

PROSPECTUS 2024-2025



Masters in Medical Research

Medical Research Center



LIAQUAT UNIVERSITY
OF MEDICAL & HEALTH SCIENCES
LUMHS- JAMSHORO



WHERE KNOWLEDGE MEETS DISCOVERY IN MEDICAL RESEARCH



Message from Vice Chancellor



At the outset, I would like to extend my heartily welcome to all those who are seeking admission in various postgraduate courses at Liaquat University of Medical and Health Sciences, Jamshoro, one of the Pakistan's leading, historical and esteemed institutions, where excellence in medical education is nurtured, pursued and celebrated since its founding in 1881. It has established itself as a centre of excellence in higher medical education and scientific research in Pakistan. These achievements are the outcome of the university's long term commitment to faculty development and innovation in the fields of medical, dental and allied sciences.

The faculty of Liaquat University of Medical & Health Sciences, Jamshoro is highly qualified and involved in excellent research that is published in renowned international and national journals.

Masters in Medical Research is a unique program to enhance research in medical university, and first of its kind to be approved by Higher Education Commission of Pakistan. It has great scope in the job market as well. Given its status of level 7 in Pakistan quality framework makes it a great opportunity for fresh graduates as well. I feel privileged to convey that various employers in the public and private sector (nationally and internationally) recognize the quality of our graduates and are willing to hire our postgraduates.

I wish and pray the postgraduate students get the best education & training and every success in their future endeavors.

Best wishes

Prof. Ikram Din Ujjan

Vice Chancellor

LUMHS



I am thrilled to welcome dedicated scholars to the Master in Medical Research program at Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro. This program has been designed to cultivate excellence in medical research, fostering innovative thinking and advancing the frontiers of healthcare knowledge.

With a robust academic foundation and cutting-edge facilities, our program equips students with the skills and expertise needed to excel in the dynamic field of medical research. Our teaching faculty and administrative staff are deeply committed to nurturing a supportive environment that encourages intellectual curiosity and scientific rigor.

Achieving success in this program requires unwavering dedication and active engagement. Through rigorous coursework and practical research opportunities, we aim to produce scholars who will contribute significantly to the academic and healthcare sectors. It is my privilege to lead this initiative and witness the impactful contributions of our students and faculty.

I look forward to welcoming you to this transformative journey as part of our vibrant and nurturing academic community.

Prof. Dr. Binafsha Manzoor Syed
Director
Medical Research Center & ORIC, LUMHS, Jamshoro



A Historical Perspective

Liaquat University of Medical & Health Sciences (LUMHS), Jamshoro, holds the distinction of being the first public-sector medical university in Pakistan with a long and illustrious history of providing quality medical education and healthcare services.

The institution traces its origins to a medical school established during the Federal Presidency. Following the separation of Sindh from Bombay in 1943, it was upgraded to Sindh Medical College, initially offering MBBS courses under Bombay University. The college was inaugurated by Sir Francis Moody, the first Governor of Sindh, and began its journey in Hyderabad with just one female student among its initial enrollees.

In 1951, the Sindh Government relocated the college to Dhoraji, renaming it Liaquat Medical College in honor of Pakistan's first Prime Minister, Liaquat Ali Khan. In 1963, the college was shifted to a sprawling campus in Jamshoro, where it expanded its offerings to include the Bachelor of Dental Surgery (BDS) program and postgraduate courses.

The institution's postgraduate programs grew steadily, leading to its designation as a Postgraduate Medical Centre in 1989. It became a recognized training institution for FCPS and MCPS qualifications in various medical and allied disciplines. Furthermore, it earned accreditation from international bodies such as the British General Medical Council, ECFMG of the USA, and others, enhancing its global reputation.

Over the years, the college produced over 1,200 specialists with postgraduate qualifications in disciplines such as MD, MS, M.Phil., and various diplomas. These contributions were pivotal in its elevation to a university. Recognized in the Federal Education Policy of 1988 for its exemplary contributions, Liaquat Medical College was upgraded to Liaquat University of Medical & Health Sciences on January 20, 2001, by the Honorable Governor of Sindh.

Today, LUMHS stands as a premier public-sector medical university in Pakistan, renowned for its academic excellence, research contributions, and commitment to advancing medical education and healthcare.



Medical Research Centre

The Medical Research Centre (MRC) is a vital component of Liaquat University of Medical & Health Sciences (LUMHS), fostering academic excellence through research. Faculty members and postgraduate students from both basic and clinical departments are actively engaged in research alongside their academic duties. The research output of the Centre is regularly published in the Journal of Liaquat University Medical & Health Sciences (ULUMHS) and the LUMHS Medical Research Journal (LMRJ), both of which are recognized by the Higher Education Commission (HEC) and indexed in various databases.

The MRC undertakes research across various domains and offers technical and advisory services to local and international clients, researchers, and sponsors seeking collaboration or support in health research. It operates a Clinical Trial Unit, which supports the management and execution of clinical trials, working closely with health facilities in Pakistan to implement research in a clinical setting. This unit is an integral part of the MRC, advancing medical research and supporting the development of new treatments and healthcare innovations.

The Centre also promotes national and international collaborations by working with other research institutes, academic institutions, and businesses. These partnerships contribute to the promotion of high-quality research and innovation in healthcare. The MRC is involved in developing research proposals, grant writing, and extensive networking with private partners, government agencies, NGOs, R&D industries, and pharmaceutical companies. To maintain the highest research standards, the MRC ensures compliance with international research protocols such as GCP ICH, GCLPs, GLPs, and GMPs. The Centre also manages the "National Research Program for Universities" (NRPU) and focuses on building capacity in clinical research. Internship opportunities are available for young researchers aspiring to establish careers in health research.

Furthermore, the MRC conducts mandatory workshops at different levels for undergraduate and postgraduate students, as well as faculty members, with a strong focus on research methodologies and biostatistics. These workshops aim to enhance participants' research skills and provide essential tools for conducting high-quality research.

Through systematic reviews, meta-analyses, and data-driven policy initiatives, the MRC helps inform public policy decisions, contributing to evidence-based healthcare and ultimately improving health outcomes.

Infrastructure and Facilities at the Medical Research Centre, LUMHS

The infrastructure at the Medical Research Centre (MRC) at Liaquat University of Medical & Health Sciences (LUMHS) is designed to support cutting-edge research and foster innovation in the medical field. The Centre includes:

- Medical Research Centre (MRC)
- Offices of Research & Commercialization
- Offices of Global Engagements
- Clinical Trial Units
- Experimental Animal Facility

Facilities Provided:

- Workshops for Undergraduates and Postgraduates
- Trainee Opportunities
- Internship Opportunities
- Research Classes



Departments at MRC:

Basic Science Research:

This department focuses on proteomics, genomics, drug discovery, and animal model research.

Clinical Science Research:

Research in this department include clinical trials, cell line & stem cell research, and biomarker discovery.

Objectives of launching Masters in Medical Research

1. To build the university's research capabilities by training highly skilled professionals who can contribute to cutting-edge medical research.
2. To equip students with the skills to tackle current and future healthcare challenges through research.
3. To prepare graduates for careers in academia, industry, and clinical research settings.
4. To promote collaboration between different academic disciplines, such as biology, medicine, data science, and public health and enhance avenues for interdisciplinary research.
5. To create opportunities for partnerships with healthcare institutions, pharmaceutical companies, and research organizations.
6. To instill a strong understanding of ethical considerations and regulatory requirements in medical research.
7. To provide a platform for continuous learning and career advancement for professionals in the medical and research fields.

Job market scope of graduates of Masters of Medical Research

A Master's in Medical Research offers diverse career opportunities across several sectors, reflecting its broad applicability and importance in advancing healthcare and medical science. **Job Market Trends and Demand.** The demand for medical research professionals is growing due to advancements in personalized medicine, genomes, and biotechnology. There is a rising focus on integrating research findings into clinical practice, driving demand for skilled researchers. Recent experiences learnt from COVID-19 pandemic has created opportunities for health research so that such challenges can be addressed appropriately. This is a post graduate program where medical and allied health professionals can enhance their research skills which can be utilized in both academia and industry.

Potential job Positions:

Research Scientist, Research Associate, Laboratory Manager, Principal Investigator in research projects, Clinical Research Coordinator, Clinical Trials Manager, Public Health Researcher, Health Policy Analyst, Research Program Manager and Grant Writer.

Admission Eligibility Criteria

- 16 years of education (i.e. Bachelor's degree) in Biological sciences, medical and health sciences, Pharmacy/pharmacology, Biotechnology and other relevant fields.
- Minimum GPA: 2.6 at the scale of 4.0 or equivalent.
- Research experience: applicants with publications and track record of research will be preferred.
- GRE/ Entry test: test core >70% (Entry test includes 75% basic sciences subject and 25% English proficiency and analytical reasoning)

How to apply

Submit an online application at
<https://www.lumhs.edu.pk/pg/>



Last date to apply is:
20 December 2024

Curriculum Masters in Medical Research (2 years degree program)

Semester	Course #	Subject	Credit Hours
Semester 1	MR#501	Introduction to Research and Basic Research Methods	3
	MR#502	Basic Biostatistics	2+1
	MR#503	Molecular and Cellular Basis of Diseases	3
	MR#504	Ethics in Medical Research-ICH-GCP Certification	3
		Total for Semester 1 - Total Credit Hours	12
Research Seminar (Mandatory for each student)			
Semester	Course #	Subject	Credit Hours
Semester 2	MR#505	Advanced Research Methods	3
	MR#506	Advanced Biostatistics and Data Analysis	3
	MR#507	Pre-clinical Research and Translational Research Techniques (Laboratory Research)	3
	MR#508	Pharmacology and Therapeutics - New Drug Development	3
		Total for Semester 2 - Total Credit Hours	12
Research Proposal Defense (Mandatory for each student)			
Semester	Course #	Subject	Credit Hours
Semester 3	MR#509	Informatics, Clinical Data Management, and Health	3
	MR#510	Qualitative Research Methods and Quality of Life	3
	MR#511	Academic Writing and Dissemination of Research Findings	3+1
		Total for Semester 3 - Total Credit Hours	10
Collection of data on the research proposal approved in Semester 2			
Semester	Course #	Subject	Credit Hours
Semester 4	MR#512	Practical Research Thesis	6
	MR#513	Optional Internship (Optional)	3
		Total for Semester 4 - Total Credit Hours 6+3 optional	6+3

Total credit hours= 40+ 3 optional

Schedule of Classes:

Every Friday 9.00 am to 5.00 pm

Examination Policy

- 50% Theory examination: (BCQs) at final exam at the end of each semester
- 20% Mid-term evaluation
- 20% class performance/ proposal defense
- 10% practical examination
- Thesis defense:

Each student has to write a thesis on a research project, and produce and manuscript in X category journal. There will be defense of the thesis with internal and external examiner from the relevant field of the subject.

Criteria for award of degree

- Attendance: 80% in each semester
- There will be separate evaluation for each course at the end of each semester Candidate has to secure 70% marks to be eligible for the award of the degree.

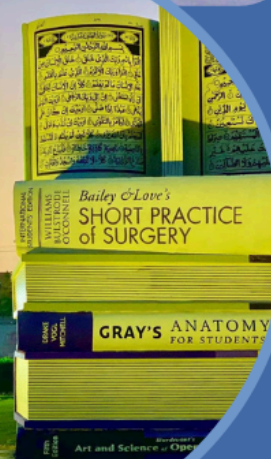




LUMHS

Glimpses

I ♥ LUMHS



Contact for further information

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