

Anas H. Alzahrani, MD, PhD, MPH

Physician-Scientist · Research Methodologist · Health Data Scientist

Jeddah, Saudi Arabia · Anashalzahrani@gmail.com · [LinkedIn](#) · [ORCID: 0000-0002-1394-9157](#)

CURRENT POSITIONS

Assistant Professor, Preventive Medicine & Public Health King Abdulaziz University, Faculty of Medicine, Jeddah	May 2024 – Present
Deputy Director, Local & International Collaboration Unit King Abdulaziz University, Faculty of Medicine	2024 – Present
Founder & Chairman Coefficients Health Analytics Health data science consultancy specializing in causal inference, real-world evidence, and AI-powered research tools.	2026 – Present

EDUCATION

PhD in Clinical Research Icahn School of Medicine at Mount Sinai, New York Cardiovascular outcomes research, causal inference, 75M+ patient records, probabilistic linkage, HPC.	2020 – 2024
MPH, Epidemiologic & Biostatistical Methods Johns Hopkins Bloomberg School of Public Health	Completed
MBBS (Bachelor of Medicine & Surgery) King Abdulaziz University, Jeddah	Completed

PREVIOUS POSITIONS

Adjunct Professor, Population Health Science & Policy Icahn School of Medicine at Mount Sinai, New York	Sep 2024
Head of Research, MENA Traverse Health, The Netherlands Directed regional RWE projects, study protocols, and investigator onboarding across MENA.	Nov 2024 – Feb 2025
Vascular Surgery Resident Skåne University Hospital, Lund University, Malmö, Sweden	2015 – 2018
Research Fellow Johns Hopkins Hospital, Baltimore NSQIP and STS database analysis, predictive modeling for surgical outcomes.	2014 – 2015
Research Fellow McGill University, Montréal Fibrosis research, tissue regeneration, in-vivo/in-vitro studies.	2012 – 2014

RESEARCH EXPERTISE

Causal Inference: Instrumental variables, propensity score methods, IPW, target trial emulation
Biostatistics: Survival analysis, hierarchical modeling, meta-analysis, Bayesian networks
Big Data: Claims data (75M+ records), Spark, HPC, cloud computing, probabilistic linkage
AI/ML: Clinical decision support, evidence synthesis automation, NLP for guidelines
Tools: Stata, Python, R, SAS, SPSS (20+ years data analysis)
Clinical: Cardiovascular outcomes, vascular surgery, diabetic foot, real-world evidence

SELECTED PUBLICATIONS

Alzahrani AH, et al.

Choice of revascularization strategy for ischemic cardiomyopathy due to multivessel coronary disease.
J Thorac Cardiovasc Surg, 2024

Alzahrani AH, et al.

Temporal Trend in Revascularization for Patients With Ischemic Cardiomyopathy and Multivessel CAD.
J Am Heart Assoc, 2024;13:e032212

Alsaleh D, Alzahrani AH, et al.

Multiple arterial vs single arterial grafting in diabetic CABG patients.
JTCVS Open, 2023;13:119-135

Alzahrani A, et al.

Endoglin haploinsufficiency & differential regulation of ECM during skin fibrosis and cartilage repair in mice.
J Cell Commun Signal, 2018;12:379-388

Wang DD, Alzahrani AH, et al. (with Frank B. Hu, Harvard)

Prevalence and Correlates of Lower-Extremity Amputation in Diabetic Foot Ulcer in Jeddah.
Int J Low Extrem Wounds, 2016;15:26-33

ACTIVE GRANTS & PROJECTS

CDSS for Antibiotic Prescriptions

2.5M SAR

AI-driven clinical decision support for antibiotic prescribing optimization (URTI/UTI/LRTI).

SchemaForge — AI Study Design Platform

Live

AI-powered research methodology consultant that challenges assumptions and generates protocols.

Automated Guideline Expansion Framework (AGEF)

Active

Automation in clinical guidelines development and maintenance.

AWARDS & HONORS

- King Abdulaziz University Awards for Scientific Research (2017, dual awards)
- Grand Award Judge, Intel International Science and Engineering Fair (ISEF), USA
- Scientific Reviewer: JAHA, Circulation, Cancer Medicine, Heart, Frontiers in Medicine

LANGUAGES

Arabic (native) · English (fluent) · French (studied at Berlitz Montréal & Alliance Française Jeddah)