



Annual Report 2023-2024

September 01, 2023 to August 31, 2024

Scientific Research Unit, College of Medicine at Shaqra,
Shaqra University, Saudi Arabia

Message from the Dean, College of Medicine at Shaqra

Dear Respected Colleagues,
Greetings!

Excellence in research is the main objective of the College of Medicine. Our faculty members collaborated with clinicians and leading researchers worldwide for scholarly contribution and attainment of excellence across many areas of medical research.

I strongly encourage academic staff and medical students from basic and clinical sciences to attain and maintain research excellence to enhance the standard of healthcare in the KSA and throughout the world.

I extend my sincere thanks to His Excellency University President, Vice-Rectorate for Graduate and Scientific Studies, Deanship of Research & Entrepreneurship, Dean and Vice-Deans, and HODs at the College of Medicine, Research and Development Committee, faculty members, and students for the support, contribution, and cooperation towards the research unit.

Thanks and kind regards

Dr. Feras Almarshad
Dean, College of Medicine at Shaqra

Message from the Head, Scientific Research Unit

Dear Respected Colleagues,
Greetings!

I am delighted to share this report which captures the key notes and metrics related to research at the College of Medicine, Shaqra for the academic year 2023-2024 [1st September 2023 to 31st August 2024].

With support from internal and external collaborations, our faculties help spur advancements in a variety of diverse areas ranging from drug discovery and newer management in various ailments. It remains incredibly important that society realizes the benefits of our research that will support the Kingdom Vision 2030.

I would like to thank His Excellency University President, Vice-Rectorate for Graduate and Scientific Studies, Deanship of Research & Entrepreneurship, Dean and Vice-Deans, and HODs at the College of Medicine, Research and Development Committee, faculty members, and students for the support, contribution, and cooperation towards the research unit.

Thanks, and kind regards

Dr. Aslam Pathan, PhD, MANF
Head, Scientific Research Unit
College of Medicine at Shaqra

**Research and Development Committee
(2023-2024)**

Sr. No.	Name of the Members	
1.	Prof. Jamal Arif	Chairman
2.	Prof. Dr. Medhat Farag	Member
3.	Dr. Abdulaziz Almulhem	Member
4.	Dr. Dushad Ram	Member
5.	Dr. Amer Ali Khan	Member
6.	Dr. Aqeel Ahmad	Member
7.	Dr. Aslam Pathan	Member

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1. Faculty/Student Publications

Sr. No.	Title of Publication	Faculty/Student Name	Publication Date
1.	Global, regional, and national burden of rheumatoid arthritis, 1990–2020, and projections to 2050: a systematic analysis of the Global Burden of Disease Study 2021. https://doi.org/10.1016/s2665-9913(23)00211-4	Aslam Pathan Ghulam Mustafa M. Tabish	Sept 2023
2.	Global, regional, and national incidence of six major immune-mediated inflammatory diseases: findings from the global burden of disease study 2019. https://doi.org/10.1016/j.eclinm.2023.102193	Aslam Pathan Aqeel Ahmad Ghulam Mustafa M. Tabish	Sept 2023
3.	Cancer stem cell-derived exosome-induced metastatic cancer: An orchestra within the tumor microenvironment. https://doi.org/10.1016/j.biochi.2023.03.014	Aqeel Ahmad Semmal Meerasa	Sept 2023
4.	Only Pakistan and Afghanistan have been Classified Polio Endemic Nations in the Globe as of 2022: Current Obstacles and Future Prospects for Polio Eradication in these Nations. https://www.medtextpublications.com/open-access/only-pakistan-and-afghanistan-have-been-classified-polio-endemic-nations-1486.pdf	Aqeel Ahmad Amer Ali Khan	Sept 2023
5.	The global fatty liver disease Sustainable Development Goal country score for 195 countries and territories. https://doi.org/10.1097/hep.0000000000000361	Aqeel Ahmad	Sept 2023
6.	Assessment of Nutritional Status among 12–18-year age group using Z-scores in post-pandemic era of covid-19. https://medforum.pk/article/16assessment-of-nutritional-status-among-12-18-year-age-group-using-who-z-scores-in-post-pandemic-era-of-covid-19	Fakhruddin Ahmad, Abdulrahman Alshahrani, Ghulam Mustafa, <u>Abdullah M. Bin Hissain</u> (student)	Sept 2023
7.	Global, regional, and national burden of other musculoskeletal disorders, 1990–2020, and projections to 2050: a systematic analysis of the Global Burden of	M. Tabish	Oct 2023

	Disease Study 2021. https://doi.org/10.1016/s2665-9913(23)00232-1		
8.	Simulation-Based Medical Education: A Boon for Medical Students? - An Integrative Review. http://dx.doi.org/10.58739/jcbs/v13i3.23.5	Bhaskar Paul Pijush Saha	Oct 2023
9.	The Global, Regional, and National Burden of Adult Lip, Oral, and Pharyngeal Cancer in 204 Countries and Territories. https://doi.org/10.1001/jamaoncol.2023.2960	Aqeel Ahmad	Oct 2023
10.	The Link Between Sleeping and Type 2 Diabetes: A Systematic Review. https://doi.org/10.7759/cureus.48228	Ali Darraj	Nov 2023
11.	Atorvastatin as an Antihypertensive Agent: A Pilot Study https://doi.org/10.7759/cureus.49532	Niaz Ali Himayat Ullah Hosam Shabana	Nov 2023
12.	Psychiatric comorbidities and concurrent substance use among people who inject drugs: a single-centre hospital-based study. https://doi.org/10.1038/s41598-023-45633-y	Altaf Bandy	Nov 2023
13.	Immotile Cilia Syndrome: A Case Report https://www.medforum.pk/article/23-immotile-cilia-syndrome-a-case-report	Ghulam Mustafa	Dec 2023
14.	Global Burden of Cardiovascular Diseases and Risks, 1990-2022. https://doi.org/10.1016/j.jacc.2023.11.007	Aqeel Ahmad Ghulam Mustafa M. Tabish	Dec 2023
15.	Potential use of neuroprotective and L-DOPA-rich plants in Parkinsonian therapy. https://doi.org/10.37881/1.831	Feras Almarshad, Mohammed Atif, Abdulrahman Alshahrani, Jamal Arif	Dec 2023
16.	Limitations of Alzheimer's Disease Medications. https://doi.org/10.37881/1.832	Aslam Pathan	Dec 2023

17.	A multicentric and nationwide predictive study role of T cell sub-population in the prevalence and prognosis of cryoglobulinemia among genotype 4 chronic hepatitis C patients. https://doi.org/10.1002/jmv.29248	Feras Almarshad	Dec 2023
18.	Alleviation of doxorubicin-induced cardiotoxicity in rat by mesenchymal stem cells and olive leaf extract via MAPK/ TNF- α pathway: Preclinical, experimental and bioinformatics enrichment study. https://doi.org/10.1016/j.tice.2023.102239	Ayman Elsharawy	Dec 2023
19.	Zinc Oxide and Magnesium-Doped Zinc Oxide Nanoparticles Ameliorate Murine Chronic Toxoplasmosis. https://doi.org/10.3390/ph17010113	M. Sarhan	Jan 2024
20.	Prevalence and associated factors of stunting and thinness among adolescent Sudanese schoolchildren: a cross-sectional study. https://doi.org/10.1093/trstmh/trad055	Jalal Bilal	Jan 2024
21.	Pathophysiology of autism spectrum disorders and the gut micro biome: A systematic review. https://doi.org/10.31893/multirev.2023ss002	Semmal Meerasa	Jan 2024
22.	Decoding the genome: Cyp3a5 rs15524 polymorphism and how it affects plasma carbamazepine levels in patients with epilepsy in khyber pakhtunkhwa. https://doi.org/10.53555/jptcp.v31i1.4034	Niaz Ali	Jan 2024
23.	Distribution pattern of <i>UGT1A6</i> and <i>UGT2B7</i> gene polymorphism and its impact on the pharmacokinetics of valproic acid and carbamazepine: Prospective genetic association study conducted in Pakistani patients with epilepsy. https://doi.org/10.1016/j.gene.2023.147886	Niaz Ali, Abdulrahman Alshahrani, Feras Almarshad	Jan 2024
24.	Temporal patterns of cancer burden in Asia, 1990–2019: a systematic examination for the Global Burden of Disease 2019 study. https://doi.org/10.1016/j.lansea.2023.100333	Aqeel Ahmad M. Tabish	Jan 2024

25.	Mortality and disability-adjusted life years in North Africa and Middle East attributed to kidney dysfunction: a systematic analysis for the Global Burden of Disease Study 2019. https://doi.org/10.1093/ckj/sfad279	Aqeel Ahmad M. Tabish	Jan 2024
26.	Chest Pain Management Using Prehospital Point-of-Care Troponin and Paramedic Risk Assessment. https://www.medforum.pk/index.php/article/21-chest-pain-management-using-prehospital-point-of-care-troponin-and-paramedic-risk-assessment	Feras Almarshad Ghulam Mustafa	Jan 2024
27.	Effect of Low-Dose Aspirin on the Elderly. https://doi.org/10.7759%2Fcurus.54658	Ali Darraj	Feb 2024
28.	Personalized Multilevel Intervention for Improving Appropriate Use of Colorectal Cancer Screening. https://medforum.pk/article/10-personalized-multilevel-intervention-for-improving-appropriate-use-of-colorectal-cancer-screening	Feras Almarshad Ghulam Mustafa	Feb 2024
29.	Global, regional, and national burden of neck pain, 1990–2020, and projections to 2050: a systematic analysis of the Global Burden of Disease Study 2021. https://doi.org/10.1016/s2665-9913(23)00321-1	M. Tabish	March 2024
30.	Global age-sex-specific mortality, life expectancy, and population estimates in 204 countries and territories and 811 subnational locations, 1950–2021, and the impact of the COVID-19 pandemic: a comprehensive demographic analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S0140-6736(24)00476-8	Aslam Pathan Ghulam Mustafa Aqeel Ahmad M. Tabish	March 2024
31.	Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S1474-4422(24)00038-3	Ghulam Mustafa Aqeel Ahmad M. Tabish	March 2024
32.	Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive	Aqeel Ahmad M. Tabish	March 2024

	demographic analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S0140-6736(24)00550-6		
33.	The Relation between Thyrotoxicosis and Risk of Cognitive Disorders in Older Adults at a Tertiary Care Centre in Pakistan. https://medforum.pk/article/7-the-relation-between-thyrotoxicosis-and-risk-of-cognitive-disorders-in-older-adults-at-a-tertiary-care-centre-in-pakistan-1	Feras Almarshad Ghulam Mustafa	March 2024
34.	Global estimates on the number of people blind or visually impaired by cataract: a meta-analysis from 2000 to 2020. https://doi.org/10.1038/s41433-024-02961-1	Aqeel Ahmad	March 2024
35.	Misuse of Alprazolam as 'kutta goli' among the youth and school children in the Malegaon city of India. https://doi.org/10.37881/1.911	Aslam Pathan	April 2024
36.	Mentorship Matters: A Comprehensive Exploration of Student Perspectives in Medical and Dental Training. https://doi.org/10.21203/rs.3.rs-4006403/v1	M. Shabbir Altaf Bandy Ali Darraj	April 2024
37.	Bacteriological Profile and Antimicrobial Resistance of Semen Infections among Infertility Cases before and during COVID-19 Pandemic: A Comparative Study. https://doi.org/10.21608/ejmm.2024.340262	Yasser Saleh Altaf Bandy	April 2024
38.	Global estimates on the number of people blind or visually impaired by glaucoma: A meta-analysis from 2000 to 2020. https://doi.org/10.1038/s41433-024-02995-5	M. Tabish	April 2024
39.	A Systematic Review of the Design and Applications of Antimicrobial Peptides in Wound Healing. https://doi.org/10.7759/cureus.58178	Aqeel Ahmad Altaf Bandy	April 2024
40.	Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S0140-6736(24)00367-2	Ghulam Mustafa Aqeel Ahmad M. Tabish	May 2024

41.	The Awareness and Knowledge of Retinopathy of Prematurity Among Pediatricians in Saudi Arabia. https://doi.org/10.7759%2Fcureus.60754	Bahaaeldin Abdelhalim, Abdulmalik Alotaibi, Naif Alruwais, Faisal Alotaibi, Abdulaziz Alotaibi, Abdulaziz Alosaimi, Fahad Alsahil	May 2024
42.	Global incidence, prevalence, years lived with disability (YLDs), disability-adjusted life-years (DALYs), and healthy life expectancy (HALE) for 371 diseases and injuries in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S0140-6736(24)00757-8	Ghulam Mustafa Aqeel Ahmad M. Tabish	May 2024
43.	Availability, cost and affordability of essential medicines for chronic respiratory diseases in low-income and middle-income countries: a cross-sectional study. https://doi.org/10.1136/thorax-2023-221349	Ghulam Mustafa	May 2024
44.	Global burden and strength of evidence for 88 risk factors in 204 countries and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S0140-6736(24)00933-4	Ghulam Mustafa Aqeel Ahmad M. Tabish	May 2024
45.	Burden of disease scenarios for 204 countries and territories, 2022–2050: a forecasting analysis for the Global Burden of Disease Study 2021. https://doi.org/10.1016/S0140-6736(24)00685-8	Ghulam Mustafa Aqeel Ahmad M. Tabish	May 2024
46.	Applications of nanomedicine-integrated phototherapeutic agents in cancer theranostics: A comprehensive review of the current state of research. https://doi.org/10.1515/ntrev-2024-0023	M. Tabish	May 2024
47.	A Systematic Review of Herbal Interventions for the Management of Cardiovascular Diseases. https://doi.org/10.2174/011573403x286573240422104647	M. Tabish	May 2024

48.	Tert-butylhydroquinone prevents cyclophosphamide induce lung toxicity in rats via inhibiting oxidative stress and apoptosis: in vivo and in silico study. https://eifs.springeropen.com/articles/10.1186/s41935-024-00395-0	Ayman Elsharawy Waleed Abo Baraka	May 2024
49.	Excel software for automated calculation of learning outcomes and graduate attributes in medical education. https://doi.org/10.37881/jmahs.315	Dharmendra Sharma, Feras Almarshad	June 2024
50.	Burden and Patterns of Multidrug-Resistant Tuberculosis in Pediatric and Adolescent Patients at a Tertiary Care Hospital in Pakistan. https://doi.org/10.7759/cureus.63246	Ghulam Mustafa Feras Almarshad	June 2024
51.	A Multi-center Cross-Sectional Assessment of Healthcare Professionals' Knowledge, Attitudes, and Practices Toward Thromboprophylaxis. https://doi.org/10.7759/cureus.61835	Feras Almarshad, Altaf Bandy, Abulrahman Alfaiz	June 2024
52.	Intravenous cannulation in children: complications and risk factors. a cross-sectional study. https://doi.org/10.46903/gjms/22.02.1397	M. Shabbir Ambreen Liaqat	June 2024
53.	The burden of neurological conditions in north Africa and the Middle East, 1990–2019: a systematic analysis of the Global Burden of Disease Study 2019. https://doi.org/10.1016/S2214-109X(24)00093-7	Aqeel Ahmad	June 2024
54.	Impact of Baseline Characteristics on Stroke Outcomes in Pakistan: A Longitudinal Study Using the Modified Rankin Scale. https://doi.org/10.21802/e-GMJ2024-A13	M. Shabbir, Abdulrahman Alshahrani, Dushad Ram, Ambreen Liaqat, Feras Almarshad, Abdulrahman Alfaiz, Muath Alammar, Altaf Bandy	June 2024
55.	Global estimates on the number of people blind or visually impaired by Uncorrected Refractive Error: a meta-analysis from 2000 to 2020.	Aqeel Ahmad M. Tabish	July 2024

	https://doi.org/10.1038/s41433-024-03106-0		
56.	Pervasive parental hesitancy and resistance towards measles rubella vaccination in rawalpindi pakistan. https://jptcp.com/index.php/jptcp/article/view/7324	Sumaira Masood	July 2024
57.	Drug-use disorders in the Eastern Mediterranean Region: a glance at GBD 2019 Findings. https://doi.org/10.1007/s00127-023-02587-w	M. Tabish	July 2024
58.	Trends and levels of the global, regional, and national burden of appendicitis between 1990 and 2021: findings from the Global Burden of Disease Study 2021. https://doi.org/10.1016/S2468-1253(24)00157-2	Aqeel Ahmad	July 2024
59.	Global estimates on the number of people blind or visually impaired by age-related macular degeneration: a meta-analysis from 2000 to 2020. https://doi.org/10.1038/s41433-024-03050-z	Aqeel Ahmad	July 2024
60.	Age-Adjusted D-Dimer Cutoff in Ruling Out Pulmonary Embolism among Saudi Arabians in Riyadh Province. https://doi.org/10.21802/e-GMJ2024-A15	Feras Almarshad Dushad Ram	July 2024
61.	Endolysosomal trapping of therapeutics and endosomal escape strategies. https://doi.org/10.1016/j.drudis.2024.104070	Aqeel Ahmad	Aug 2024
62.	Global pattern, trend, and cross-country inequality of early musculoskeletal disorders from 1990 to 2019, with projection from 2020 to 2050. https://doi.org/10.1016/j.medj.2024.04.009	Ghulam Mustafa	Aug 2024
Student Publications			
63.	Thyroid Disorders in Saudi Patients With Acromegaly: A Tertiary Care Center Experience. https://doi.org/10.7759%2Fcureus.53663	<u>Eyad Almalki</u> (student)	Feb 2024
Missed in the Annual Report 2022-2023 due to late reporting			
64.	Gum Arabic nanoformulation rescues neuronal lesions in bromobenzene-challenged rats by its antioxidant, anti-	Basal Alkhudairy (student)	Dec 2022

	apoptotic and cytoprotective potentials. https://www.nature.com/articles/s41598-022-24556-0		
65.	Development of more potent anti-microbial drugs from extracts of five medicinal plants resistant to <i>S. aureus</i> in human fluids: an ex vivo and in vivo analysis. https://link.springer.com/article/10.1007/s12210-023-01135-7	Basal Alkhudairy (student)	Feb 2023
66.	Non-coding RNAs as key players in the neurodegenerative diseases Multi-platform strategies and approaches for exploring the Genome's dark matter. https://doi.org/10.1016/j.jchemneu.2023.102236	Basal Alkhudairy (student)	April 2023

2. Patents

Faculty Name	Title	Authority
M. Tabish	Electroconvulsimeter for anti-Convulsant activity (Sept 2023)	India

3. Book/Book Chapter

Faculty Name	Title	Publication Date
Aqeel Ahmad	Exploring Thyroid Gland Lesions: A Comprehensive Study on Histopathology and Clinical Correlations	May 2024 ISBN: 978-6206772415 Scholars' Press

4. Presentation at Conference

The following abstracts are presented at the Third Medical Research Day-2024, Organized by the College of Medicine, Shaqra at Shaqra University, Saudi Arabia on 19th May 2024.

Sr. No.	Title of the Abstract	Authors (Student/Faculty)
1.	Public awareness towards renal stones and its risk factors among the population of Shaqra, Saudi Arabia.	Abdullah Alqahtani, Muhammad Alhuthyli, Salman Alrakan, Turkey Almutairi, Rakan Aldawsari, Medhat Farag
2.	The Relationship between Quality of Sleep and the Academic Performance of College Students in Shaqra University.	Ahmed Alzahrani, Rashed Alrashed, Rayan Ebnalameer, Ghazi Alotaibi, Bader Alsaif, Semmal Mustafa
3.	A cross-sectional study on the effect of procrastination on the performance of Students of Shaqra University.	Saud Albadia, Abdullah Abodabyk, Abdulmehsin Alenzi, Bandar Alanazi, Mohammed Almazroa, Sultan Alzahrani, Abdullah Alhumaid, Aqeel Ahmad
4.	Does the cost matter? A student learning experience with the ulcer models prepared from playdough. (Third Prize)	Abdulaziz Alruways, Saleh Almunyif, Ambreen Liaqat, Muhammad Shabbir
5.	A Multi-center Cross-sectional Assessment of Thromboprophylaxis Knowledge, Attitude, and Practices among Health Care Professionals. (Second Prize)	Saad Alotaibi, Shafi Alaklabi, Yasser Alotaibi, Feras Almarshad, Altaf Bandy, Abdulrahman Alfaiz
6.	Prevalence of electronic cigarette smoking among Shaqra University students, Saudi Arabia.	Fahad Al Gassim, Mohammed Al Howaiti, Adel Al Otaibi, Ibrahim Al Enazi, Abdulmajeed Alhumidi, Abdulaziz Alanezi, Abdulmajid Almansour, Muath Alammr
7.	A Systemic Approach to the Comatose Patient.	Faisal Alhuwail, Fahad Algassim, Abdulmajeed Almutairi, Abdulaziz Alowais, Muhammed Shabbir, Hossam Shabana, Abdulrahman

		Alshahrani, Feras Almarshad, Waleed Abubaraka
8.	Awareness of Iron Deficiency Anaemia in Shaqra City.	Meshal Almutairi, Abdullah Alharbi, Saud Almutairi, Alwaleed Alshehri, Yazeed Altresi, Dharmendra Sharma
9.	The prevalence and impact of autoimmune diseases on long- standing Type-1 Diabetes Mellitus: Results from a Saudi cohort of adults and children with Type-1 Diabetes Mellitus. (First Prize)	Eyad Almalki, Khalid Altaweel, Aslam Pathan, Maram Alkhaldi, Mohammed Maswood, Imad Brema, Abdulhammed Alsaheel, Mussa Almalki
10.	Prevalence and context of peer bullying among adolescents in schools of Shaqra City: Public-schools surveillance in Shaqra, Saudi Arabia.	Abdullah Hussein, Saif Alshammary, Muath Alammar, Jalal Bilal, Yasser saleh

5. Program Key Performance Indicators related to research

Performance indicators are important tools for assessing the quality of academic programs and monitoring their performance. They contribute to continuous development processes and decision-making support.

The National Center for Academic Accreditation and Evaluation has identified 03 key performance indicators that measure the research potential of the program. Herewith we mentioned these research-related key performance indicators to ensure the quality of our program.



Code	Key Performance Indicator	Description
KPI-P-09	Percentage of publications of faculty members.	Percentage of full-time faculty members who published at least one research during the year to total faculty members in the program.
KPI-P-09 for the academic year 2023-2024= 67.44 %		

Code	Key Performance Indicator	Description
KPI-P-10	Rate of published research per faculty member.	The average number of refereed and/or published research per each faculty member during the year (total number of refereed and/or published research to the total number of full-time or equivalent faculty members during the year).
KPI-P-10 for the academic year 2023-2024= 1.4		

Code	Key Performance Indicator	Description
KPI-P-11	Citations rate in referred journals per faculty member.	The average number of citations in referred journals from published research per faculty member in the program (total number of citations in refereed journals from published research for full-time or equivalent faculty members to the total research published).
KPI-P-11 for the academic year 2023-2024= 19.1		

6. Article Statistics

Articles published in standard databases during the academic year 2023-2024

PubMed	44	Web of Science	50
Scopus	47	Others	08

Thank You
Scientific Research Unit
College of Medicine at Shaqra

