

CONFERENCE BOOKLET



مؤتمر تكامل الذكاء الاصطناعي والتحاليل المخبرية الطبية

آفاق جديدة لدعم التشخيص المخبري والرعاية الصحية

**Integration of Artificial Intelligence
& Medical Laboratory Analyses Conference**

New Horizons for Supporting Laboratory Dignosis and Healthcare

Registration
Barcode



✉ aimla@su.edu.sa ☎ 0116476959

🌐 aimlaconferece.su.edu.sa

📍 Main Lobby, Administration Building,
Shaqra University



2026 /04/23



ABOUT SHAQRA UNIVERSITY

Shaqra University (SU) is a prominent public university in the Kingdom of Saudi Arabia, headquartered in Shaqra City, approximately 190 km northwest of Riyadh. With multiple campuses across the region, the university provides diverse academic programs in health sciences, engineering, business, and humanities.

As a key institution in advancing healthcare education, Shaqra University is dedicated to developing the medical laboratory workforce through innovative curricula, hands-on training, and research-driven approaches. By hosting the **Integration of Artificial Intelligence and Medical Laboratory Conference (AIMLA): New Horizons to Support Diagnosis and Healthcare**, the university reaffirms its commitment to strengthening the medical laboratory profession and supporting Saudi Arabia's healthcare goals.



ABOUT AI and Medical Laboratory conference 2026

Additionally, the conference has received official accreditation from the Saudi Commission for Health Specialties to award 8 Continuing Education Hours, reflecting our commitment to providing high-quality scientific content that supports the professional development of participants.

Join us at this exceptional event and be part of shaping the future of medical laboratory in Saudi Arabia!

Accepted research papers will be published in the Journal of Medicine and Health Studies, an international open-access journal regularly issued by Shaqra University. Conference presentations will also be published in the official conference proceedings, aligned with academic promotion regulations followed by most Saudi universities.





INTRODUCTION OF CONFERENCE

Based on the national role that Shaqra University feels, represented by the College of Applied Medical Sciences in Al Quwayyah, in contributing to the academic development process in our dear homeland and in light of the accelerating digital revolution, the world is witnessing a radical transformation in the concepts of health care and medical diagnosis. As artificial intelligence has become an effective tool in developing performance and achieving accuracy and speed of response and among the most prominent sectors benefiting from these modern technologies, the medical laboratory sector stands out as one of the pillars of early diagnosis and public health monitoring. The conference aims to shed light on the integration of artificial intelligence with laboratory analyses, and review the challenges and opportunities, in addition to presenting realistic models of successful experiments in automation, predictive analysis, and improving the quality of performance. We believe that the future begins from the laboratory, and that investing in technology and knowledge is our path toward more accurate, efficient, and humane health care.



WELCOME MESSAGE

It is our great pleasure to welcome you to the **Integration of Artificial Intelligence and Medical Laboratory Conference (AIMLA): New Horizons to Support Diagnosis and Healthcare 2026**, hosted by Shaqra University. This landmark event is the first of its kind, dedicated to advancing the medical laboratory profession in the Kingdom of Saudi Arabia. The First Scientific Conference for Medical Laboratories and Artificial Intelligence seeks to enhance integration between smart technologies and laboratory practices by providing a specialized scientific platform for exchanging knowledge and displaying the latest innovations.

We extend our heartfelt gratitude to all the participants, speakers, sponsors, and organizers who have made this conference possible. Your contributions and commitment are crucial to the success of this event and the continued advancement of the Laboratory profession in Saudi Arabia and beyond.

We look forward to an engaging and inspiring conference, filled with fruitful discussions and new opportunities. Thank you for joining us on this important journey to shape the future of Laboratory in the Kingdom.





CONFERENCE GOALS

The conference aims to shed light on the role of artificial intelligence in developing medical analysis techniques, exchange scientific and applied experiences between laboratories and researchers, and discuss the ethical and legal challenges associated with the adoption of artificial intelligence.

01

Reviewing the latest technologies in artificial intelligence and their application in medical laboratories.

02

Enhancing integration between laboratory analyzes and smart systems to support medical diagnosis and improve patient care.

03

Discuss the ethical and legal challenges associated with the use of artificial intelligence in laboratory data analysis.

04

Transferring expertise and experiences between medical laboratories from different countries and sectors.

05

Support research and research in the areas of editing, data analysis, and computer vision in laboratories

06

Use laboratory staff and develop their digital skills to keep pace with smart transformation in the health sector.

07

Encouraging partnerships between technical institutions, advanced solutions, etc.





Conference Themes and Programs



Theme 1: AI-Driven Diagnostic Applications in Medical Laboratories

This theme focuses on artificial intelligence applications that enhance diagnostic processes in medical laboratories. It includes AI-enabled solutions that improve diagnostic accuracy, support early diseases detection, facilitate intelligent interpretation of laboratory data, and strengthen the integration between laboratory findings and clinical decision making



Theme 2: Smart Automation and Optimization of Laboratory Processes.

This theme addresses the role of artificial intelligence in automating and optimizing laboratory workflows. It covers intelligent systems for sample management and tracking, AI-supported resource and supply chains management, and technologies that improve efficiency, reduce turnaround time, and enhance overall laboratory performance.



Theme 3: Big Data and Predictive Analytics in Medical Laboratories.

This theme focuses on the use of big Data Analytics and predictive modelling in laboratories. It includes large-scale analysis of laboratory data for disease surveillance epidemic prediction, development of integrated laboratory -clinical data platforms and AI-based clinical decision support system.



Theme 4: Future of the Workforce in Medical Laboratories

This theme explores the impact of artificial intelligence on the medical laboratory workforce. It covers changes in professional roles, development of digital and AI- related competencies, workforce readiness, and the importance of continuous education and training in emerging technologies



Theme 5 : Ethical and governance Issues in AI for Medical laboratories

This theme focuses on ethical, legal, and governance aspects of using artificial intelligence in medical laboratories including patient data privacy, security of laboratory information, transparency and accountability of AI systems, algorithmic bias, and responsible implantation of AI in healthcare.





KEYNOTE SPEAKERS



Professor Khalid Alharbi

Chairman of the Board of the Saudi Society for Clinical Laboratory Sciences @SSCLS , Professor, medical genetics consultant, and former dean of the College of Nursing @ King Saud University. Professor, Department of Clinical Laboratory Sciences, College of Applied Medical Sciences in King Saud University.



Dr. Yusef Alhwasawi

Chairman of the Board of Directors of the Future Society for Scientific Research, genetics consultant and research scientist at King Faisal Specialist Hospital in Jeddah. Professor at Al-Faisal University, Fellowship - America. CEO





Dr. Maram Al-Otaibi

Chief Executive Officer (CEO) of the Supporting Health Services Center. Former associate professor and consultant molecular genetics at King Saud University medical city, where I head the Molecular Genetic and Cytogenetic clinical Laboratories.



Dr. Mohsin Bilal

Associate Professor | Computational Pathology Deep Learning, Foundation Models Head of Artificial Intelligence and Complexity (AIC), College of Computer Engineering & Sciences, Prince Sattam Bin Abdulaziz University (PSAU) Al-Kharj, Saudi Arabia





Dr. Fawaz Daleem Alharbi

Head of the advisory team for establishing and operating the Enterprise Architecture Office to achieve strategic objectives. Associated Professor, Imam Mohammed Bin Saud University



Dr. Mariam Mohammed Ali AlEissa

Senior genetic consultant with over 20 years of experience at The KSA Ministry of Health (MOH) and Public Health Authority (PHA)





Dr. Nasser Khamis Alqurainy

Assistant Professor of Medical and Molecular Microbiology in the Basic Sciences Department, College of Science and Health Professions, King Saud bin Abdulaziz University for Health Sciences (KSAU-HS). Associate Research Scientist in the Department of Infectious Diseases at King Abdullah International Medical Research Centre (KAIMRC).



Dr. Abdulrahman Abdullah Al Ghamdi

Chair Professor of HRH Prince Faisal bin Bandar for Artificial Intelligence Technologies in Smart Cities. Editor-in-Chief of the Journal of Computing and Information Technology. College of Computing and Information Technology, Shaqra University, Saudi Arabia.





Dr. Abdullah Ghadeer Alharbi

Blood Bank supervisor King Fahad Specialist Hospital – Qassim Burydah



Dr. Mona Abdulhadi Shegdar

Molecular Microbiology Consultant Head of Clinical Risk Management & Infection Control Regional Shared Services Laboratory Riyadh





Dr. Manar Abu Bakr Samman

Executive Director General Laboratories, KSA Ministry of Health (MOH), Genetics Consultant



Dr. Areej Abdul Aziz Al-Omar

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SCIENTIFIC COMMITTEE



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JOURNAL OF
MEDICINE AND
HEALTH STUDIES

Official publication of Shaqra University



CME (8 Hours)



Standout Info

Important Dates:

- ★ Abstract Submission Deadline: 📅 19/04/2026
- ★ Conference Dates: 📅 23/04/2026

Stay tuned for updates and announcements to make the most of your participation in AIMLA 2026!





Contact Info:



Website Link:

AIMLACONFERENCE.SU.EDU.SA

Submission link



Registration Link



Welcome to AIMLA 2026!

Best regards,

Integration of Artificial Intelligence and Medical Laboratory Conference (AIMLA Organising Committee)
(AIMLA) 2026



For inquiries

✉ aimla@su.edu.sa ☎ 0116476959

🌐 aimlaconference.su.edu.sa

Thank You for Joining Us!

We sincerely appreciate your participation in the Integration of Artificial Intelligence and Medical Laboratory Conference (AIMLA) 2026. Your contributions help shape the future of Laboratory in the Kingdom of Saudi Arabia. We look forward to seeing you at future events!

Safe travels and see you soon!

Organizing Committee





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