

Spine Research Fellowship

Department of Orthopedic Surgery

University of Missouri–Kansas City (UMKC)

Program Overview

The Department of Orthopedic Surgery at the University of Missouri–Kansas City (UMKC) offers a partially funded 12-month Spine Research Fellowship under the direction of Houssam Bouloussa, MD, MS, Vice Chair of Research, starting July 1, 2026.

This fellowship provides an intensive, high-impact research experience for orthopedic surgery residents, neurosurgery residents, spine fellows, and junior attendings passionate about advancing spine care through clinical research. Fellows will work closely with engaged faculty, including Jonathan Dubin, MD (FDA regulation expert in orthopedics) and Akin Cil, MD (Chairman of the Department), in a collaborative academic environment.

Key Research Areas

- FDA recalls and MAUDE database analysis (medical device safety and adverse events in spine surgery).
- Medical device innovation.
- Interdisciplinary collaboration with the UMKC School of Engineering.
- AI applications for mining large spine databases.
- Support from the UMKC Department of Biostatistics for study design and analysis.

Observerships in clinic and the operating room are available with orthopedic surgery colleagues in the department.

Fellow Responsibilities

- Design studies; collect and analyze data using REDCap, SPSS/R, and AI platforms.
- Prepare manuscripts and abstracts for submission to high-impact journals (e.g., Spine, JBJS, JNS Spine, NASSJ).
- Present research at national and international meetings.
- Coordinate research activities between medical students and residents.
- Engage in collaborative, interdisciplinary research projects.

Eligibility Requirements

- Current orthopedic surgery or neurosurgery resident, spine fellow, or junior attending.
- Strong work ethic, passion for spine surgery, and commitment to impactful research and academic career development.

Program Benefits

- Intensive clinical research training using advanced methodologies (AI, large databases).
- Observership opportunities in clinic and the operating room.
- Close mentorship from senior faculty with high engagement.
- Co-authorship in high-impact publications.
- Presentation experience at major national and international meetings.
- Strengthened academic profile for career advancement.
- Access to biostatistics and engineering resources.

Application Process

Applicants should submit a **single PDF** by **April 1, 2026** (or until positions are filled) containing:

- Curriculum Vitae (CV).
- One letter of recommendation.
- Brief personal statement (≤ 1 page) describing interest in spine research and career goals.

Submit applications and inquiries to:

Houssam Bouloussa, MD, MS

Vice Chair of Research

Department of Orthopedic Surgery, UMKC

Email: Houssam.bouloussa@uhkc.org