AREEJ ALSARAIRAH

LECTURER IN DIAGNOSTIC RADIOGRAPHY & MEDICAL IMAGING

Al-Karak, Jordan areej_alsarairah@yahoo.com Al-Hussein Bin Talal University



Professional Summary: Academic educator and medical diagnostic imaging researcher specializing in Magnetic Resonance Imaging (MRI), Quantitative Susceptibility Mapping (QSM), deep learning applications in computed tomography, radiomics, and advanced luminescent radiation dosimetry (OSL). Experienced in clinical training, lab supervision, and radiation safety protocols.

ACADEMIC & CLINICAL EXPERIENCE

Full-Time Lecturer (Medical Diagnostic Imaging)

2022 – Present

Al-Hussein Bin Talal University — Princess Aisha College of Nursing and Health Sciences | Ma'an, Jordan

Appointed in the Department of Medical Imaging and Radiation. Responsible for curriculum delivery, practical supervision, and student evaluation across multiple specialized modules:

- **Lecture & Practical Courses:** Radiographic Positioning (I, II, III, & IV), Sectional Anatomy, Magnetic Resonance Imaging (MRI), Computed Tomography (CT), Diagnostic Imaging Techniques, Mammography, Medical Imaging & Image Processing, and Quality Assurance/Control.
- **Clinical Mentorship:** Guiding undergraduate students during hands-on hospital rotations and radiological departmental protocols.

Laboratory Supervisor & Radiation Protection Inspector

2016 – 2019

Al-Hussein Bin Talal University — Department of Medical Imaging and Radiation | Ma'an, Jordan

Managed departmental radiological laboratories and directed safety compliance across diagnostic installations:

- Supervised specialized practical training in Radiation Physics, Sectional Anatomy, Radiographic Positioning, and Mammography laboratories.
- Administered radiation protection monitoring, dosimetric badge audits, safety standards, and laboratory equipment quality testing.

EDUCATION & ACADEMIC QUALIFICATIONS

Master of Medical Sciences (Medical Diagnostic Imaging / MRI)

2019 – 2022

Tongji Medical College, Huazhong University of Science and Technology (HUST) | Wuhan, China

Department of Medical Imaging and Nuclear Medicine.
Dissertation: *"Quantitative Susceptibility Mapping (QSM) on Brain Iron Deposition in Hypertension Patients With and Without Regular Medication."*

Bachelor of Science in Medical Imaging and Radiation

2012 – 2016

The Hashemite University — College of Allied Medical Sciences | Zarqa, Jordan

PROFESSIONAL CERTIFICATIONS & TRAINING

Year	Course & Credential Title	Issuing Institution / Authority
2022	**Academic Work Permit**	Ministry of Higher Education and Scientific Research, Jordan
2016	Training Course in Radiation Protection & Safety	Royal Scientific Society (RSS), Jordan
2016	International Computer Driving Licence (ICDL)	Mutah University, Jordan
2014	Training Course in Physics of Magnetic Resonance Imaging (MRI)	UK Academy, Jordan

PEER-REVIEWED RESEARCH PUBLICATIONS & CASE STUDIES

Refereed scholarly journal articles, machine learning models, systematic reviews, and experimental dosimetry publications:

[1] A Systematic Review and Meta-analysis of Two-Dimensional Breast Ultrasound Radiomics: Implications for Lesion Characterization and Diagnostic Accuracy
Journal of Imaging Informatics in Medicine — Springer Nature (2026). **Journal Quartile: Q1**

[2] Impact of Hypertension on Brain Function Assessed by Resting State Functional MRI (rs-fMRI): A Systematic Review and Meta-Analysis
Brain Imaging and Behavior — Springer Nature (2026). **Journal Quartile: Q1**

[3] Evaluating Transfer Learning for Brain Tumor MRI Classification: Frozen VGG16 Feature Extraction Versus End-to-End CNN Training
Egyptian Journal of Radiology and Nuclear Medicine — Springer (2026). **Journal Quartile: Q3**

[4] YOLOv11 Models: Enhancing CT-Based Diagnosis of Cervical Foraminal Stenosis Through Deep Learning
International Journal of Advanced Multidisciplinary Research and Studies (Nov 2025). **Peer Reviewed**

[5] Osteoid Osteoma of the Joint Capsule: A Case Report Highlighting Diagnostic Challenges and the Role of Advanced Imaging
Journal of Radiology Case Reports, Vol. 19, No. 7, pp. 1–11 (Jul 2025). **Peer Reviewed Case Report**

[6] Advancing Human Organ Radiation Dosimetry Optically Stimulated Luminescence NaCl Detectors in CT-Scan
Collaborative Radiation Sciences & Dosimetry Research (Published / Full-text available 2025–2026). **Peer Reviewed**

[7] Fabrication and Development of NaCl-Based Optically Stimulated Luminescence Detectors for Radiation Dosimetry
Experimental Dosimetry & Radiation Physics Research (Published / Full-text available 2025–2026). **Peer Reviewed**

✓ CORE COMPETENCIES & PROFESSIONAL SKILLS

Diagnostic Imaging & Modalities

Comprehensive operational proficiency in Magnetic Resonance Imaging (MRI), Quantitative Susceptibility Mapping (QSM), Multi-Detector Computed Tomography (CT), Mammography positioning, and Quality Control/Assurance standards.

Radiation Protection & Lab Management

Certified radiation safety monitoring, dose estimation protocols, laboratory equipment oversight, clinical room inspection, and personal radiation dosimetry monitoring (OSL/TLD systems).

Pedagogical & Communication Skills

Proven university teaching capacity across foundational and advanced radiography modules; engaging presentation abilities; positive student mentorship; and constructive academic feedback delivery.

Teamwork, Adaptability & Leadership

Strong ability to adapt rapidly to multidisciplinary health science environments; team leadership in laboratory supervision; collaborative spirit in research initiatives with international institutions.

LANGUAGES

Arabic: Native / Mother tongue **English:** Professional Working Proficiency (Academic & Clinical)