2014; 472 (12): 3982-3986
  - **Antirotaion pins improve stability of the compress limb salvage implant: a biomechanical study.** *Clinical orthopaedics and related research*  
Avedian, R. S., Chen, T., Lindsey, D., Palanca, A., Mohler, D.  
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  - **Successful Limb Salvage of a "Too-Short Segment" of the Proximal Part of the Femur with Use of a Compression Osseointegration Implant: A Case Report.** *JBJS case connector*

- Avedian, R. S., Giori, N. J., Mohler, D. n.  
2014; 4 (3): e63–e6
- **Surgical Technique: Methods for Removing a Compress (R) Compliant Prestress Implant** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*  
Abrams, G. D., Gajendran, V. K., Mohler, D. G., Avedian, R. S.  
2012; 470 (4): 1204-1212
  - **Curettage and Cryosurgery for Low-grade Cartilage Tumors Is Associated with Low Recurrence and High Function** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*  
Mohler, D. G., Chiu, R., McCall, D. A., Avedian, R. S.  
2010; 468 (10): 2765-2773
  - **EXTERNAL BEAM RADIATION THERAPY ENHANCES LOCAL CONTROL IN PIGMENTED VILLODULAR SYNOVITIS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*  
Horoschak, M., Tran, P. T., Bachireddy, P., West, R. B., Mohler, D., Beaulieu, C. F., Kapp, D. S., Donaldson, S. S.  
2009; 75 (1): 183-187
  - **Hunting Injuries** *In Wilderness Medicine, Editor Auerbach, P. Elsevier Press*  
Mohler, D., Otes, D  
2007
  - **Surgical Treatment of Post-Radiotherapy Nonunions of the Clavicle** *BULLETIN OF THE HOSPITAL FOR JOINT DISEASES*  
Wera, G., Mohler, D., Chou, L.  
2005; 62 (3-4): 125–30
  - **Failure of medullary tubes - A materials analysis** *INJURY-INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED*  
Taub, M., Wera, G., Dauskardt, R. H., Mohler, D. G.  
2004; 35 (9): 878-882
  - **Intercalary tibial allografts following tumor resection: The role of fibular centralization** *ORTHOPEDICS*  
Mohler, D. G., Yaszay, B., Hong, R., Wera, G.  
2003; 26 (6): 631-637
  - **Multifocal pseudoaneurysmal bone cysts in sickle cell disease** *ORTHOPEDICS*  
Kim, S. S., Fernando, T. L., Mohler, D. G.  
2001; 24 (5): 489-491
  - **Multiple fracture of medullary tube during intramedullary nailing of long bone fractures** *JOURNAL OF ORTHOPAEDIC TRAUMA*  
Vakharia, M. R., Lehto, S. A., Mohler, D. G.  
2000; 14 (7): 514-517
  - **Augmented amputations of the lower extremity** *CLINICAL ORTHOPAEDICS AND RELATED RESEARCH*  
Mohler, D. G., Kessler, J. I., Earp, B. E.  
2000: 183-197
  - **Open synovectomy with cryosurgical adjuvant for treatment of diffuse pigmented villonodular synovitis of the knee.** *Bulletin (Hospital for Joint Diseases (New York, N.Y.))*  
Mohler, D. G., Kessler, B. D.  
2000; 59 (2): 99-105
  - **Complete pelvic ring failure after posterior iliac bone graft harvesting** *SPINE*  
Fernando, T. L., Kim, S. S., Mohler, D. G.  
1999; 24 (20): 2101-2104
  - **Angiosarcoma of the hand associated with chronic exposure to polyvinyl chloride pipes and cement. A case report.** *journal of bone and joint surgery. American volume*  
Mohler, D. G., Chen, W. W., Bloom, H.  
1998; 80 (9): 1349-1354

- **Angiosarcoma of the hand associated with chronic exposure to polyvinyl chloride pipes and cement - A case report** *JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME*  
Mohler, D. G., Chen, W. W., Bloom, H.  
1998; 80A (9): 1349-1354
- **Adamantinoma arising in the distal fibula treated with distal fibulectomy: A case report and review of the literature** *FOOT & ANKLE INTERNATIONAL*  
Mohler, D. G., Cunningham, D. C.  
1997; 18 (11): 746-751
- **Glomus tumor of the plantar arch: A case report with magnetic resonance imaging findings** *FOOT & ANKLE INTERNATIONAL*  
Mohler, D. G., Lim, C. K., Martin, B.  
1997; 18 (10): 672-674
- **Oncologic and Functional Results of Curettage and Cryosurgical Treatment of Low Grade Chondrosarcomas** *Clinical Orthopaedics and Related Research. (Accepted 10/2009)*  
Mohler, D.G., Chiu, R, McCall, DA, Avedian, RS