

# Ahmad Hussain, MD

Interventional Radiology Research Fellow at Brigham and Women's Hospital/Harvard Medical School

[Email](#) | [LinkedIn](#) | [Portfolio](#) | [ResearchGate](#)

## Education

---

### Bachelor of Medicine, Bachelor of Surgery (MBBS)

2019-25

King Edward Medical University, Pakistan

### ECFMG Certified (MD)

2026-28

MyIntealth (USMLE Step 1: Passed, USMLE Step 2: 255, OET: Passed)

### Bachelor of Science (BSc)

2017-19

University of the Punjab, Pakistan

## Research Experience

---

### Postdoctoral Research Fellow

Oct 2025 - Present

Interventional Radiology department at Brigham and Women's Hospital/Harvard Medical School, Boston

PI: Yan Epelboym, MD, MPH

**Research Focus:** Clinical trials planning and management including patient screening, procedural planning, and angiographic interpretation for MSK embolization (GAE and TAE), with focus on treatment endpoints and longitudinal clinical response. Optimization of patient selection in knee OA patients, Quantitative angiographic and perfusion imaging, assessing feasibility of MRI instead of Fluoroscopy/CT for embolization, Evaluating feasibility of Microbot (Robot-assisted GAE) in Knee OA patients.

### Research Assistant

Nov 2024 - Feb 2025

Biology department (Basic Science Lab) at Lahore University of Management Sciences, Pakistan

PI: Shaper Mirza, PhD

**Research Focus:** Understanding immune impairments in type-2 diabetes and their impact on pneumococcal infections.

Skills: Bacterial Culturing and Assays, Immunoassays and DNA Sequencing.

### Lab Intern

Sep 2024 - Oct 2024

Pathology lab at various locations across Lahore, Pakistan

PI: Sohail Chughtai, MD

**Focus:** Two months internship program for medical students to develop interest in Pathology with weekly rotations across Histopathology Lab, Tissue Engineering Lab, Genetics Lab and Forensic Lab.

### Lab Intern

2019-21

Biochemistry Lab at KEMU, Pakistan

PI: Naqshab Chaudhary, MBBS, PhD

**Focus:** Tissue Handling, Cell Culture, Flow Cytometry, PCR, RT-PCR, Western Blot, Microscopy, ELISA.

## Publications

---

### Peer-Reviewed Publications

Selecting Osteoarthritis Patients for Genicular Artery Embolization: The Role of Imaging and Molecular Biomarkers. **Hussain A**, Taslakian B, et al. *Seminars in Interventional Radiology*. 2026. [Full Text Link](#)

Arterial Anatomy of the Shoulder: What the Interventional Radiologist Needs to Know. **Hussain A**, Bihun R, Epelboym Y. *Seminars in Interventional Radiology*. 2026. [Full Text Link](#)

Cystic genitourinary lesions in the pelvis: pearls and pitfalls. Hamade M, et al. *Abdominal Radiology*. 2025;50(12):5963-5983. [Full Text Link](#)

Effectiveness and reliability of AI in diagnosis and robot-assisted spinal and cranial surgery. Shahid I, Hussain A, et al. *Ann Med Surg (Lond)*. 2025;87(11):7236-7243. [Full Text Link](#)

How long to wait after local infiltration anaesthesia: systematic review. Bajwa MS, Hussain A, et al. *BJS Open*. 2023;7(5). [Full Text Link](#)

Redefining Fasciocutaneous Microanatomy: An Illustrated Review of Current Concepts and Their Clinical Correlates. Bajwa MS, Hussain A, et al. *International Microsurgery Journal*. 2023;7(1):2. [Full Text Link](#)

Impact of trans-anal versus laparoscopic total mesorectal excision on surgical and pathologic outcomes: meta-analysis of randomized controlled trials. Farooqi M, Hussain A, et al. *Langenbecks Arch Surg*. 2023;408(1):413. [Full Text Link](#)

Bevacizumab combination therapy versus standard chemotherapy for ovarian cancer: systematic review and meta-analysis. Rehman OU, Hussain A, et al. *Am J Clin Oncol*. 2024;47(8):399-408. [Full Text Link](#)

Calcifying aponeurotic fibroma in the deep space of the hand. Antar RM, Hussain A, et al. *Plast Reconstr Surg Glob Open*. 2024;12(12):e6358. [Full Text Link](#)

An infant with Patau syndrome associated with congenital heart defects. Khan U, Hussain A et al. *Ann Med Surg (Lond)*. 2022;80:104100. [Full Text Link](#)

Microscopic diascopic dermoscopy, an international ultra-budget alternative to traditional dermoscopy. Prideaux A, Hussain A et al. *Clinical and Experimental Dermatology*, Feb 2026. [Full Text Link](#)

Mixed Trabecular and Mucinous Carcinoid Arising in the Background of a Mature Ovarian Cystic Teratoma. Ali SMH, Hussain A et al. *Cureus* 2025, 17(1), e77013. [Full Text Link](#)

## Conference Abstracts

Lipiojoint for Musculoskeletal Embolization. Epelboym Y, et al. *GEST Annual Meeting 2026*.

Microwave Ablation versus Resection for Colorectal Cancer Liver Metastases: A Systematic Review and Meta-Analysis.

Nadeem A, Husnain A, et al. *SIR Annual Meeting 2025*; 36(3):S190-S191.

Cystic genitourinary lesions in the pelvis: pearls and pitfalls. Hamade M, Ballard DH, et al. Presented at RSNA Annual Meeting 2024; Chicago, IL.

## Research Projects (Ongoing/In Press)

Lipiojoint for Musculoskeletal Embolization: Properties, Applications, and Comparison with Other Temporary Embolic Agents. Epelboym Y et al. *Cardio-Vascular and Interventional Radiology (CVIR)*. (Accepted)

Adhesive Capsulitis Embolization: A Narrative Review. Ho Kit Kennis Leung, Ahmad Hussain et al. *Skeletal Radiology* (Accepted)

Utilization of Intraprocedural MRI in Genicular Artery Embolization: A Feasibility Study with a Genicular Artery Phantom (Prospective)

Feasibility of Microbot in GAE for robot-assisted procedures (Prospective)

Knee OA patients' outcomes review (Retrospective)

## Clinical Experience

---

### Hands-on Elective(Away IR)

July 2024

Interventional Radiology department at WashU in Saint Louis to gain practical experience about advanced IR procedures, including biopsies, vascular access placements, angioplasties, embolization (uterine artery, GI bleeding), sclerotherapy, tumor ablations, abscess drainages, biliary interventions and Y-90 radioembolization for liver cancer.

### Clinical Observership

June 2024- July 2024

Lenox Hill Interventional Radiology to observe about a range of advanced procedures, including Y-90 radioembolization, prostate and uterine artery embolization, fluoroscopic guided biopsies and thrombectomies.

### Clinical Rotation (Home DR)

Feb-March 2025

Department of Radiology, Mayo Hospital, Lahore to gain hands-on experience in diagnostic ultrasound and Doppler imaging. Contributed to CT and MRI reporting; performed eFAST in emergency settings. Observed oncologic tumor ablation procedures.

## Leadership and Service

---

**Fundraising Manager**, Students' Patient Welfare Society, KEMU

**Organizer**, Monthly Free Eye Camps at Vision of Hope by IFMSA

**Co-founder**, The Little Steps, an organization to promote personal hygiene in public school kids in Pakistan

**Project Director**, Volunteer Force Against Polio Transmission (VFAPT)

**Student Volunteer**, Shaukat Khanum Cancer Hospital Fundraising (Annual Campaign)

**Student Volunteer**, fundraising campaign for flood affectees by **Alkhidmat Foundation**

**Student Volunteer**, awareness campaigns for **COVID-19** preventive measures and immunization

**Student Volunteer**, Plant Green (Nationwide plantation drive in Pakistan)

**Medical Transcriber and Translator**, Sehat Sanjha (App development related to AI in Healthcare at LUMS)

## **Honors and Awards**

---

**Honors** in Radiology, Surgery and Internal Medicine.

**GEST Research Trainee Scholarship Award**

**RSNA Trainee Travel Award**

**Harvard Catalyst Mentee Program**

**Aga Khan University Challenge Scholarship Program**

**Gold Medalist** at Lahore Table Tennis Intercollegiate Championship 2024.

## **Teaching and Mentorship**

---

### **Research Mentorship**

Mentored medical students about clinical research and particularly about Case Reports, Review Articles, Systematic Reviews and Meta Analyses, helping them learn statistical tools such as Review Manager, MedCalc, and JAMOVI. Also, addressed a session on navigating research pathway into US before applying for residency.

### **USMLE Mentorship**

Mentored and tutored 200+ students throughout their USMLE exam journey.

## **Extracurricular Activities**

---

Table Tennis, Cricket, Soccer, Cycling, Photography and E-Sports

## **References**

---

To be provided upon request.