

University Residency Programs

Doctor of Medicine (MD), Master of Surgery

Prof. Muhammad Umar Prof. Jahangir Sarwar Khan Dr. Rizwana Shahid Dr. Rabbia Khalid

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Rawalpindi Medical University

www.rmur.edu.pk

Mission Statement

To impart evidence-based research oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision & Values

Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

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Message from Vice Chancellor



It is indeed a great honor and privilege for me to be reappointed as Vice Chancellor of Rawalpindi Medical University. This university was founded on 5th May 2017 with many dreams and visions; one of them was the excellence of Medical Education. I am thankful to Allah Almighty for providing me the opportunities not only to initiate Integrated Undergraduate medical education but also to launch ACGME centered competency based postgraduate medical curricula. The day and night rigorous efforts of all honorable Deans, faculty and support staff in successful implementation of University Postgraduate Medical Education is really worth mentioning.

Now RMU is not only ranking as top medical university in Pakistan and among the Times Higher Education (THE) impact rankings for the year 2022, but by the grace of Allah it has become a Degree Awarding Institute (DAI) after prosperously passing out of our University residents. Our University is currently the third one after King Edward Medical University (KEMU) and University of Health Sciences (UHS) to produce competent consultants. The dedication of the whole team inclusive of Examination department, committed faculty, URTMC and QEC in accomplishment of this undertaking throughout this tiring journey is really admirable. I wish them all the best for their future endeavor and pray for their prosperity and success.

Prof. Muhammad Umar (SI)Vice Chancellor & CEO
RMU & Allied Hospitals

Preamble

Rawalpindi Medical University is renowned not only for strengthening the health care delivery system through innovation in its teaching hospitals but also by commencement of University Residency Programs. Untiring efforts of Prof. Muhammad Umar and Prof. Bushra Khaar are admirable in this regard. University residency programs will not only provide an opportunity to the postgraduate trainees and faculty for polishing their knowledge and enhancing their skills but will also create visionary and committed leaders.

I am confident that our University Residency Program will be competitive with International residency programs and our passing out residents will prove them to be the best healthcare professionals all over the world. I congratulate all my seniors, colleagues and residents on the success attained so far pertaining to successful and invite them to work with commitment and devotion for continuation of this journey towards prosperity.

Dr. Rizwana Shahid

Assistant Director Medical Education Incharge URTMC 16th August, 2022

Introduction

On up-gradation of Rawalpindi Medical College to Rawalpindi Medical University on 5th May, 2017, Residency Program of Rawalpindi Medical University was launched to offer rigorous and vibrant postgraduate degree programs. Our University Residency Program entails MS, MD, M.Phil, Masters, PhD, Certificate and Diploma courses. These residency programs are meant to get our residents well equipped with knowledge and skills deemed inevitable to compete with international doctors and to improve the healthcare of the nation.

Rawalpindi Medical University provide excellent opportunities to its postgraduate residents and worthy faculty for scholarships, linkages and collaborations with the renowned universities of the world ranking high in research projects. The faculty members are actively engaged in several training and research programs with universities/institutions/centers in the technologically advanced countries.

The University provides excellent academic facilities through its fully equipped laboratories, library, museums, information technology facility, video conferencing, besides good logistic facilities at departments, hostels and the campus in general. Examination Cell of the University has also started taking undergraduate as well as postgraduate exams and University will be the Degree Awarding Institute (DAI) very soon.

We hope that joining the Rawalpindi Medical University & enrollment in University Residency Program will pave the way of upcoming generation towards new horizon of excellence and prosperity.

Objectives of University Residency Program

Objectives of University Residency Program (URP) are to:

- 1. Recognize the significance of concerned specialty in the context of health needs of the community and national priorities in the health sector
- 2. Practice the concerned specialty ethically and in compliance with steps of primary health care
- 3. Promote system based practice and patient safety
- 4. Advocate for appropriate health resource allocation
- 5. Identify social, economic, environmental, biological and emotional determinants of health while dealing with patients and take them into consideration before application of therapeutic, rehabilitative and preventive measures
- 6. Diagnose and manage the patients on the basis of clinical assessment and appropriate investigations
- 7. Demonstrate empathy and humane approach towards patients and their families
- 8. Express interpersonal behavior according to societal norms and expectations
- 9. Implement national health programs effectively and responsibly
- 10. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic / hospital / community
- 11. Develop skills as a self-directed learner, recognize continuing education needs; select and use appropriate learning resources
- 12. Function as an effective leader of a health team engaged in health care, research and training
- 13. Elaborate innovative knowledge about diseases of their specialty in the context of technological and pharmacological advances

Section-I

About Rawalpindi Medical University





Rawalpindi Medical University

Rawalpindi Medical College was established in Faisalabad on 18th March 1974 and later shifted to Rawalpindi on 5th November 1974 in an incomplete building at Tipu Road (Science block of Gordon College Rawalpindi), that was later handed over to Rawalpindi Medical College. It was upgraded to Rawalpindi Medical University on 5th May, 2017 under the leadership of Prof. Muhammad Umar (SI) who is currently the Vice Chancellor of this University. This institute is visulaized to emerge as an advanced centre of excellence in healthcare sciences all over the world.



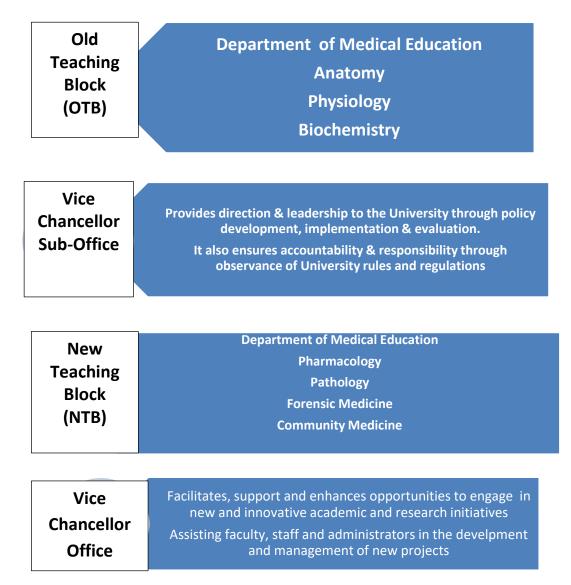


There are two campuses of Rawalpindi Medical University. Old teaching block is situated at Tipu Road, Rawalpindi while New Teaching Block is located at Satellite Town within the premises of Holy Family Hospital Rawalpindi which is one of the teaching hospitals affiliated with Rawalpindi Medical University.

This University is intended to impart evidence-based research oriented medical education, to promote ethical practice of medicine and hence to improve the healthcare of our nation. It is actively involved not only in undergraduate teaching of MBBS students, but also the training and clinical teaching of M.Phil, M.S, M.D, FCPS & MCPS postgraduate trainees in various disciplines. Apart from that, the college is also providing teaching facilities to nursing and Allied Health Sciences students.

Departments & Human Resource

There are two teaching blocks of Rawalpindi Medical University. The departments operational in both teaching blocks are depicted below:



Specialized and trained faculty along with support staff is available in well-equipped departments of both the campuses of RMU. In addition Department of Medical Education and splendid library with thousands of books on all medical subjects to facilitate the learning of undergraduate students and postgraduate trainees are also accessible separately in both teaching blocks.

Teaching Hospitals

There are three tertiary care hospitals attached to RMU for clinical training namely Holy Family Hospital, Benazir Bhutto Hospital & District Head Quarters Hospital with total bed strength of 2177. A school of Nursing is also attached with each of the three teaching hospitals.

Holy Family Hospital, Rawalpindi (HFH) was established in 1927. It is 962 bedded tertiary care hospital. It is fully equipped with the latest medical equipment. The hospital has an emergency department that works 24 hours a day and receives emergency patients. This is the biggest hospital in district Rawalpindi and receives the highest number of patients in the whole district. Hospital has two units of Surgery, Medicine and Gynaecology departments along with specialties of Cardiology, ENT, Paediatrics, Ophthalmology, Pathology, Nephrology, Plastic Surgery, Paediatric Surgery etc. Hospital has state-of-the-Art Radiology Department, Centre for Liver and Digestive Diseases, Department of Infectious Diseases and well-equipped critical / intensive care unit.



Holy Family Hospital, Rawalpindi established in 1927

Benazir Bhutto Hospital (BBH) that was formerly Rawalpindi General Hospital (RGH) was established in 1957. 762 bedded tertiary care teaching hospital. BBH is a centre for undergraduate and post-graduate studies in different disciplines of Medicine and Surgery. It is a state of the art health facility, well-equipped with advanced Diagnostic and Therapeutic facilities and caters for a wide range of patient from wide catchment area. Besides usual specialties, there

are specialties of Orthopaedic, Urology and Psychiatry. Institute of Psychiatry is WHO Collaboration Centre for Mental Health.



Benazir Bhutto Hospital, Rawalpindi established in 1957

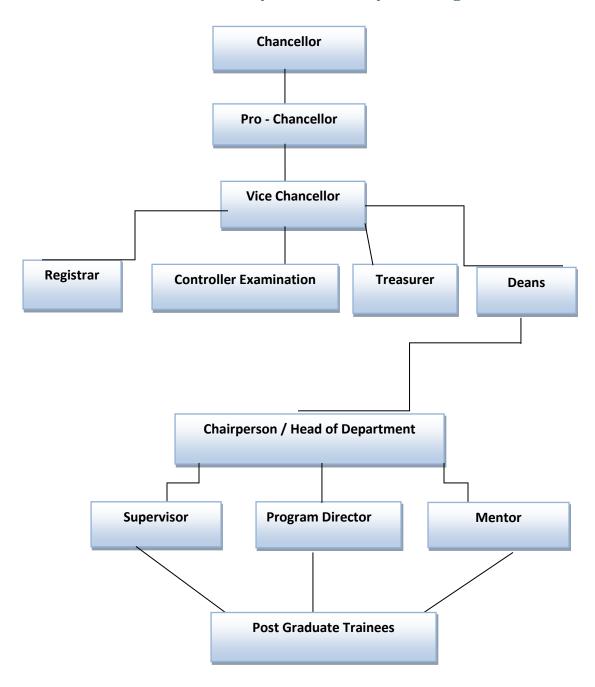
District Head Quarters (DHQ) Hospital was established in 1967. It is 453 bedded healthcare facility that offers all basic outdoor as well as indoor treatment facilities including infectious diseases (including TB), Coronary Care Unit and an Intensive Therapy Centre services along with a diagnostic Pathology Laboratory and a fully functioning mortuary facility. The recent years have seen the addition of an Orthopaedics Unit, a new Accident & Emergency building, Reproductive health unit, Homeopathy / Hikmat OPDs, Computerized Tomography, Endoscopy, Mammography, Doppler Scanning and a state of the Art Modular Operation Theatre (for

Neurosurgical Operations).



District Head Quarters Hospital, Rawalpindi established in 1967

Hierarchy for University Working



Authorities of the University

Syndicate

Academic Council

Board of Faculty

Board of Advanced Studies and Research (BASR)

Planning and Finance Committee

Recruitment Board

Officers of the University

Chancellor

Governor of Punjab

Pro Chancellor

Health Minister

Vice Chancellor

Professor Muhammad Umar

Registrar

Prof. Muhammad Idress Anwar

Controller Examination

Professor Rai Muhammad Asghar

Treasurer

Director Finance

Deans

Program Directors

Supervisors

Mentors

Program Coordinators

Syndicate

The Syndicate shall consist of:

- a) Pro-Chancellor who shall be its chairperson;
- b) Vice Chancellor;
- c) Secretary of the Government, Specialized Healthcare and Medical Education Department or a nominee not below the rank of an Additional Secretary;
- d) Secretary to the Government, Finance Department or a nominee not below the rank of an Additional Secretary;
- e) Secretary to the Government, Higher Education department, or a nominee not below the rank of an Additional Secretary;
- f) Secretary to the Government, Law and Parliamentary Affairs department or a nominee not below the rank of an Additional Secretary;
- g) Chairman of the Commission or a nominee not below the rank of a whole-time member of Commission;
- h) One senior most Dean of the Faculties;
- i) Three members including at least one woman member of Provincial Assembly of Punjab preferably medical doctors to be nominated by the Speaker of the Assembly;
- j) Two retired Principals or Professor of Rawalpindi Medical College or University to be nominated by the Government;
- k) Two financial experts or bankers to be nominated by the Government;
- 1) Two philanthropists or representatives of civil society to be nominated by the Government;
- m) Head of an associated faculty;
- n) Medical Superintendent of an attached hospital having not less than two hundred beds;
- o) Two Dean of an attached nursing school;
- p) Two Vice Chancellors, one from public sector university and one from a private sector university, to be nominated by the Chancellor.
- q) The Registrar shall be the Secretary of the Syndicate.



Academic Council

- 1) The Academic Council shall consist of the Vice Chancellor who shall be the Chairperson of the Academic Council and the following members:
 - a) Pro-Vice Chancellor;
 - b) Deans;
 - c) Chairpersons;
 - d) One retired Principal or Professor of Rawalpindi Medical College for the University nominated by the Syndicate;
 - e) All Professors including Professor Emeritus
 - f) Two Associate Professors, two Assistant Professors and two lecturers to be elected from amongst themselves;
 - g) Three academicians of eminence including at least one woman to be nominated by the Syndicate;
 - h) Secretary to the Government, Specialized Healthcare and Medical Education Department or a nominee not below the rank of a Deputy Secretary;
 - i) Five experts including at least two women in the field of medical education to be nominated by the Chancellor;
 - j) Registrar (Member / Secretary);
 - k) Controller of Examinations; and
 - 1) Librarian

The members of Academic Council, other than ex-officio members, shall hold office for three years, and the vacancy, if any, shall be filled for the remaining period in the prescribed manner.

The quorum for a meeting of the Academic Council shall be one-third of the total number of members, a fraction being counted as one.



Board of Faculty

As per Rawalpindi Medical University Act 2017 (XVI of 2017), board of faculty for disciplines will comprise of the following members:

- 1. Dean of the faculty
- 2. Chairperson and Professors in the faculty
- 3. Three teachers to be nominated by the Academic Council on the basis of their specialized knowledge of the subjects
- 4. Two experts in the field from outside the University to be nominated by the Syndicate
- 5. One Associate Professor, one Assistant Professor and one Demonstrator to be appointed by rotation in order of seniority from each department of the faculty
- 6. One member to be nominated by the Vice Chancellor





Board of Faculty of Rawalpindi Medical University with Vice Chancellor RMU in Academic Council Hall

Board of Advanced Studies & Research (BASR)

Functions

The functions of Board of Advanced Studies & Research as prescribed under serial No. 27of Rawalpindi Medical University Act 2017 are to:

- 1. Advise the authority on all matters connected with promotion of Advanced studies and research publications in the University
- 2. Consider and report to an authority with regard to a research degree of the University
- 3. Propose regulations regarding the award of research degree
- 4. Appoint supervisors for a postgraduate research student and to approve title and synopsis of the thesis or dissertation
- 5. Recommend panel of examiners for evaluation of a research examination
- 6. Perform such other functions as may be prescribed by the statutes

Members

Sr.#	Members
1.	Vice Chancellor of the University
2.	All Deans of the University
3.	Controller of Examination
4.	One University Professor from each faculty to be nominated by the
	Syndicate
5.	One member to be nominated by the Vice Chancellor
6.	Three members from the relevant field, research organizations or the
	Government to be nominated by the Syndicate
7.	Three Professors other than Deans to be nominated by the Syndicate
8.	Registrar of the University



8th Meeting of BASR in syndicate hall of RMU

Deans



Prof. Tehzeeb-ul-Hassan
Basic Sciences and Diagnostics
(Pathology, Anatomy, Physiology, Biochemistry, Pharmacology and therapeutics, Radiology)



Prof. Muhammad Khurram

Dean of Medicine & Allied Subjects
(Internal Medicine, Psychiatry, Nephrology, Neurology,
Dermatology, Cardiology, Pulmonology, Emergency Medicine)



Prof. Syed Arshad Sabir Community Medicine and Public Health (Community Medicine & Forensic Medicine)



Prof. Muhammad Idrees Anwar Surgery & Allied Subjects General Surgery, Urology, Plastic Surgery, Pediatric Surgery, Anesthesia



Prof. Lubna Ejaz Kahloon Gynaecology and Obstetrics



Prof. Rai Muhammad Asghar Paediatrics



Dr. Fuad Ahmed Khan Niazi Otorhinolaryngology, Ophthalmology



Prof. Nayyar Qayyum
Orthopedics and Trauma
(Orthopedics, Neurosurgery, Trauma



Prof. Samia Sarwar
Allied Health Sciences
Physiotherapy, Orthotics and Prosthetics, Medical Imaging
Technology, Medical Laboratory, Technology, Optometry and
Orthoptics



Prof. Mobina Ahsan Dodhy Nursing College of Nursing and School of Nursing

Finance & Planning Committee

The Planning and Finance Committee of Rawalpindi Medical University is comprised of the following members:

- All Deans
- Members of Syndicate to be nominated by the Syndicate
- Chairman Planning and Development Board of the Government or his nominee not below the rank of a member
- Director (Budget) nominee of the Higher Education Commission
- One member of the Academic Council to be nominated by the Academic Council
- Registrar RMU
- Medical Superintendents of all 3 teaching hospitals of RMU
- Treasurer RMU





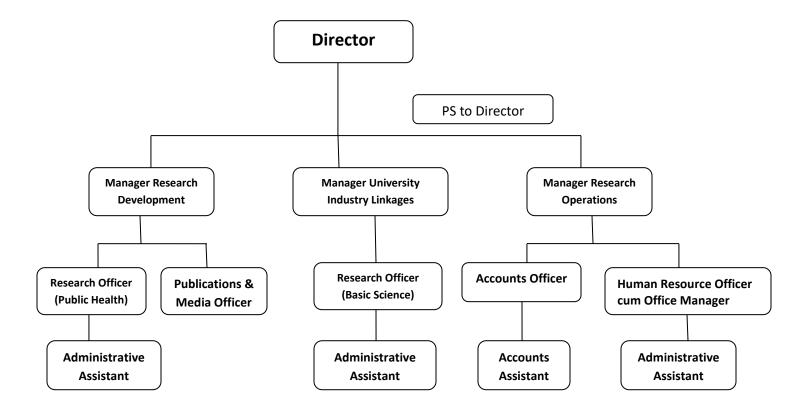
Meeting of Finance & Planning Committee

Office of Research Innovation & Commercialization (ORIC)

ORIC is basically directed by Director ORIC and assisted by Deputy Director (Manager) Research. The concerned officers are intended to execute the following activities.

- 1. Manage and enhance research activities in the University which includes acting as secretariat for the advanced studies and research board & ethics board.
- 2. Develop research policies and priorities (which include management, administration, supervision, monitoring and coordination of all research related activities) and explore new themes of research and research agenda of RMU.
- 3. Work for fund raising and acquiring grants for research and development both nationally and internationally.
- 4. Promote capacity building activities within the University not only in the field of research but also in other disciplines.
- 5. Mobilize faculty and resources to yield quality research projects.
- 6. Mobilize community and industry to promote research commercialization
- 7. Serve as an effective advocate for research with the University and to its broader community of stakeholders and supporters to develop collaboration with national and international research bodies.
- 8. Develop collaboration with relevant government bodies (health department) and lead in establishing and conducting health systems research.
- 9. Endorse development of intellectual property (IP) and patenting activities. In addition, IP success stories are also to be endorsed within university to enforce communication efforts.

Organizational Chart of ORIC at RMU



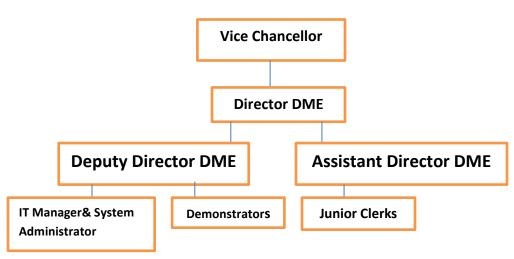
❖ Managers of ORIC at RMU are also referred to as Deputy Directors RMU



Office of Research Innovation & Commercialization

Department of Medical Education

Department of Medical Education (DME) was established on 15th December, 2015 at Rawalpindi Medical College which is now upgraded to Rawalpindi Medical University (RMU). This department has become an essential requirement of any medical institute worldwide for educational development. Untiring efforts of Prof. Muhammad Umar, Vice Chancellor RMU are worth mentioning in this regard. He supported the faculty of this department to get specialized in this field. The core staff of this department includes educationists, technical support staff and computer operators.



Hierarchy & Structure of Department of Medical Education

Functions of Department of Medical Education

Department of Medical Education at Rawalpindi Medical University is proficiently working to facilitate the reshaping of medical education and implementation of successful innovations both at undergraduate and postgraduate level. This department is liaising with all departments of RMU / Allied Hospitals for effective delivery of services. This department is efficiently engaged in improving all the fundamental phases of medical education which are:

- Undergraduate training
- Postgraduate education
- Continuing Medical Education (CME)
- Continuing Professional Development (CPD)

Davis MH, Karunathilake I, Harden RM. AMEE Education Guide No. 28: The development and role of departments of medical education. Medical Teacher 2005; 27(8): 665-675.

The qualified doctors employed in Department of Medical Education are dedicated to:

- Arrange guest lecture forums through liaising with national and international experts
- Organize annual lectures for RMU residents
- Facilitate teaching by organizing capacity building programs / workshops / conferences, seminars and symposia
- Develop the curriculum by arranging meetings of curriculum committee
- Organize meeting of syndicate for through review of integrated modular and University residency programs' curricula
- Evaluate the course design
- Support learning of students and trainees through small group and self-directed learning
- Design instructional materials to guide both tutors and tutees
- Fairly assess students and trainees through conduction of block examinations and dissemination of Multi Source Feedback (MSF) proforma
- Arrange counseling sessions for undergraduate students
- Facilitate the students in national and international electives
- Get training programs recognized by accrediting bodies and councils
- Promote research at faculty, undergraduate and postgraduate level through organization of research workshops
- Other details pertinent to DME are already mentioned in "Department of Medical Education 2013-2016"





Department of Medical Education, New Teaching Block, Rawalpindi Medical University, Rawalpindi

Benor DE. Faculty development, teacher training and teacher accreditation in medical education: twenty years from now. Medical Teacher 2000; 22: 503-512.

University Residency Training & Monitoring Cell (URTMC)

University Residency Programs are successfully executed and monitored in RMU by University Residency Training & Monitoring Cell (URTMC). This Cell is headed by Prof. Muhammad Umar Vice Chancellor RMU followed by Prof. Jahangir Sarwar Khan, Dean of Postgraduate Studies as shown below.

HIERARCHY OF UNIVERSITY WORKING



Prof. Muhammad Umar Vice Chancellor RMU



Prof. Jahangir Sarwar Khan Dean of Postgraduate Studies

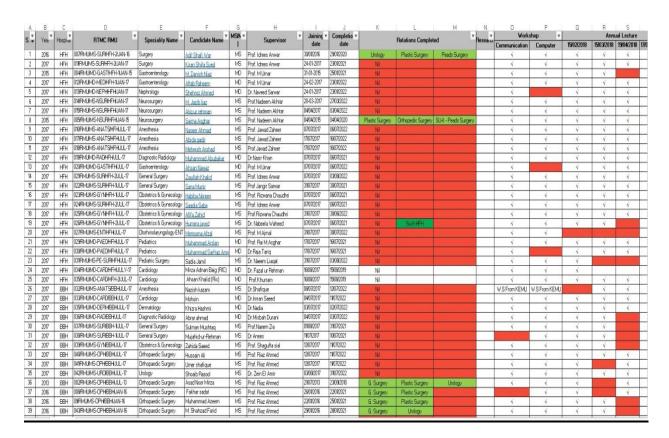


Prof. Rai Muhammad Asghar Director DME & Controller of Examinations



Dr. Rizwana Shahid Assistant Professor Community Medicine Assistant Director DME, RMU

URTMC is a computerized system for maintaining the profile and detailed academic information pertinent to each university resident at RMU. On selection through Punjab Residency Program in compliance with Punjab Residency Program Guidelines available at: http://prp.punjab.gov.pk/, postgraduate trainees coming to Rawalpindi Medical University, Rawalpindi and its 3 Allied Hospitals (HFH, BBH and DHQ Hospital) get affiliated with UTMC and are issued UTMC Registration Number. Computerized UTMC data of RMU residents is depicted below:



URTMC data in RMU Software

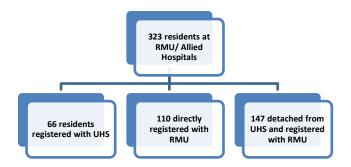
Objectives of URTMC

- To register the residents at RMU following their induction via Central Induction Program (CIP) through allotment of URTMC Registration number
- To get supervisors and mentors of Residency Program registered
- To update the whole personal and training record of residents
- To monitor the record of trainees' rotations
- To receive attendance and leave record of trainees on 4 monthly basis from respective departments
- To have liaison with resource persons for conduction of mandatory workshops
- To update the schedule of annual lectures and mandatory workshops for residents
- To organize workshops for capacity building of the supervisors, mentors, program directors and program coordinators
- To timely assess the synopsis and dissertation in order to meet the eligibility requirement of examination
- To collaborate with examination department regarding status of training, registration and dissertation of trainees
- To provide curriculum and logbook to the trainees
- To coordinate with teaching hospitals via prior intimation about issues related to training
- To procure all assessment proforma duly filled by concerned personnel on 6 monthly basis
- To submit assessment proforma in QEC for in depth evaluation of trainees' academic performance
- To arrange orientation sessions for trainers as well as trainees to introduce innovative academic opportunity
- To verify the eligibility of university residents for their assessments to be done by the end of each academic year

Functions of URTMC

Curriculum and logbooks of respective disciplines designed by respective Deans / Chairpersons are available for downloading at website of RMU (rmur.edu.pk). However, these are proposed curricula and liable to amendments on recommendations of competent authority. Curricula have also been revised with respect to their assessment scheme and to ensure acquisition of all 6 core competencies as specified by ACGME (Accreditation Council for Graduate Medical Education).. Logbooks and portfolio have been designed to facilitate the residents in achievement of their learning objectives during the course of postgraduate training.

About Supervisors / Mentors in University Residency Program are supervising the residents to streamline their training activities form induction till completion of training at RMU / Allied Hospitals. Three types of residents are being supervised here.



Supervisor ship and Mentorship certificates are also issued to the respective personnel.





Duties assigned to these personnel are comprehensively mentioned in Program Director Guide. Program Director Guide is a fundamental book to keep the supervisors, mentors, program directors and program coordinators well aware of their responsibilities requisite for successful execution of University Residence Program. In addition, Residency Program Trainees' guide is also specifically compiled for guidance of RMU residents throughout their training.

Criteria for MS / MD Supervisors

The following is notified for information of all concerned:

- 1. The Assistant Professors, Associate Professor and Professors shall be allowed to act as supervisor for postgraduate training in MS / MD Programs.
- 2. The supervisors must have experience of minimum 3 years after post-graduation.
- 3. The supervisors must have attended the following Mandatory workshops for capacity building:
 - a) Educational planning & evaluation
 - b) Assessment of Competence
 - c) Supervisory skills
 - d) Research Methodology, Biostatistics & Medical writing
 - e) Advanced Research Methodology
- 4. Workshops on Leadership and Professionalism are optional.
- 5. The minimum eligibility criteria for rotational supervisor include major postgraduate qualification in the subject with 2 years' experience after post-graduation. In addition, he / she should have attended all aforementioned mandatory workshops.
- 6. Senior Registrars can apply in Department of Medical Education to become supervisor of postgraduate trainees in the absence of professorial staff in department.

Quality Enhancement Cell (QEC)

Quality Enhancement Cell (QEC) was established at Rawalpindi Medical University in January 2018 with the vision to achieve excellence in medical education, scientific research and healthcare services of the country by meeting international standards.

Dr. Rabbia Khalid is Assistant Director of QEC. She works for collection, compilation and analysis of all data (assessment of residents & feedback proforma filled by the end of workshops & annual lectures) pertinent to quality enhancement of RMU.



Quality Enhancement Cell

Progress is being made to meet the space and other requirements for quality enhancement as per HEC guidelines. QEC personnel also attend the meetings called by HEC regarding quality enhancement of institutions. Curriculum (undergraduate& postgraduate) teachers and students are surveyed periodically and annual monitoring report is compiled by the end of each year to emphasize the developments and challenges pertinent to all the teaching and learning issues of the University.

Functions of QEC

QEC is intended to have excellent quality and standards of:

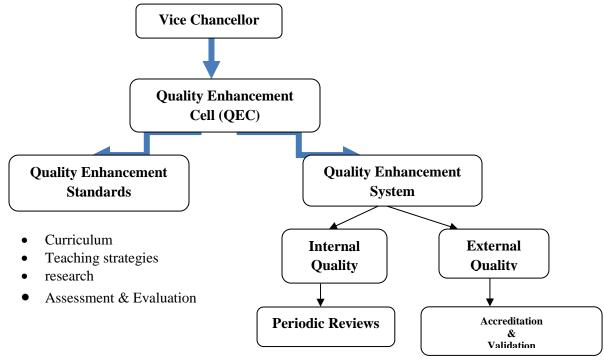
- University Residency programs
- Examinations
- ➤ Inductions of students, residents and faculty
- ➤ Planning & development
- Research & other academic activities

QEC is also meant to carry out Institutional Performance Evaluation (IPE) and Post Graduate Program Review (PGPR) as per recommendations of HEC.

QEC Tool Box

Comprises of HEC guidelines for quality enhancement to be followed and Multi-Source Feedback (MSF) proforma that are to be filled biannually for comprehensive assessment of RMU residents.

Quality Assurance Model of RMU



In addition to quality assessment of undergraduate and postgraduate programs, QEC also works for arranging Self – IPE & PGPR on annual basis as depicted below:

Self-Institutional Performance Evaluation by HEC 2022





Post Graduate Program Review (PGPR) by HEC nominated focal person 2021













Post Graduate Program Review (PGPR) by HEC nominated focal person 2022





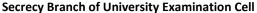




Examination Department

University Examination Cell of Rawalpindi Medical University is situated in Old Campus of the University. Apart from undergraduate (MBBS) exam, post graduate assessments were also done here. UEC is headed by Prof. Rai Muhammad Asghar who is Controller Examination at University.







TOS of Final Training Assessment (FTA) in Examination Cell

Examination Committee

The examination committee is comprised of competent officers of diverse specialties of RMU in addition to Controller Examination, Deputy Controller and Assistant Controller Examination. All the members of Examination committee are well versed in knowledge of examinations, assessment practice, and principles of evaluation.



MTA January 2022 in examination hall of RMU



Vice Chancellor & Controller of Examinations RMU addressing to the queries of residents during exam

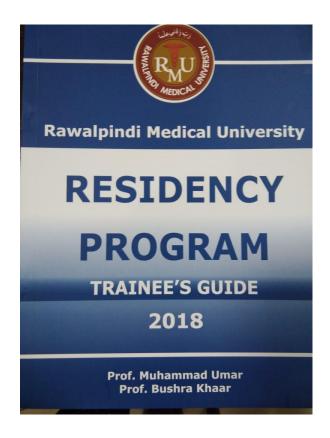
Functions of Examination Department

- Examination Cell serves all Examination notices received from University to all concerned.
- Examination cell prepares Circulars for students regarding Exam Fee Collection, the last date of fee Collection, modalities of payments of fine etc.
- Examination Cell takes all precautions while preparing Examination Time table, Invigilation duty chart, seating plans for the students in the Examination halls, smooth conduct of Examinations etc. Examination Time table will be displayed on institutional notice boards and at University website (www.rmur.edu.pk.).
- Examination Cell mobilizes the proper staff during the examination time and assigning them duty as per the duty chart already prepared.
- After the examination, concerned staff of UEC shall seal the answer booklets along with the attendance sheet, course wise and degree program wise and shall be preserved in a secured place.
- Examination cell takes necessary steps for distribution of Answer sheets to the concerned teachers after completion of the exam and receiving the answer sheets, award list, and preparing in the desired format to send them to University.
- Examination cell analyzes all examination results and in consultation with Controller Examination, prepares the report thereof for submission to appropriate authorities for follow up action.
- Examination Cell keeps all records pertaining to examinations.
- Examination Cell staff addresses grievances of administration, faculty, staff and students on all examination related issues.
- The Internal and the External Examination marks shall be compiled at the UEC and the results shall be finalized by the Controller Examination. The results shall be uploaded to the University website (www.rmur.edu.pk.) one month after completion of examination.

- Queries regarding re-totaling of marks, providing photocopies of evaluated answer booklets and re-evaluation of answer booklets shall be attended as per University rules.
- The supplementary examinations shall be conducted along with the final external examinations as and when the courses are offered.
- The meetings of University examination cell will be arranged thrice per year.
- Examination format in liaison with relevant faculties will be updated from time to time.

Section-II

Residency Programs



University Residency Program

Mission

To provide residents with a comprehensive structured education and training in both basic and clinical sciences that will enable the resident to become competent and proficient.

Vision

To disseminate best services and bring innovation in treatment and preventive strategies through research that spans fundamental discovery, health care services and knowledge mobilization

Objectives of University Residency Program

By the end of postgraduate training in the discipline concerned, resident should be able to:

- 1. Recognize the significance of concerned specialty in the context of health needs of the community and national priorities in the health sector
- 2. Practice the concerned specialty ethically and in compliance with steps of primary health care
- 3. Promote system based practice and patient safety
- 4. Advocate for appropriate health resource allocation
- 5. Identify social, economic, environmental, biological and emotional determinants of health while dealing with patients and take them into consideration before application of therapeutic, rehabilitative and preventive measures
- 6. Diagnose and manage the patients on the basis of clinical assessment and appropriate investigations
- 7. Demonstrate empathy and humane approach towards patients and their families
- 8. Express interpersonal behavior according to societal norms and expectations
- 9. Implement national health programs effectively and responsibly
- 10. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic / hospital / community
- 11. Develop skills as a self-directed learner, recognize continuing education needs; select and use appropriate learning resources
- 12. Function as an effective leader of a health team engaged in health care, research and training
- 13. Elaborate innovative knowledge about diseases of their specialty in the context of technological and pharmacological advances

Nomenclature & Duration of University Residency Programs

Nomenclature

- MD Doctor of Medicine
- MS Master of Surgery

Specialists approved for MS / MD Training at RMU

Total 22 specialties are approved for MS / MD training at RMU / Allied Hospitals by Pakistan Medical Commission (PMC). Adequate qualified supervisors and nursing staff are working in these disciplines. Number of residents enrolled through CIP at RMU affiliated hospitals against these programs is revealed below:

Sr.#	Training Programs	Duration	No. of residents
1)	MD Medicine	4 years	37
2)	MD Gastroenterology	5 years	10
3)	MD Nephrology	5 years	08
4)	MD Dermatology	5 years	08
5)	MD Cardiology	5 years	08
6)	MD Psychiatry	4 years	08
7)	MD Emergency Medicine	5 years	01
8)	MD Critical Care	5 years	
9)	MD Pulmonology	5 years	01
10)	MD Infectious Diseases	5 years	
11)	MS General Surgery	4 years	42
12)	MS Orthopedic Surgery	5 years	21
13)	MS Neurosurgery	5 years	21
14)	MS Pediatric Surgery	5 years	08
15)	MS Plastic Surgery	5 years	07
16)	MS Urology	5 years	10
17)	MS Gynaecology & Obstetrics	4 years	47
18)	MS Otorthinolaryngology (ENT)	4 years	19
19)	MS Ophthalmology	4 years	08
20)	MS Anesthesiology	5 years	21
21)	MD Paediatrics	4 years	25
22)	MD Diagnostic Radiology	4 years	13

PhD & Masters Programs

SR#	Residency Programs	Duration
1.	PhD Microbiology & Molecular Biology	6 years
2.	Masters in Health Professions Education (MHPE)	2 years
3.	PhD Biochemistry	6 years

Proposed Programs

SR#	Residency Programs	Duration
4.	M. Phil Community medicine	2 years
5.	M. Phil Pharmacology	2 years
6.	M. Phil Anatomy	2 years
7.	M. Phil Physiology	2 years
8.	M. Phil Biochemistry	2 years
9.	M. Phil Histopathology	2 years
10.	M. Phil Chemical Pathology	2 years
11.	M. Phil Haematology	2 years

Rotations of University Residents at RMU/ Allied Hospitals

The rotations in respective specialties and sub-specialties are clearly defined. Assessments of both external and internal rotations are updated in the academic record of the residents. Updated planner of residents' rotations 2022 for both 4 years and 5 years residency programs is depicted below:

Rotations' Planners for 4 years Training Program

Sr.	Training	1 st year	2 nd year	3 rd year	4 th year
No.	programs				
1	MD Medicine	Cardiology, Nephrolog to be completed in 1st	gy, ICU (Each of 2 months) 2 years of training	Neurology (1 month), Gas Dermatology (1 month), P (2 weeks), Psychiatry (2 w	ulmonology (1 month), Radiology
2	MS General Surgery	General Surgery	Orthopedics – 3 months Urology – 3 months Pediatric Surgery – 3 months Neurosurgery – 2 months Plastic / Cardiac Surgery – 1 month	General Surgery	General Surgery
3	MS Gynaecology & Obstetrics	Internal Medicine - 2 months	Neonatology (1 month) & Surgical ICU (critical care) (1 month)	Surgery - 2 months	Urology – 2 months
4	MD Paediatrics	Neonatology, Emerge Paediatrics Medicine		Cardiology & Rehabilitativ	e Medicine (each of 2 months
5	MD Diagnostic Radiology	Nuclear Medicine (6 weeks)	Interventional Radiology (1 month), MRI-I (2 months)	Echocardiography (2 weeks), MRI-II(2 months)	Interventional Radiology (1 month)
6	MS Otorhinolaryngolo gy (ENT)	General Surgery, Neurosurgery (each of 2 months)	Maxillofacial surgery (2 months)	Plastic surgery (2 months)	ENT
7	MS Ophthalmology	General Surgery (1 month), Emergency Medicine (1 month)		Community Ophthalmolog Neurosurgery, Plastic Surg Dermatology & Pathology	ery, Radiology, Oncology,
8	MD Psychiatry	3 rotations each of 3 medicine & Neurolog			

Sr.	Training programs	1st year	2 nd year	3 rd year	4 th year	5 th year		
No.	Training programs	1 year	Z year	5° year	4" year	5 ^m year		
1	MS Orthopedics	General Surgery (1 year) 3 rotations each of 2 months can be opted from the following: Pediatric surgery, Urology, Thoracic Surgery, Neurosurgery, Plastic Surgery		2 rotations each of 3 months can Physical Medicine & Rehabilitatio Orthopedics		Spine, Pediatric		
2	MD Dermatology	3 rotations each of 2 months to be completed. Cardiology, Nephrology, Gastroenterology			opathology , 1 month Plastic S ser Clinic, 15 days Leprosy Hos			
3	MS Plastic Surgery	General Surgery (18 mo	nths)	3 rotations each of 2 months to b Dermatology, Maxillofacial surge	o be completed in the following: rgery, any other Plastic surgery department			
4	MS Neurosurgery	General Surgery (1 year) Trauma & Orthopedics (2 mo 2 rotations each of 2 months following: Plastic Surgery, Pediatric Surg Urology	to be opted from the	Neurology (1 month), Neuro-Radi	ology (1 month)			
5	MD Gastroenterology	3 rotations each of 2 m completed Cardiology, Nephrology		ICU (2 months)	Radiology (02 months) Histopathology(01 month) Liver transplant/ GI surgery (01 month)			
6	MD Nephrology	After 6 months in Neph in Internal Medicine & i external rotation (4 ext be opted each of 2 mon Neurology, Radiology, D Medical ICU, Pulmonology Gastroenterology, Rhei	8 months of ernal rotations can ths from: Permatology, ogy, Psychiatry,	Medical ICU (1 month)	Radiology (1 month)	Transplant (2 months)		
7	MD Cardiology	First 6 months in Cardi Internal Medicine, tota 2 months can be opted • Pulmonology • Nephrology • Medical ICU • Gastroenterology • Psychiatry	ology, 12 months I 3 rotations each of	4 rotations each of 3 months. Coronary care unit, consultation service, non-invasive service cardiac catheterization laboratory	Echo (3 months), Nuclear Radiology (2 months), non-invasive cardiac testing including exercise stress testing (2 months), EKG interpretation and Holter monitoring (1 month), cardiac catheterization laboratory (2 months), Electrophysiology (2 months)	Invasive Track <i>OR</i> Non-invasive track		
8	MS Urology	First 6 months in Urolog General Surgery, 3 rota Surgery, Pediatric Surge each rotation of 2 mont	tions (Plastic ery & Radiology) –	Urology	Urology	Urology		

Rotations' Planner for MS Anesthesiology

Training	1 st year	2 nd year	3 rd year	4 th year	5 th year
programs	_ ,	_ /	72	, ,	, , , , , ,
MS Anesthesiology	A: Introduction to Anesth 1. Preoperative assessmer 2. Premedication 3. Post-operative and reco 4. Perioperative managem patients 5. Induction of general and 6. Intraoperative care 7. Infection control 8. Management of cardiac children. 9. Mandatory workshops 10. Synopsis preparation. B: Core Anesthesia (18 Mo Basics of Surgery: 1. Basic Airway Management Management; 2 weeks 2. Day Surgery: 2 weeks 2. Day Surgery: 2 weeks 3. General Surgery & Traun 4. Urological Surgery:1 mo 5. Gynecological Surgery:1 6. Head Neck Maxillofacia weeks 7. Orthopedic Surgery:1 M Basics of medicine: 1. Intensive Care Medicine: 2 months 2. Outside Theatre:2 weeks 3. Obstetrics:3 months 4. Pediatrics:2 months	very room care very room care vent of emergency esthesia arrest in adults and nths) ent & Critical Incident ma: 6 Months nths month I& Dental Surgery: 2 onth	Focus on Subspeciality Train Essential Units: 1. Anesthesia for Neurosurg Neuroradiology & Neurocrit 2. Cardiothoracic, Vascular & Anesthesia: 2 months 3. Intensive Care Medicine: 2 4. Day Surgery: 2 weeks 5. General Surgery, Traumamonths 6. Urological Surgery: 1 Mont 7. Gynecological Surgery: 1 M. 8. Head Neck maxillofacial & weeks 9. Outside Theatre: 2 weeks 10. Orthopedic Anesthesia: 1 m. 12. Sedation: 2 weeks 13. Anesthesia for Obstetric 14. Pediatrics Anesthesia: 3 m. 15. Pain Medicine: 1 month Minor rotations: 16. Ophthalmic: 2 weeks 17. Plastic/Burns: 2 Weeks	ery, ical care: 1 month thoracic months & Stabilisation:5 ths Month Dental Surgery:2 1 month nonth	Focused advanced training: May elect to do up to 6 months in two of the following Subspecialities: 1. Anesthesia in Neurosurgery, Nueroradiology & Neurocritical care 2. Cardiothoracic anesthesia & Cardiothoracic critical care 3. Regional 4. Intensive Care Medicine 5. Obstetrics 6. Pediatrics 7. Pain Medicine 8. Plastics/Burns

Curricula of University Residency Program

Curricula of both ongoing and proposed Residency Programs have been prepared by subject specialists in compliance with objectives of University Residency Program. These curricula can be viewed by all residents on RMU website (www.rmur.edu.pk.)

Curricula of Residency Programs at Rawalpindi Medical University





These curricula are designed and finalized by worthy Dean of respective departments with consensus and discussion of their dedicated faculty in alignment with ACGME (Accreditation Council for Graduate Medical Education) ¹guidelines that are tracked in order to ensure acquisition of our residents by all the 6 core competencies which are:

- 1. Medical Knowledge
- 2. Patient care
- 3. Interpersonal & Communication skills
- 4. Professionalism
- 5. Practice Based Learning & Improvement
- 6. System Based Practice

WFME Global Standards for Quality Improvement in Post-graduate Medical Education

World Federation for Medical Education (WFME)² recommends the following set of global standards for Post-graduate medical education according to 9 areas. These areas are defined as broad components in the structure, process and outcome of post-graduate medical education and training. These are:

- 1. Mission and outcomes
- 2. Training process
- 3. Assessment of Trainees
- 4. Trainees
- 5. Staffing

- 6. Training settings and Educational resources
- 7. Evaluation of Training process
- 8. Governance & Administration
- 9. Continuous Renewal

Intended users of these standards are Authorities, organizations and institutions with responsibility for postgraduate medical education. This 9 set of international standards can be used globally as a tool for quality assurance and development of postgraduate medical education in the following ways:

- 1. Self-evaluation of Programs
- 2. peer review
- 3. Combination of self-evaluation and External Peer review
- 4. Recognition and Accreditation

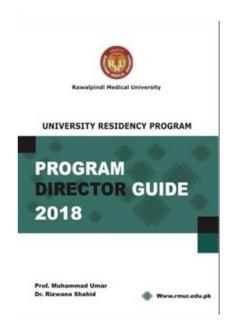
https://knowledgeplus.nejm.org/blog/exploring-acgme-core-competencies/.

^{1.} ACGME Guidelines Available at:

^{2.} WFME Global Standards for Quality improvement in Post-graduate Medical Education Available at: https://wfme.org/publications/wfme-global-standards-for-quality-improvement-pgme-2015/.

Residents' Appointments

Residents / postgraduate medical trainees are enrolled in training program in compliance with Punjab Residency Program Guidelines available at: http://prp.punjab.gov.pk/. These guidelines are also mentioned in detail in *Program Director Guide*.



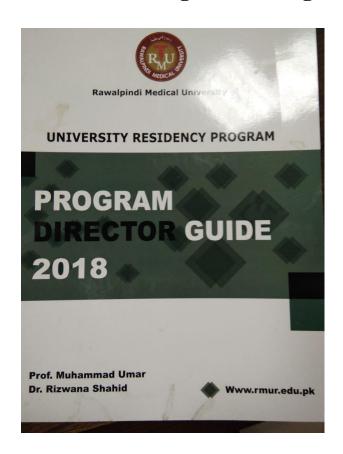
In order to get a residency in government institutes of Punjab, candidates need to apply to Punjab Residency Progeram (PRP) Central Induction Policy (CIP). It's an online process. The candidates need to fill the form online on the official website (http://prp.phf.gop.pk) of PRP.

Seat Distribution:

- 50% of the total seats are for FCPS candidates
- 50% of the total seast are for MS / MD / MDS candidates
- 93% seats are for Punjab
- 6% seats are for other regions distributed as:
 - a) 2% seats for foreign candidates
 - b) 2% seat for AJK, Gilgit, Islamabad
 - c) 2% seats for Sindh, KPK, Baluchistan
 - d) 1% for disabled candidates of Punjab Province (from the discipline of Anesthesia, Radiology & Pathology)

Section-III

Teaching & Training



Instructional Strategies

Teaching and training of the residents enrolling in University Residency Program are through diverse modalities which are:

- Bedside teaching
- Morning meetings
- Multidisciplinary Team meetings (MDT) monthly
- Mandatory workshops
- Orientation seminar &Training sessions
- Annual lectures
- Interactive sessions
- Rotations

Apart from aforementioned methodologies, trainees will also get expertise in their respective specialty through participation in Conferences / Seminars / Symposium, doing Self-Directed Learning (SDL), visualizing videos of procedures and attending interactive sessions.

Case Based Discussion (CBD)

A clinical teaching tool for the postgraduate residents in the field of medicine that entails structured interview of trainee by the supervisor within which actual written case records presented by the trainee are thoroughly focused. It is neither an informal chat nor a formal examination, but rather a process in which residents are not graded for their discussion but also bestowed by constructive feedback by the supervisor¹.

Case Based Discussion is one of the most valuable modality to assess clinical reasoning of the trainees and application of knowledge to solve the problem of the patients. the importance of this mode of teaching cannot be overlooked due to reflective practice of the trainees followed by feedback of the trainers².

The primary function of the rating scale of a CBD is to inform the trainee and trainer about what needs to be learnt³. Marks per see provide no learning improvement; students gain the most learning value from assessment that is provided without marks or grades⁴. CBDs have in built feedback and so trainees get feedback immediately through this modality. Verbal feedback has a significantly greater effect on future performance than grades or marks as the assessor can check comprehension and encourage the student to act upon the advice given4.

Proforma for Case Based clinical evaluation of trainee along with other 360 degree evaluation Proforma designed for RMU residents is attached as Annexure in Program Director Guide 2018.

^{1.} Case Based Discussion Available at: https://medical-dictionary.thefreedictionary.com/case-based+discussion.

Mehta F, Brown J, Shaw NJ. Do trainees value feedback in case-based discussion assessments? Medical Teacher 2013; 35: 1166-1172.

^{3.} Williamson JML, Osborne AJ. Critical analysis of Case Based Discussion. BJMP 2012; 5(2): 1-4.

Cooks TJ. The impact of classroom evaluation practices on students. Review of Educational Research 1998;58;438-481.

Morning Meetings

Morning meetings are of paramount importance to enhance the interpersonal communication among doctors and nurses in addition to improvement of patients' outcome. These meetings not only facilitate better planning of activities to be undertaken throughout the day but also promote better understanding of the subject among residents. Such meetings also assist the residents exponentially in achievement of desired learning outcomes¹.

Multi-Disciplinary Team (MDT) Meetings

There is enormous increase in multidisciplinary team meetings in healthcare setting due to more specialties² and advancement in technology³. Consultations are taking place through MDTMs promote better patient care as management is aided with case discussions⁴.

MDT meetings are characterized by coordination among functional departments of the hospital. They also promote learning among residents as they get an opportunity of in depth visualization of health status of the patients⁵.

^{1. &}lt;u>Aston J, Shi E, Bullôt H, Galway R, Crisp J</u>. Qualitative evaluation of regular morning meetings aimed at improving interdisciplinary communication and patient outcomes. Int J NursPract. 2005; 11(5): 206-213.

^{2.} Calman K, Hine D. A Policy Framework for Commissioning Cancer Services. London: Department of Health, Welsh Office; 1995.

^{3.} Board of the Faculty of Clinical Radiology. Cancer Multidisciplinary Team Meeting – Standards for Clinical Radiologists. London: The Royal College of Radiologists; 2005.

^{4.} Kane B, Luz S, O'Brain DS, McDermott R. Multidisciplinary team meetings and their impact on workflow in radiology and pathology departments. BMC Med 2007; 5:15.

^{5.} Kane B, Luz S. Multidisciplinary medical team meetings: an analysis of collaborative working with special attention to timing and teleconferencing. Comp Support Coop Work. 2006;15:501–535.

Mortality & Morbidity Meetings (MMM)

Apart from International organizations mortality and morbidity meetings are frequently organized in our national health care settings to scrutinize frequency of mortality and morbidity with an intention to promote patient safety. Such meetings are also meant to ensure accountability, they also facilitate professional learning among doctors¹.

In many countries, mortality and morbidity meetings are intruded within the medical curriculum for postgraduate trainees². Junior doctors present cases to other doctors for reflection on diagnostic or treatment decision-making, and in return they receive clinicopathological wisdom and learn presentation skills. In the past, the brief discussions between the clinicians about the causes of death were thought to be effective peer review and an adequate means of changing practice^{3,4}. Little attention was paid to analyze the causes of deaths for quality improvement. Studies have shown that for M&M meetings need to be structured and systematic in reviewing and discussing deaths, directing discussions towards improving system and process variations⁵. There is dire need to Integrate M&M meetings into the wider governance structure and monitor meeting outcomes for shared learning and assurance⁶.

^{1.} National Patient Safety Agency. *Patient Safety First. The Campaign Review London:* National Patient Safety Agency, 2011.

^{2.} Accreditation Council for Graduate Education. *ACGME Program Requirements for Graduate Medical Education in Surgery 2008*. http://www.acgme.org/acWebsite/downloads/RRC progReq/440 general surgery 01012 008.pdf.3. Biddle C. Investigating the nature of the mortality and morbidity conference. Acad Med1990;65:420.

^{4.} Pierluissi E, Fischer MA, Campbell AR et al. Discussion of medical errors in morbidity and mortality conferences. JAMA 2003;290:2838–42.

^{5.} Schwarz D, Schwarz R, Gauchan B, et al. Implementing a systems-oriented morbidity and mortality conference in remote rural Nepal for quality improvement. BMJ QualSaf 2011;20:1082–8.

^{6.} Higginson J, Walters R, Fulop N. Mortality and Morbidity meetings: An updated resource for improving the governance of patient safety? BMJ QualSaf 2012; 21: 576-585.

Mandatory Workshops

The importance of workshops as a component of postgraduate training can never be neglected. This modality provides a platform of single short educational program to teach or introduce to participants practical skills or techniques that can facilitate them at their workplace. Workshops endorse brainstorming among participants who also get an opportunity to share their experiences and learn from those of others. Mandatory workshops for these residents are conducted during 6 months-1 year period following their registration. Mandatory workshops are:

- Communication skills
- Computer skills
- Research methodology, Biostatistics Dissertation writing (RMB&DW)
- Synopsis writing
- Cardiac First Response



Prof. Muhammad Umar is addressing RMU residents at the end of communication skills workshop







Cardiac First Response (CFR) workshop in skill Lab

Communication skills workshop for university residents in DME Conference Hall of RMU

These workshops are proposed keeping in view both national and international training standards.

Conducting a workshop. Available at: https://ctb.ku.edu/en/table-of-contents/structure/training-and-technical-assistance/workshops/main.

Orientation Seminar & Training Sessions

Orientation sessions are imperative to prepare the faculty members for commencement of new academic program. These sessions are meant to provide the guidance pertinent to course structure, expectation and support services available.

A grand orientation seminar was organized about University Residency Program at RMU. All the Deans, supervisors, Mentors, Program Directors and Program Coordinators were invited in this seminar. The honorable Vice Chancellor RMU Prof. Muhammad Umar, Chairman PGME Committee Prof. Muhammad Ajmal and Director DME Prof. Rai Muhammad Asghar gave an overview of University Residency Program (URP), briefed its road map and assured the audience of transparency in all the upcoming steps from enrollment in this program through CIP till award of degree.

Numerous orientation sessions have been arranged regarding University Residency Programs.

- For facilitators (supervisors, mentors, program directors & program coordinators
- For residents

These were basically organized to clear the ambiguities regarding filling of assessment proforma.



Prof. Muhammad Umar VC RMU is distributing UTMC Registration cards to RMU residents



Supervisors and mentors are collecting their reg. certificates at the end of orientation session

Other worth mentioning pictures related to orientation and training sessions regarding URP are depicted below:



Prof. Muhammad Umar VC RMU addressing the queries of RMU residents in orientation session of URP



VC RMU discussing the assessments of residents' rotations with supervisors



VC RMU elaborating the supervisors and residents about the importance of Continuous Internal Assessment (CIA)



Worthy faculty of RMU asking questions pertinent to URP form the patrons of University Residency Program (URP)



Dr. Rabbia Khalid, Assistant Director QEC explaining about the scoring of 360 degree evaluation proforma



Dr. Arsalan Manzoor giving orientation to Assistant Professors of Allied Hospitals about URP

Such sessions are planned to be organized every 4 months to resolve the queries of RMU residents pertinent to their training.

Annual Lectures

There is great emphasis worldwide to integrate basic and clinical sciences in medical education for long term learning and to prepare the future generation for practice. Annual lectures are also being delivered for these residents by esteemed and experienced lecturers which are preferably professorial staff of the university.

FORMAT OF ANNUAL LECTURES

- 1. Annual lectures should comprise of the following content:
 - 80% patho-physiology
 - 20% applied clinical
- 2. Prepare lectures power point presentation keeping in view all the characteristics of good presentation like proper colour match of slide background and font, adequate font size, use of pictures for understanding of clinical pictures, avoiding overcrowding of slides etc. Optimal number of slides should be 30.
- 3. Learning objectives should be specified at the beginning of lecture.
- 4. MCQs paper should also be designed relevant to annual lecture with key that should be distributed among trainees by the end of lecture and should also be marked. Pass percentage is 60%.
- 5. MCQs paper of trainees should be assessed and tabulate the result for submission to DME.
- 6. Feedback proforma should be filled by the trainees at the end of lecture.
- 7. Soft copy of annual lecture should preferably be uploaded on RMU website.

Hoeven DV, Hoeven RV, Zhu L, Busaidy K, Quock RL. Integration of Basic and Clincial Sciences: Faculty Perspectives at a U.S. Dental School. *Journal of Dental Education*2018, 82 (4) 349-355.

List of Annual Lectures

List of annual lectures to be delivered to RMU residents from in New Teaching Block of Rawalpindi Medical University is depicted below:

Sr.#	Topics of Annual lecture	Teachers
1.	Research Ethics	Dr. Faiza Aslam
2.	Cardiac cycle	Dr. Syed Muarraf Hussain
3.	Acid Base Balance	Dr. Shmyla Hamid
4.	Fluid & electrolyte imbalance	Dr. Syed Muarraf Hussain
5.	Genetic diseases & Inheritance	Prof. Rai Muhammad Asghar
6.	immunological components of diseases	Prof. NaeemAkhtar
7.	Principles of Infectious Diseases	Dr. Mujeeb Khan
8.	Patho-physiology of sepsis & septic shock	Dr. Abrar Akbar
9.	Systemic inflammatory response syndrome	Prof. Mobina Ahsan Dodhy
10	Abdominal & chest imaging	Dr. Hina Hanif
11.	Electrocardiogram (ECG)	Dr. Muhammad Asad
12.	Interpretation of clinical chemical reports	Prof. Mobina Ahsan Dodhy
13.	Physiology of critical illnesses	Dr. Abrar Akbar
14.	Therapeutics in Oncology	Dr. Asma Khan
15.	Palliative care & pain management in terminal illness	Prof. Jawad Zaheer
16.	Adult respiratory distress syndrome (ARDS)	Dr. Abrar Akbar

Some of the pictures of annual lectures at RMU for University residents are depicted below:



Prof. Muhammad Umar Vice Chancellor RMU highlighting the significance of research in annual lecture



Dr. FiazaAslam Research Coordinator RMU delivering annual lecture on ethical perspective of research to RMU residents



Dr. FaizaniaShabbir AP Physiology delivering annual Lecture on Fluid & Electrolyte Imbalance to RMU residents



Prof. Muhammad Umar VC RMU clarifying the ambiguities of RMU residents in annual lecture



Dr. Mujeeb Khan is delivering Annual lecture on Principles of Infectious Diseases to RMU residents



Dr. Mujeeb Khan clarifying the ambiguities of RMU residents about principles of Infectious Diseases

Interactive Sessions

Interactive sessions are also occasionally arranged for RMU residents with International speakers to give them an overview of modern healthcare concepts operating worldwide. One of such sessions was organized on 12th September, 2018 in CPC Hall of RMU. The speakers were Dr. Najma Siddiqui, Clinical Senior Lecturer in Psychiatry, Department of Health Sciences, Hull York Medical School, UK and Mr. Jerome Uuright, Senior Lecturer in Mental Health, Department of Health Sciences, University of York, UK. Topic of this interactive session was "Clinicians engaging in Research – Why Bother?"

The pictures of this prestigious event are depicted below:



Mr. Jerome Uright, Senior Lecturer in Mental Health University of York, UK briefing about research



RMU residents listening to prestigious lecture in CPC Hall of RMU

Logbook

Logbook is an ideal tool to document the activities undertaken during training for accomplishment of the learning outcomes along with procurement of remarks / feedback of the supervisor. They should be appropriately designed to encompass all the components of curriculum¹. Logbooks guide the residents regarding the number of cases to be seen, procedures to be done deemed necessary for skill acquisition. They also facilitate supervisors in giving constructive feedback to the trainees².

Logbooks can be successfully implemented in residency program by getting input of the stakeholders for its content, keeping short and precise, integrating it into the curriculum and training the supervision physicians and mentors³.

Logbooks are designed for each University Residency program separately by the consensus of the worthy faculty of RMU. These logbooks are also uploaded on www.rmur.edu.pk. to ease its availability for the trainees.



- 1. Gouda P. The need for logbooks to evolve in the undergraduate medical setting. <u>Perspect Med Educ</u>. 2016 Feb; 5(1): 65.
- 2. Rees CE, Shepherd M, Chamberlain S. The utility of reflective portfolios as a method of assessing first year medical students' personal and professional development. Reflect Pract. 2005;6(1):3–14.
- 3. Brauns KS, Narciss E, Schneyinck C, Bohme K, Brustle P, Mau-Holzmann U, et al. Twelve tips for successfully implementing logbooks in clinical training. Medical Teacher, 38: 6, 564-569.

Portfolio

Portfolios are of great use in postgraduate medical training as an assessment tool, as documentation of competence, a database of procedure experience and for revalidation purposes¹. This form of assessment promotes achievement of learning outcomes AND assists in understanding varied aspects of the trainees in clinical settings like attitude, personal attributes and professionalism through reflective practices².

Reflection which is the hallmark of portfolio allows our doctors at all stages of training to learn from their actions and promotes continued review of the literature to keep them up to date³. The Portfolio of a doctor or medical resident should comprise of the following pillars of Good Medical Practice:

- Maintaining good medical practice
- Good clinical care
- Teaching and training, appraising and assessing
- Relationships with patients
- Working with colleagues⁴



Logbooks & Portfolio appraisal of University Residents for FTA & MTA July 2022 by Dean of Postgraduate Studies, DME & QEC

- 1. Haldane T. "Porfolios" as a method of assessment in medical education. <u>GastroenterolHepatol Bed Bench</u>. 2014; 7(2): 89–93.
- 2. Davis MH, Ponnamperuma GG. Portfolios, projects and dissertations. In: Dent JA, Harden RM, editors. A practical guide for medical teachers. London: Elsevier Churchill Livingstone; 2006.
- 3. O'Sullivan PS, Cogbill KK, McClain T, Reckase MD, Clardy JA. Portfolios as a novel approach for residency evaluation. Acad Psychiatry. 2002;26:173–179.
- 4. Douglas H, West C. Creating a good portfolio. BMJ 2009; 338: 811.

Assessment & Evaluation Section-IV





RAWALPINDI UNIVERSITY RESIDENCY PROGRAM

Assessment and Evaluation Report 2019-2021, Vol II

Quality Enhancement Cell, Rawalpini Medical University. Published: May, 2022

Assessment of University Residents

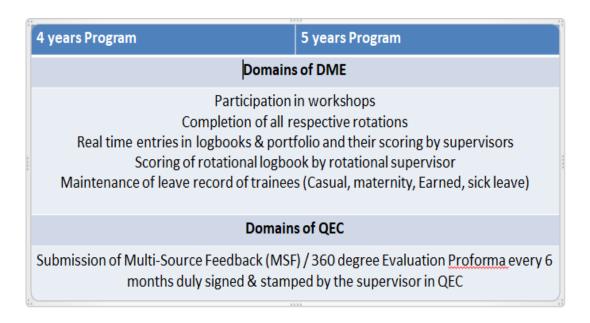
Revised curriculum and assessment scheme 2021 are implemented on the university residents inducted from July 2020. Revised Assessment Plan for the residents is revealed below:

Assessments for residents enrolled in 4 years	Assessments for residents enrolled in 5 years		
training program	training program		
In training assessment- 1 st year	In training assessment- 1 st year		
Mid Training Assessment (MTA)	Mid Training Assessment (MTA)		
In training Assessment – 3 rd year	In training Assessment – 3 rd year		
Final Training Assessment (FTA)	In training Assessment – 4 th year		
	Final Training Assessment (FTA)		

Components of Assessment:

- 1. Written Assessment ---- will be based on 100 one best MCQs
- 2. Clinical Assessment --- will be based on OSCE, long case and short case presentation. Residents will be supposed to defend their thesis on passing their clinical assessment in FTA.

Eligibility requirements for Assessments



Continuous Internal Assessment (CIA)

• 75% CIA is mandatory

 CIA will be an average of logbooks' / rotational scores & MSF / 360 degree evaluation scores.

Continuous Assessment of University Residents

Transparent assessment plans have been defined for these residents. These assessments are meant to score 6 core competencies among the residents as per ACGME guidelines¹. These are:

- 1. Medical knowledge
- 2. Patient care
- 3. Interpersonal & communication skills
- 4. Professionalism
- 5. Practice based learning & improvement
- 6. System based learning

Multi-Source Feedback (MSF) and Direct Observation of Procedural skills (DOPS) are authentic in academic assessment of residents at their workplace².

Duly filled self-assessment proforma were collected from university residents followed by their analysis and compilation of report. Now 360 degree evaluation proforma has been sent to their respective departments to get multi-source feedback as these proforma are to be filled by their supervisors, mentors, nursing staff and patients pertinent to their knowledge, skills and attitude. DOPS proforma will also be designed by clinical departments with respect to their specialty to assess the procedural skills of their residents.

Diverse profroma designed for assessment and evaluation of RMU residents are shown in 360 degree OR Multi-source Assessment



- ACGME Core Competencies Available at: https://knowledgeplus.nejm.org/blog/exploring-acgme-core-competencies/.
- 2. Vleuten C, Verhoeven B. In-training assessment developments in postgraduate education in Europe. ANZ J Surg 2013; 83: 454-459.

360 Degree Evaluation

360-degree evaluations are comprised of measurement tools duly filled by multiple people in an individual's sphere of influence. They are also labelled as multisource feedback, multi-rater assessment, full-circle appraisal, and peer evaluation. This method of providing developmental feedback is used to assess competency as well as behaviour of concerned individual¹.

360-degree evaluations in health care settings are destined to assess the six core competencies among residents but they are particularly valuable in evaluating interpersonal skills, communications skills, and professionalism. Most 360-degree tools use a survey or questionnaire to gather information in several areas (e.g., knowledge base, skills and task proficiency, teamwork, communication, managerial skills, decision making, professionalism and practice based learning)².

The evaluators filling the 360- degree evaluation proforma should include departmental faculty, fellow residents, medical students, nurses, ancillary staff, patients, families, and the resident self-assessment, allowing for a "gap analysis" between how residents perceive themselves and how others perceive them. This provides a golden opportunity to focus on areas which are to be improved³. However, both raters and ratees must understand and accept the process as a career-enhancing tool for its successful implementation. Raters should give fair and honest feedback, and ratees must respect the confidentiality and anonymity of the process. 360 degree feedback must be used in a positive and constructive manner to enhance career development. Failure in either of these areas will diminish participation and effectiveness¹.

This tool focuses on multiple perspectives and results are considered to be highly credible to change behavior. This is a significant deviation from the traditional peer review and the resident review processes that almost exclusively use physicians as raters⁴.

360 degree Evaluation report of the RMU residents is computer based to generate timely and easily correlated results. These reports are sent to respective Deans and are open for discussion only among supervisors and their residents. They constitute 15% weight age in final assessments of residents.

^{1.} Rodger KG, Manifold C. 360-degree Feedback: Possibilities for Assessment of ACGME Core Competencies for Emergency Medicine Residents. AcaEmerg Med 2002; 9(11): 1300-1304.

- 2. Rudy DW, Fejfar MC, Griffith CH, Wilson JF. Self and peer assessment in a first-year communication and interviewing course. Eval Health Prof. 2001; 24:436–45.
- 3. Atwater LE, Yammarino FJ. Self-other rating agreement: a review and model. Res Person Hum Resources Manage. 1997; 15:141–64.
- 4. Southgate L, Cox J, David T, et al. The General Medical Council's Performance Procedures: peer review of performance in the workplace. Med Educ. 2001; 35(suppl 1):9–19.

360 Degree Evaluation Proforma

These proforma are enlisted below:

- 1. Mentor / Supervisor Evaluation of Trainee Proforma
- 2. Patient Medical Record / Chart Evaluation Proforma
- 3. Resident Evaluation by Nurse / Staff Proforma
- 4. Patient Evaluation of Trainee Proforma
- 5. Resident/Fellow Evaluation of Faculty Teaching Proforma
- 6. Final Evaluation Scoring Sheet Proforma
- 7. Resident Self-Assessment Proforma
- 8. Direct Observation of Procedural Skills (DOPS) Proforma
- 9. Case Based Clinical Evaluation Of Trainee Proforma

Format of 360 degree evaluation report compilation





EVALUATION	REPORT
Note: 70% is required to be	in the satisfactory zone
UTMC No:	Unit /Hospital:
Name of Resident:	Supervisor:
Discipline:	Year of Starting:
Supervisor Evaluation of Trainee: (1)	
Medical Patient Care:/ 90 (%)	
Medical Knowledge:/ 90 (%)	
Professionalism:/ 105 (%)	
Communication Skills:/ 60 (%)	
System Based Learning:/ 105 (%)	
Practice Based Learning:/ 45 (%)	
Grand % = 85.45%	
Patient Medical Record Evaluation: (2) Marks obtained:/240 (%)
Resident Evaluation by Staff / Nurse	: (3) Marks obtained: / 168 (%)
Resident Evaluation by Patient / Att	endant: (4) Marks obtained:/ 90 (%
DOPS: (8) Marks obtained: /66 (%)	
Case Based Clinical Evaluation: (9) Ma	arks obtained: /100 (%)
Comments:	
Chair person	Quality Enhancement Cell
Post Graduate Medical Education	Department of Medical Education
Rawalpindi Medical University	Rawalpindi Medical University
date' signature	

Supervisor Evaluation of The Trainee

This is form no. 1. It has to be filled by the supervisors, program directors, deans, coordinators and mentors and minimum three faculty members should duly fill the form so that average value can be taken. This form contains strength of our university residency program i.e., 6 core competencies.

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MENTOR / SUPERVISOR EVALUATION OF TRAINEE

Resident's Name:		Unsatisfactory		
Evaluator's Name(s):	2	Below Average		
Hospital Name:	3	Average		
Date of Evaluation:	4	Good		
Traditional Track (10% Clinic) Drimary Care Track (20% Clinic	5	Superior		

Please circle the appropriate number for each item using the scale above.

	Please circle the appropriate number for each item using the scale above.						
	Patient Care						
1.	Demonstrates sound clinical judgment	1	2	3	4	5	
2.	Presents patient information case concisely without significant omissions or digressions	1	2	က	4	5	
3.	Able to integrate the history and physical findings with the clinical data and identify all of the patient's major problems using a logical thought process	1	2	3	4	5	
4.	Develops a logical sequence in planning for diagnostic tests and procedures and Formulates an appropriate treatment plan to deal with the patient's major problems	1	2	თ	4	5	
5.	Able to perform commonly used office procedures	1	2	3	4	5	
6.	Follows age appropriate preventative medicine guidelines in patient care	1	2	3	4	5	
	Medical Knowledge		5	cal	ale		
1.	Uses current terminology	1	2	3	4	5	
2.	Understands the meaning of the patient's abnormal findings	1	2	3	4	5	
3.	Utilizes the appropriate techniques of physical examination	1	2	3	4	5	
4.	Develops a pertinent and appropriate differential diagnosis for each patient	1	2	3	4	5	
5.	Demonstrates a solid base of knowledge of ambulatory medicine	1	2	3	4	5	
6.	Can discuss and apply the applicable basic and clinically supportive sciences	1	2	3	4	5	
	Professionalism		5	r,a	e		
1.	Demonstrates consideration for the patient's comfort and modesty	1	2	3	4	5	
2.	Arrives to clinic on time and follows clinic policies and procedures	1	2	3	4	5	
3.	Works effectively with clinic staff and other health professionals	1	2	3	4	5	
4.	Able to gain the patient's cooperation and respect	1	2	3	4	5	
5.	Demonstrates compassion and empathy for the patient	1	2	3	4	5	
6.	Demonstrates sensitivity to patient's culture, age, gender, and disabilities	1	2	3	4	5	
7.	Discusses end-of-life issues (DPOA, advanced directives, etc.) when appropriate	1	2	3	4	5	



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	Interpersonal and Communication Skills				Scale				
1.	Demonstrates appropriate patient/physician relationship		2	3	4	I			
2.	Uses appropriate and understandable layman's terminology in discussions with patients	1	2	3	4	İ			
3.	Patient care documentation is complete, legible, and submitted in timely manner	1	2	3	4	İ			
4.	Recognizes need for behavioral health services and understands resources available	1	2	3	4	I			
	Systems-based Practice			cal	e	ĺ			
1.	Spends appropriate time with patient for the complexity of the problem	1	2	3	4	I			
2.	Able to discuss the costs, risks and benefits of clinical data and therapy	1	2	3	4	1			
3.	Recognizes the personal, financial, and health system resources required to carry out the prescribed care plan								
4.	Demonstrates effective coordination of care with other health professionals	1	2	3	4				
5.	Recognizes the patient's barriers to compliance with treatment plan such as age, gender, ethnicity, socioeconomic status, intelligence, dementia, etc.								
6.	Demonstrates knowledge of risk management issues associated with patient's case	1	2	3	4	ı			
7.	Works effectively with other residents in clinic as if a member of a group practice	1	2	3	4	ı			
	Practice-Based Learning and Improvement		5	0.3	e				
1.	Locates, appraises, and assimilates evidence from scientific studies								
2.	Apply knowledge of study designs and statistical methods to the appraisal of clinical studies to assess diagnostic and therapeutic effectiveness of treatment plan				4				
3.	Uses information technology to access information to support diagnosis and treatment				4	ı			
	Comments	Ī	Ī			ľ			
						1			
	Total Score/165								

Patient Medical Record Evaluation Proforma

This is form no. 2. It has to be filled by the supervisors, program directors, deans, coordinators and mentors and minimum three faculty members should duly fill the form so that average value can be taken. Random files of the patients are consulted to fill this form.



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2

Patient Medical Record / Chart Evaluation Proforma

Name of Resident

Location of Care or Interaction

(OPD/Ward/Emergency/Endoscopy Department)

3#		Poor	Fair	Good	V. Good	Excellent
1.	Basic Data on Front Page Recorded	0	0	0	0	0
2.	Presenting Complaints written in chronological order	0	0	0	0	0
3.	Presenting Complaints Evaluation Done	0	0	0	0	0
4.	Systemic review Documented	0	0	0	0	0
5.	All Components of History Documented	0	0	0	0	0
6.	Complete General Physical Examination done	0	0	0	0	0
7.	Examination of all systems documented	0	0	0	0	0
8.	Differential Diagnosis framed	0	0	0	0	0
9.	Relevant and required investigations documented	0	0	0	0	0
10.	Management Plan framed	0	0	0	0	0
11.	Notes are properly written and eligible	0	0	0	0	0
12.	Progress notes written in organized manner	0	0	0	0	0
13.	Daily progress is written	0	0	0	0	0
14.	Chart is organized no loose paper	0	0	0	0	0
15.	Investigations properly pasted	0	0	0	0	0
16.	Abnormal findings in investigations encircled.	0	0	0	0	0
17.	Procedures done on patient documented properly	0	0	0	0	0
18.	Medicine written in capital letter	0	0	0	0	0
19.	I/v fluids orders are proper with rate of infusion mentioned	0	0	0	0	0
20.	All columns of chart complete	0	0	0	0	0

Poor 0, Fair 1, Good 2, V.Good 3, Excellent 4

Resident Evaluation by Nurse / Staff

This is form no. 3. It has to be filled by the nurses or the staff which are in contact with the trainee and minimum three nurses should duly fill the form so that average value can be taken.

RU	RAWALPINDI MEDICAL UNIVERSITY	3
Preview Fo	orm	
RESIDEN	EVALUATION BY NURSE / STAFF	

Please take a few minutes to complete this evaluation form. All information is confidential and will be used constructively. You need not answer all the questions

Name of Resident

Location of care or interaction: (OPD/Ward/Emergency/Endoscopy Department)

Your position (Nurse, Ward Servant, Endoscopy Attendant)

S#	PROFESSIONALISM	Poor	Fair	Good	V Good	Excellent	Insufficient
1.	Resident is Honest and Trustworthy	0	0	0	0	0	Contact
2.	Resident treats patients and families with courtesy, compassion and respect	0	0	0	0	0	0
3.	Resident treats me and other member of the team with courtesy and respect	0	0	0	0	0	0
4.	Resident shows regard for my opinions	0	0	0	0	0	0
5.	Resident maintains a professional manner and appearance	0	0	0	0	0	0
INTE	RPERSONAL AND COMMUNICATIONS SKILLS		-				
6.	Resident communicates well with patients, families, and members of the healthcare team	0	0	0	0	0	0
7.	Resident provides legible and timely documentation	0	0	0	0	0	0
8.	Resident respect differences in religion, culture age, gender sexual orientation and disability	0	0	0	0	0	0
SYST	EMS BASED PRACTICE						
9.	Resident works effectively with nurses and other professionals to improve patient care.	0	0	0	0	0	0
PATI	ENT CARE						
10.	Resident respects patient preferences	0	0	0	0	0	0
11.	Resident is reasonable accessible to patients	0	0	0	0	0	0
12.	Resident take care of patient comfort and dignity during procedures.	0	0	0	0	0	0
PRA	CTICE BASED LEARNING AND IMPROVEMENT	4					
13.	Resident facilitates the learning of students and other professionals	0	0	0	0	0	0
CON	IMENTS						
14.	Please describe any praises or concerns or information about specific incidents	0	0	0	0	0	0
	IK YOU for your time and thoughtful input. You play a vi cine residents.	tal role i	n the e	ducation	and tra	ining of the	internal
	O Saint Good 3 V Good 3 Smallast 4			talsco			lec

Patient Evaluation of Trainee

This is form no. 4. It has to be filled by the patients which are in contact with the trainee and minimum three patients should duly fill the form so that average value can be taken.

(RU)	RAWALPINDI MEDICAL UNIVERSITY	4
Charles of the Control of the Contro		

Patient Evaluation of Trainee

Trainee Name:	1	Strongly Disagree
Date of Evaluation:	2	Disagree
	3	Neutral
	4	Agree
	5	Strongly Agree

Please circle the appropriate number for each item using this scale. Please provide any relevant comments on the back of this form.

	This Trainee:		Scale				
1.	Introduces him/herself and greets me in a way that makes me feel comfortable. قا کشر صاحب نے ٹودکو متعارف کر ایا اور ٹوٹی اسلو ٹی سے چیش آ ہے۔	1	2	3	4	5	
2.	Manages his/her time well and is respectful of my time. قائل صاحب فے مرسادار البادات کا کیال رکا۔	1	2	3	4	5	
3.	Is truthful, upfront, and does not keep things from me that I believe I should know. I should know. قائل صاحب نے میر سے مرش کی مورتمال پری کاپلی سے بیان کی۔	1	2	3	4	5	
4.	Talks to me in a way that I can understand, while also being respectful. المراهب في المراهب	1	2	3	4	5	
5.	Understands how my health affects me, based on his/her understanding of the details of my life. قائلوسا دیا نے میں سے عالمان شماری کا محت پر اللّٰ از کی کُورکر کھا۔	1	2	3	4	5	
6.	Takes time to explain my treatment options, including benefits and risks. د اکر صاحب نے بیر سے مرض کے بدی کے آنا کہ اور اقتصالا کے گوٹھے آنا بیان کیا۔	1	2	3	4	5	

Total Score _____/30

Resident's Evaluation of Faculty Teaching

This is form no. 5. It has to be filled by the trainee him / herself. This form is about the teaching methodology of the facilitators. This is not included in the final score. This is just for information and improvement of the faculty teaching.

R	RAWALPINDI MEDICA						5_
	Resident/Fellow	Evalua	ation of I	Faculty	Teach	ning	
Evalu	uatoc			-			
Evalu	ation of:						
Date:							
Eval	uation information entered here wi		mous and ma	de availabl			m. Strongh
-		Disagree	Moderately ENT CARE			Moderately	
	Teaches current scientific	PATI	ENI CARE		_		
1.	evidence for daily patient management						
2	Explains rationale behind clinical judgements/decisions*						
3.	Teaches clear diagnostic algorithms*						
4.	Teaches clear treatment algorithms*						
	PATIENT CARE	- OPERAT	TVE AND P	ROCEDUR	\$18(J)318	E)	
5.	Teaches operative/procedural shills during cases*						
6.	Allows learners to perform operative/procedural skills when						
	appropriate*	NAME OF TAXABLE PARTY O	KNOWLED	VOID.		L	
7.	Teaches relevant pathophysiology	1313/(day)	L ANOWITE	AGE.			
	needed to evaluate patient medical conditions*						
8.	Teaches how/when to use-order- perform procedures/tests*						
9.	Teaching content adds significantly to my medical knowledge						
10.	Teaches the use of literature / evidence based medicine to support clinical decisions/teaching points*						

Final Evaluation Scoring Sheet

RAWALPINDI MED	ICAL UN	IIVERS	ITY										6
Name of Resident	FIN	AL E	valu	uation	Sc pervi:	oring	g SI	heet	Y	ear of T	raining	_	
Date Parallel Patient Care Date													
(30)				/30	ι	Jnit							
Medical Knowledge (30)				/30			l				 		
Professionalism (35) Interpersonal and Communication Skills (20)				/35 /20	(30)	(30)	(30)	(80)	(80)	(80)	(26)	(99)	(36)
System Based Practice (35)				/35	#	*	eo #±	Recoi	Recoi	Recol	_	8	_
Practice Based Learning and Improvement (15)				/15	Patient # 1	Patient # 2	Patient # 3	Medical Record Performa#1 (Medical Record Performa#2 (Medical Record Performa#3	Staff#1	Staff #2	Staff #3
Overall Rating								20	24	20.	0,		- 67
Average:				/165			/30			/80			/56
										_		id To: /;	331
RAWALPINDI MEDI	CAL UN	IVERSI	TY										
Logbook complete	e]	ir	ncomplete									
Portfolio complet	e]	ir	ncomplete									
Leave /absentees:					-								
Comments													
Supervisor Name (1)	Sı	upervis	or Nan	ne (2)			F	lead of	f Unit				
Sign & Stamp	Sig	ın & St	amp				s	ign & S	Stamp_				

Self-Assessment Form

This is form no. 7. It has to be filled by the trainee him / herself. This is not included in the final score. This is just giving the idea how much the trainee is confident about him / herself.

R			INDI MEDICAL									7	
Reside	nt Name	RESIDENT S	BELF-ASSESS	MEN			FC		MA				
Year of	f Training _	Нозр	oital Name				_ Ur	nit_				-	
0	NA	o 1	n 2		0	3					o 4		
Not A	Not Applicable I rarely demonstrates I do this Sometimes (<25% of the time) (25-50% of the time)						the tir time		10		s all t % of		
1.	ı	o acquire accurate and ro an efficient, prioritized ar	elevant histories from my nd hypothesis driven	٥	NA	٥	1	0	2	0	3	٥	4
2.	I am able prioritized records ar	data from secondary nd pharmacy)		d a	NA	٥	1	0	2	0	3	٥	4
3.		to perform accurate p ppropriately targeted s.		٥	NA	٥	1	٥	2	٥	3	٥	4
4.	interview,	to synthesize all avail physical exam, and p th patient's central clir	reliminary lab data to	٥	NA	٥	1	٥	2	0	3	0	4
5.	I am able evidence		differential diagnoses, therapeutic plans for	٥	NA	٥	1	٥	2	٥	3	٥	4
6.	or emerge conditions	ent medical care, inclu s.	-	nt a	NA	٥	1	٥	2	٥	3	٥	4
7.	I am able guidance.	to recognize when to	seek additional	٥	NA	0	1	٥	2	٥	3	•	4
8.	1	to provide appropriat		0	NA	•	1	0	2	٥	3	٥	4
9.	disorders with minir	nal supervision.	oatient internal medicin		NA	0	1	0	2	0	3	0	4
10.		formed several invasi ed them in my New Ir		٥	NA	•	1	۰	2	•	3	•	4
11.	I demonst	trate sufficient knowle mon conditions that re	dge to diagnose and	0	NA	0	1	۰	2	٥	3	٥	4
12.	I understa	and the indications for tion of common diagn	and the basic	0	NA	0	1	٥	2	٥	3	٥	4
	I have rev my medic level of tra	riewed my in service e al knowledge is where aining.	xam scores and believ it should be for my		NA	٥	1	0	2	0	3	٥	4
14.	I am able	to identify clinical que	stions as they emerge		NA	0	1	•	2	•	3	•	4

A	E	2	À
1	Ŕ	Û	n
1	8	-	7

RAWALPINDI MEDICAL UNIVERSITY

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-											
	in patient care activities.										
15.	I am responsive to feedback from all members of the healthcare team including faculty, residents, students, nurses, allied health professionals, patients and their advocates.	0	NA	0	1	0	2	0	3	0	4
16.	I am an active participant in teaching rounds and intern report.	٥	NA	0	1	D	2	0	3	0	4
17.	I effectively use verbal and non verbal skills to create rapport with patients and their advocates.	٥	NA	0	1	D	2	D	3	D	4
18.	I communicate effectively with other caregivers to ensure safe transitions in care.	0	NA	0	1	D	2	D	3	0	4
19.	My patient presentations on rounds are organized, complete and succinct.	0	NA	0	1	ם	2	0	3	0	4
20.	I am able to communicate the plan of care to all the members of the healthcare team.	0	NA	0	1	0	2	0	3	D	4
21.	My documentation in the medical record is accurate, complete and timely.	٥	NA	0	1	0	2	0	3	0	4
22.	I accept personal errors and honestly acknowledge them.	٥	NA	0	1	0	2	۵	3	۵	4
23.	I demonstrate compassion and respect to all patients.	a	NA	a	1	a	2	0	3	0	4
24.	I complete my clinical, administrative and academic tasks promptly.	۵	NA	0	1	0	2	0	3	D	4
25.	I maintain patient confidentiality	0	NA	a	1	u	2	а	3	0	4
26.	I log my duty hours regularly and make every effort not to violate the rules	۵	NA	0	1	0	2	0	3	0	4
27.	When I feel I am too fatigued to work safely, I understand that I can call the chief medical residents for back-up.	0	NA	0	1	D	2	0	3	0	4
28.	I understand the unique roles and services provided by the workers in the local health delivery system (social workers, case managers, dept of public health etc)	0	NA	0	1	0	2	D	3	0	4
29.	I am able to identify, reflect on, and learn from critical incidents and preventable medical errors.	0	NA	0	1	D	2	0	3	0	4
30.	I do my best to minimize unnecessary care including	0	NA	0	1	0	2	D	3	0	4

Please	e set three specific goals for the next six months:					\neg
Pleas	e identify three specific clinical skills that you have	e improve	d over	the past	six mo	nths:
	tests, procedures, therapies and consultations.					
30.	I do my best to minimize unnecessary care including	D NA	0 1	D 2	3	3 4
20						

Direct Observation of Procedural Skills

This is form no. 8. It has to be filled by the supervisors, program directors, deans, coordinators and mentors. Marks are included in the evaluation. Supervisors or mentors observe and evaluate any procedure (short case).

DIRECT OBSE	RVATIO	NOFPRO	OCEDUI	RALSKIL	LS (DOP	S)	
lease complete the question	as using a cry	ss 🔽 Ple	ase use blac	ek ink and C	APITALLE	TERS	
octor's Name: MDC Number:		LA		CA IIII AIII C	umete	ILING	
linical setting:	^AE	COPD In-	potions Ass	e Admission	Other		
ssessors position: Consul	hara SpSR	Spik S	pecialty doctor	Nurse	Other		
number of previous DOPS	observed by	0 [2	3	4 3.		9
lumber of times procedure	0 1-4	5-9 >10	Difficul	ty of	Low	Ачотес	High
erformed by trainee:			procee				
lease grade the ollowing areas	Well below especialions	Expectation	Bordarline	Meets Expectations	Above Expectations	Well above expectations	wc.
	1	2	3	4	5.		
Demonstrate understanding of indications, relevant anatomy, technique of procedure				0			
Obtains informed consent							П
Denominates appropriate preparation pre-procedure							
Appropriete analgasia or preparation pre-procedure	0				0		0
Technical shifty safe sedution		0-	-0-				-0-
5 Asegsic technique 7 Seeks help where appropriate				- -	-8-	-	1-13-
8. Post precodure reanagement						1.	1
9 Communication skills 10 Consideration of	-		$-\Box$		- P-	-0-	1-0
Patient/professionalism							
11 Overall ability to perform procedure							0
	mark this if you	have not observ	ed the behavio	our and therefore	Seel unable to co	ermen.	
				any suggested			
Anything especially good?			Sug	gestions for deve	dopment:	110	
	folia como con	- Dr		7 the sent and	letters [7] W	/eb/ CD-Rom	
Have you had training in the use of	is this issessine	T 00011 110001	tes to soce	Have read guid	peanes U w	rear CD-Ionn	
		1.5			Time taken (in minutes	for observations)	IE
Assessors signature:	Date (mm/	had			Tirne taken f	or feedback	
- \	00/0	D			the extended	ш	
Assessor's Name:							

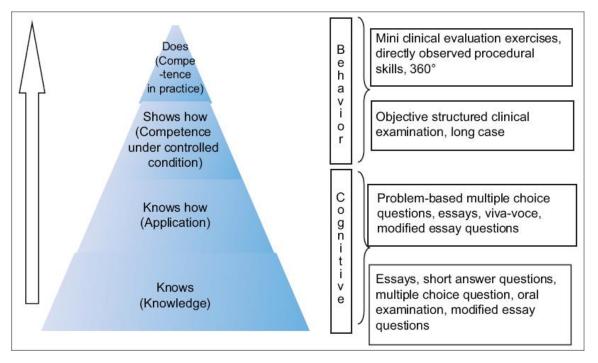
Case Based Clinical Evaluation of Trainee

This is form no. 9. It has to be filled by the supervisors, program directors, deans, coordinators and mentors. Marks are included in the evaluation. Supervisors or mentors observe and evaluate the whole one case i.e. from history taking to management (long case).

CASE BASED CLINICAL EVALUATION			A11		(9)	
CASE BASED CLINICAL EVALUATION	י אכ	JF IK	AII	NE	_			
Resident's Name:	1		sati			_		
Evaluator's Name(s):	2	Bel			_	е	_	
Hospital Name:	3		Ave	rag			\dashv	
Date of Evaluation:	5		Sup				\dashv	
□ Traditional Track (10% Clinic) □ Primary Care Track (20% Clinic)					_			
Please circle the appropriate number for each item using the sca	le abo	re.						
History				S	Scal	е		
Introduces himself and greet the patient.			1	2	3	4	5	
Listen to the patient problems.			1	2	3	4	5	
Shows politeness and empathy			1	2	3	4	5	
Gathers proper information of present and past history			1	2	3	4	5	
Physical Examination			Г		Scale			
Physical examination done correctly			1	2	3	4	5	
Pick physical signs correctly			1	2	3	4	5	
Relevant examination done in detail			1	2	3	4	5	
Interpret physical signs correctly			1	2	3	4	5	
Assessment Plans			Г		cal	е	\dashv	
Can list a logical differential diagnosis			1	2	3	4	5	
Defend the diagnosis logically			1	2	3	4	5	
Identifies patient active problems			1	2	3	4	5	
Interpretation and Correlation of Laboratory and Imaging	Data		Г		cal	e	\exists	
Can order logical and relevant investigations			1	2	3	4	5	
Correctly interpret investigations (Laboratory and Imaging)			1	2	3	4	5	
Formulate a logical management plan			1	2	3	4	5	
Treatment plan is logical and relevant			1	2	3	4	5	
Able to write a proper prescription			1	2	3	4	5	

Work Place Based Assessment (WPBA)

They are now considered to be an integral part of training. Workplace-based methods of assessment are at the topmost position in Miller's Pyramid of Competence because they provide information about performance of trainees during their everyday clinical practice as depicted below:



Most commonly used modalities for assessing the trainees at their workplace are:

- a) Direct Observation of Procedural Skills (DOPS)
- b) Case Based Discussions (CBD)
- c) Mini-Clinical Evaluation Exercise (Mini-CEX)

Experts believe that assessments of actual practice are much better reflections of routine performance than assessments done under test conditions.

Direct Observation of Procedural Skills (DOPS)

The Direct Observation of Procedural Skills (DOPS) is an evidence-based assessment intended to guide the trainees during their learning process ant to ensure acquisition of skills. The assessor provides constructive feedback to the trainees keeping in view their learning needs. The assessor gives feedback in a structured manner by breaking up the procedure into skill-related areas. Feedback on each area can be of greater value than feedback on the overall procedure as the assessor can pinpoint areas for improvement.

Trainees are assessed by using a structured checklist.

Areas To Be Assessed

- Understanding of indications, relevant anatomy, technique of procedure
- Pre-procedure preparation
- Patient and risk awareness
- Technical ability
- Post-procedure management
- Communication skills
- Professionalism



DOPS Assessment form for MD Gastroenterology Residents

Mini-Clinical Evaluation Exercise (mini-CEX)

Mini-CEX is designed to assess the trainees in their real-life settings at workplace. Trainees can choose a different for each assessment. It is intended to assess the clinical skills, attitudes and behaviors essential to the provision of high-quality care. The estimated time required is 20 minutes (15 minutes for assessment, 5 minutes for feedback).

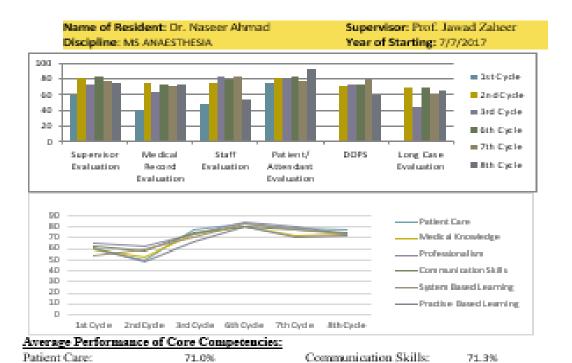
The following areas of competence are covered in Mini-CEX:

- History taking
- Physical examination
- Professionalism
- Clinical judgment
- Communication skills
- Organization
- Efficiency
- Overall clinical care

Feedback questions	Mean	Minimum score	Maximum score
Mini-CEX useful/not useful (%)	Ye	s (100)	
To what extent it was useful	5.47	5	6
What was most useful			
Multiple encounters with patient being observed	5.6	5	6
Faculty feedback	5.9	5	7
Rate improvement in following skills			
Medical interviewing skills	5.2	4	6
Physical examination skills	4.9	4	6
Humanistic qualities/ professionalism	5.7	4	6
Clinical judgment	5.4	4	6
Counseling skills	5.3	4	7
Orgnization/efficiency	5.3	4	7

Rating was obtained on a Likert scale of 1-7 where 1 was minimum and 7 was maximum possible score. Mini-CEX: Mini-clinical evaluation exercise

Norcini JJ, Blank LL, Duffy FD, Fortna GS. The mini-CEX: a method for assessing clinical skills. Ann Intern Med. 2003; 138: 476–81.



Internal Evaluation of	Internal Evaluation of MS residents: OTs (6 months-Collective assessment), Oct 2021- march 2022												
Manses	DOPS Total marks =60	Presentations Journal clubs, topic presentations. Total marks=60	Table (699) Total Marks=200	Log book Total markv=90	Grand Total marks=280								
Naseer Ahmad	52	45	50	60	207								

68.7%

73.3%

System Based Learning:

Practice Based Learning:

69.894

66.5%

	In Year In Year 3rd Year		5" Year	4" Table		Final Year				
	SA	Fant NA NA			NΔ					
	Research Status									
I	One Direce Statistical	Synopsis Status	BASR Approva		Thada 5t	15us				
	Report									
	64	Approved	Approved	·	NA					

Exam Status

2

Medial Knowledge:

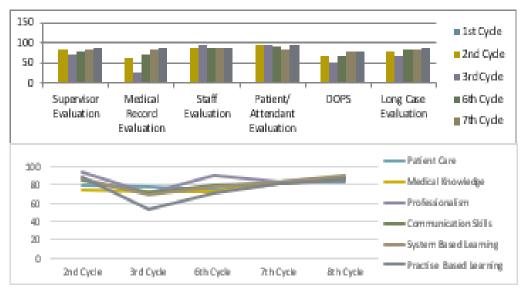
Professionalism:

FINAL SCORING SHEET

Name of Resident: Dr. M. Umar Javed

Discipline: MS Surgery

Supervisor: Prof M. Hamif Year of Starting: 7/28/2018



Average Performance of Core Competencies:

 Patient Care:
 79.6%
 Communication Skills:
 80.8%

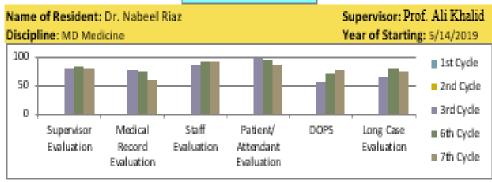
 Medial Knowledge:
 77.4%
 System Based Learning:
 \$1.6%

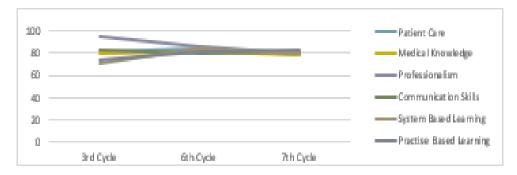
 Professionalism:
 85.0%
 Practice Based Learning:
 76.0%

Internal Evaluation of MD residents: WARD (6 months-Collective assessment)						
Long case and group discussions Total Market 15	Short case Total	System wise scritten test SEQ and MCD	TOACS Total	Log book Total	360 evaluations Total marks = 20	Grand Total 100 marks
40	marks=15	Total Markw20	marks=20	marks=10	4.0	0.0
13	10	16	15	08	18	80
Internal Evaluation of MD residents:WARD (6 months-Collective assessment)						
		ckubs, topic gaevenda logy radiology present		Log bookTotal marks=10	Grand Total marks=100	
49		24		8	81	
w	ard rotation (10	0)	Emergency rotation (100)			Grand total - 200
	81		86			167

Exam Status						
1" Year	2nd Year	3 ⁻⁴ Year	4" Year	Final Year		
5.A.	Patt	NA	NA	NA		
Research Status						
One Disease Statistical Synopsis Status BASR Approval Thesis Status Report						
277	Approved	Approve	d 1	VA.		

FINAL SCORING SHEET





Average Performance of Core Competencies:

Approved

 Patient Care:
 81.3%
 Communication Skills:
 81.7%

 Medial Knowledge:
 80.0%
 System Based Learning:
 78.3%

 Professionalism:
 87.0%
 Practice Based Learning:
 79.3%

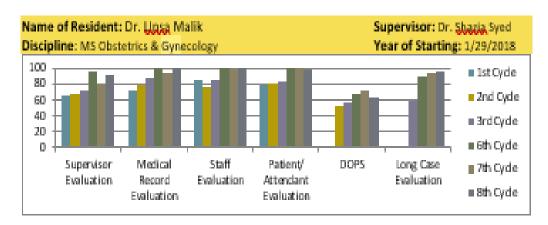
Internal Evaluation of MD residents: WARD (6 months-Collective assessment)						
LONG CASE AND GROUP DISCUSSIONS TOTAL MARKS= 15	SHORT CASE TOTAL MARKS=15	SYSTEM WISE WRITTEN TEST SEQ AND MCQ MARKS=20	TOACS TOTAL MARKS=20	LOGBOOK TOTAL MARKS=10	360 EXOLUATION, TOTAL MARKS= 20	GRAND TOTAL 100 MARKS
8/15	10/15	16/20	12/20	8/10	15/20	69 (69 %)

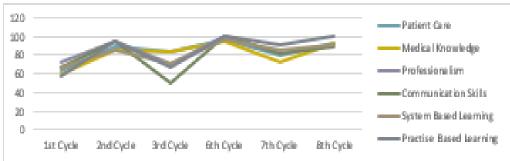
Exam Status						
1" Year	2nd Year	3rd Year	4" Year	Final Year		
N.A.	Pan	NA	NA	NA		
Research Status						
One Disease Statistical Report Synopsis Status BASR Approval Thesis Status						

Approved

NA

FINAL SCORING SHEET





Average Performance of Core Competencies:

 Patient Care:
 84.2%
 Communication Skills:
 80.5%

 Medial Knowledge:
 81.7%
 System Based Learning:
 82.7%

 Professionalism:
 85.0%
 Practice Based Learning:
 84.8%

CIA						
DOP's (10)	Long case (20)	Presentation/ Journal club (20)	MCQ/ SAQ's (20)	Log book (10)	Mini- CEX (20)	Grand Total = 100
8	15	16	14	9	17	79

Exam Status 1" Year 2" Year 3" Year 4" Year Final Year NA Pau NA NA NA

	Kesearch Status						
	One Disease Statistical Synopsis Status BASR Approval Thesis Status						
	Report						
Г	N.A.	Approved	Approved	NA			

Short Intensive Preparatory Course for MTA & FTA in Surgery & Allied Disciplines

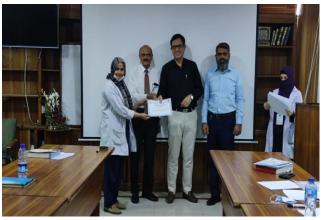












Short Intensive Preparatory Course for MTA in MD Psychiatry





SHORT INTENSIVE PREPARATORY COURSE FOR MTA & FTA IN MS GYNAECOLOGY & OBSTETRICS









FTA (Final Training Assessment) 2022 of MS / MD residents at RMU







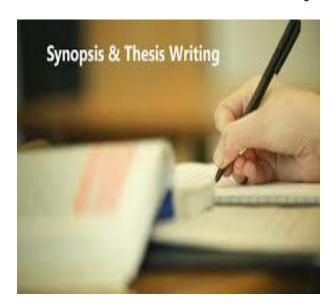






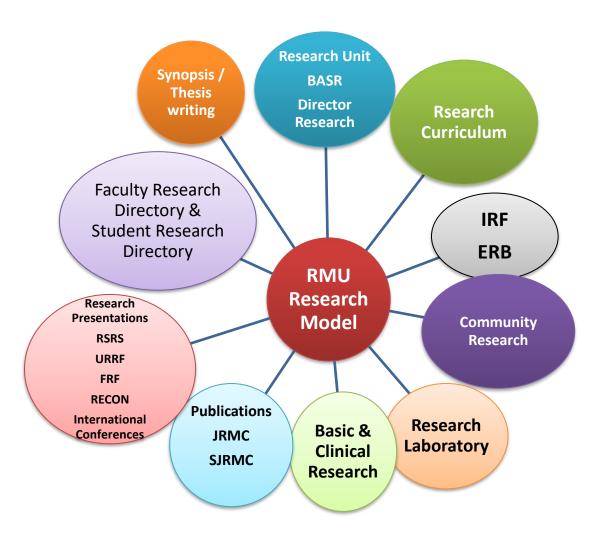
Section-V

Research Synopsis / Thesis

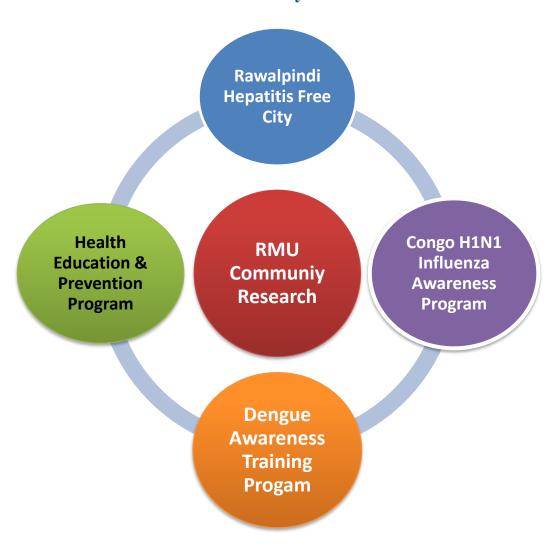




Rawalpindi Medical University Research Model



RMU Community Research Model



Research & Development Department

Research Unit of Rawalpindi Medical University was initially established in February 2014 that was located in Medical Education Department, New teaching Block of RMU. Untiring and persistent efforts of Dr. Faiza Aslam who formerly worked as Research Coordinator of RMU are worth mentioning in this regard.

The Research Unit carries out all the research related activities including facilitation post graduate trainees, faculty of RMU as well as visitor researchers regarding Health Systems Research, proposal formulation, application of basic and advanced research methodologies, data entry, comprehensive data analysis and manuscript writing. Research model of RMU as a whole is comprised of the following salient entities or bodies:

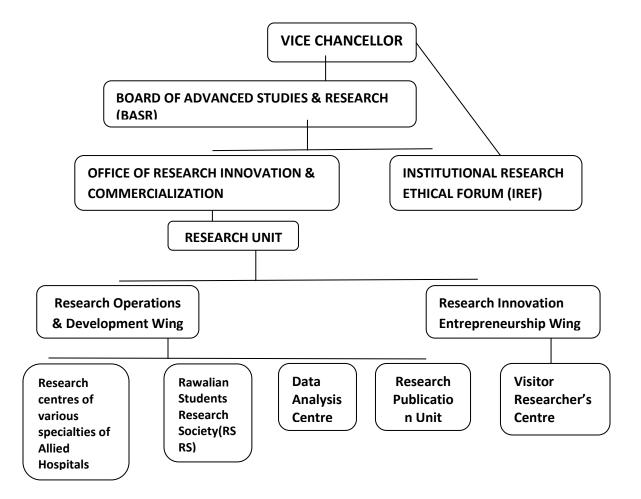






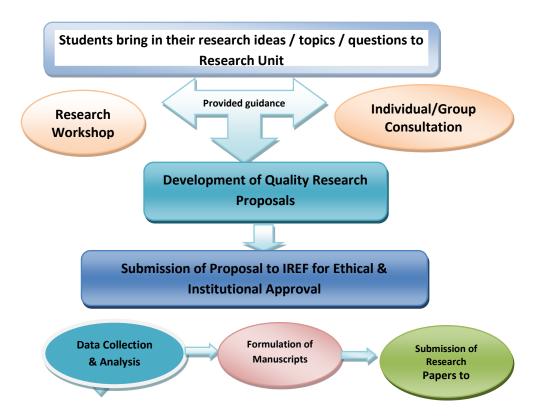


Salient Bodies Associated with Research at RMU



Aptitude of Research among Undergraduate Students

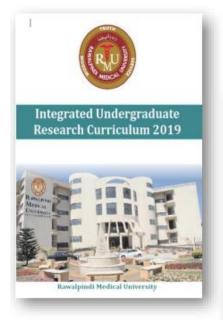
Research provides an opportunity of novel scientific discovery. It is an intellectual stimulator that paves the way towards detection of advanced technologies. It is imperative to acknowledge the efforts of Prof. Muhammad Umar, Vice Chancellor RMU in promoting research culture at undergraduate level by organizing Research Forums. The undergraduate students of RMU are destined to conduct research according to the following research model:

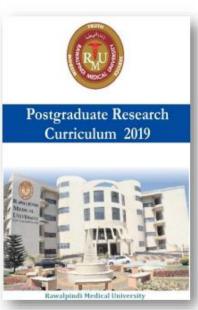


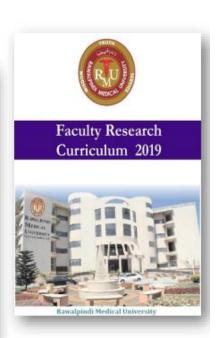
Undergraduate, Postgraduate & Faculty Research Curricula

Apart from fulfilling the requirement of post-graduation, University residents are also provided with research training to equip them with sufficient knowledge and skills pertinent to research methods and critical appraisal. Therefore, research curriculum is specifically designed by Dr. Faiza Aslam following need assessment of RMU residents. This curriculum reflects the learning outcomes to be achieved separately for all our residents from first to final year of training. Moreover, this comprehensive curriculum is intended to guide residents throughout their research work from selection of research topic, its ethical approval, data collection, analysis till dissertation writing.

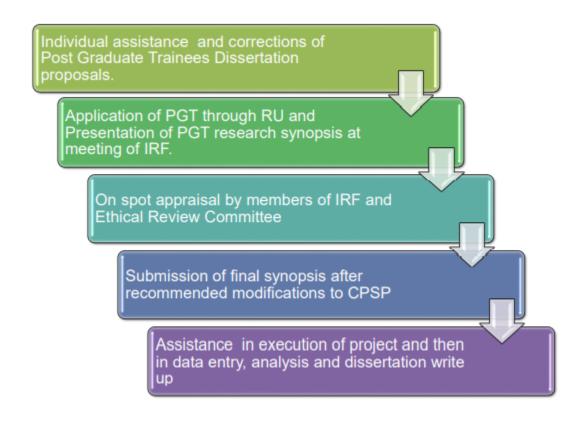
Moreover, undergraduate and faculty research curricula have also been designed for capacity building of our medical students and acquisition of the faculty members with competencies pertinent to research.



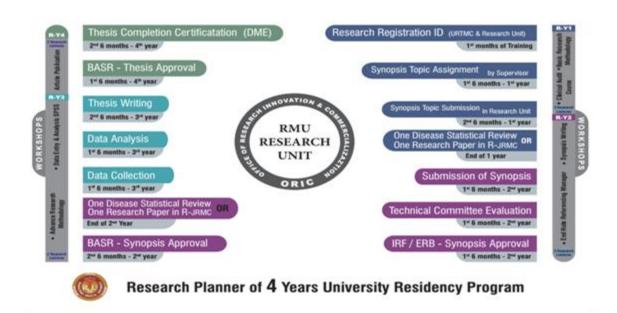




University Residents' Research Organogram



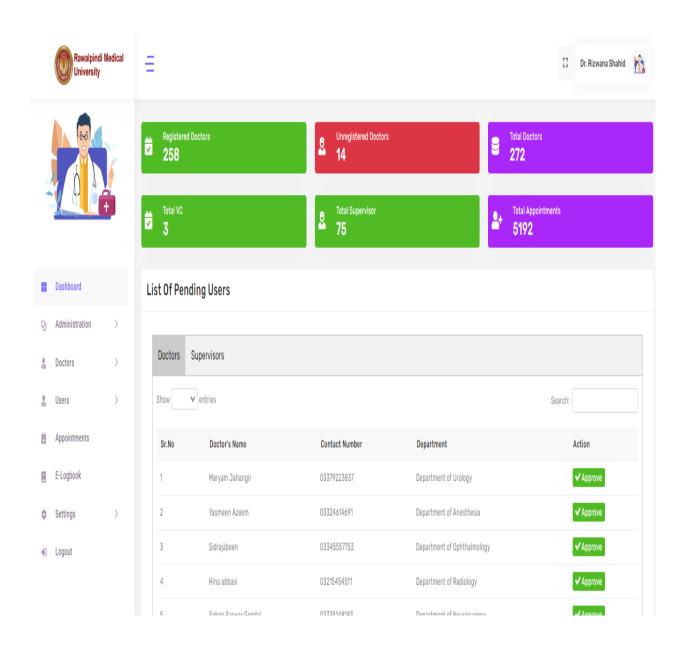
RMU Research Planner for Postgraduate University Residents





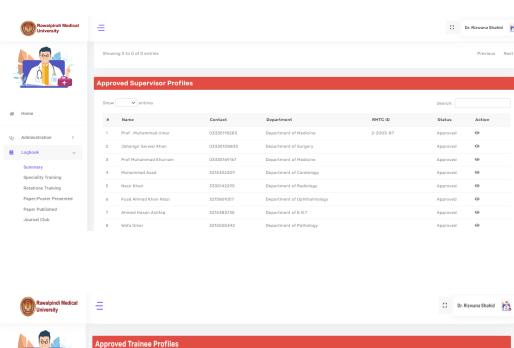
Research Dashboard

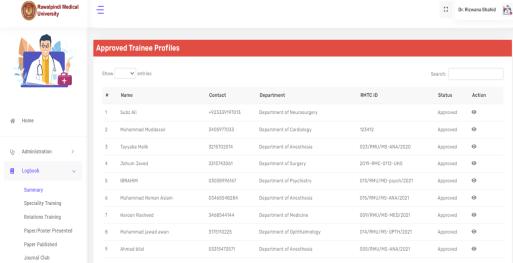
The quality of research work is assured by meticulous review of data sheets, completed data collection tools, feedback forms of research workshops, research elective logbooks. and telephonic calls to the patients as entered on Research Dashboard to verify the authenticity of data.



E-Logbook for University Residents

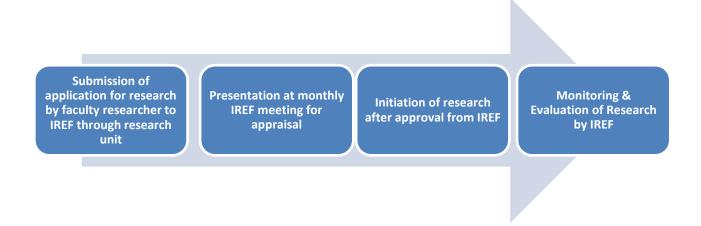
E-Logbook has also been introduced at RMU to ensure paper free working environment and to ensure prompt faciliation of university residents with respect to verification of real time entries of the cases seen and managed by them. Apart from approved supervisors, list of residents is also avaiable on e-log portal of RMU as illustrated below:





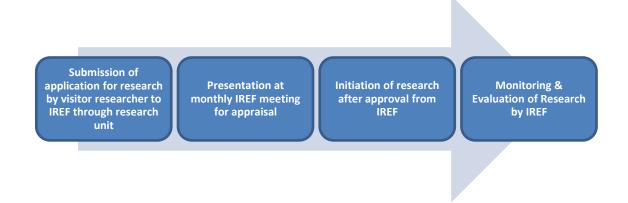
Research By RMU Faculty

It is inevitable for Faculty members of Rawalpindi Medical University / Allied Hospitals to get approval of their research proposals from IREF before commencement of research as depicted below in Research model:



Research by Visitor Researchers

Faculty members as well as residents of both national and international institutions other than RMU are privileged to carry out research in RMU / Allied hospitals. However, they have get approval from IREF of Rawalpindi Medical University before starting their research project as shown below in research model:



Journal of Rawalpindi Medical College (JRMC)

Journal of Rawalpindi Medical College (JRMC)is official journal of Rawalpindi Medical University, Rawalpindi. It was first published in 1977. It is recognized by PM&DC and is published quarterly from Rawalpindi Medical University. In addition to being indexed in HEC "Y" category, JRMC is also indexed in Index Medicus for the Eastern Mediterranean Region (IMEMR). It is an open access, double blind peer reviewed medical journal. It is published quarterly. It follows Committee on Publication Ethics (COPE), and International Committee of Medical Journal Editors (ICMJE) guidelines. All rights are reserved. The publisher and the members of the editorial board cannot be held responsible for errors or any consequences arising from the use of the information contained in this journal.

Scope of JRMC

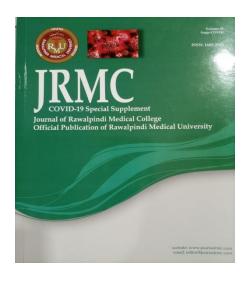
JRMC is meant to;

- 1) Facilitate the creativity of medical professionals in basic and clinical medical sciences in accordance to its utility for medical practice
- 2) To employ medical research as a potent and effective tool in combating disease and alleviating the suffering of mankind.

Editorial Advisory Board is comprised of both national and international research experts.

JRMC publishes important and leading topics focusing basic and clinical medical research.





Student Journal

Rawalpindi Medical College (SJRMC)

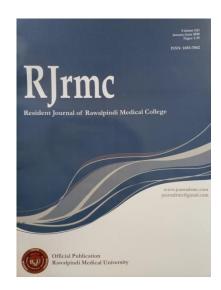
With the advent of Evidence Based Practice over the last three decades in medical sciences, integration of best research evidence with clinical expertise and ethical values is of paramount significance to improve healthcare of the community. Therefore it is inevitable for our healthcare workers to be well versed in research. Untiring and persistent efforts of Prof. Muhammad Umar, Vice Chancellor RMU are worth mentioning in this regard. He not only organized many International Scientific Conferences, Seminars and workshops at RMU but also took initiative for Student Journal titled "SJRMC" in 2014 to promote culture of research among undergraduate students. This Journal is published biannually. There is a research society of students in the university which is responsible for monitoring the research activities of students and this society works under the senior faculty members who are actively involved in research activities. Efforts of Dr. Faiza Aslam, Research Coordinator RMU are really commendable for conduction of basic and advanced research methodology workshops, correction of research proposals and facilitating the students as well as residents in compilation of research data and narrations of articles.



Resident Journal of Rawalpindi Medical College (RJRMC)

Resident Journal of Rawalpindi Medical University is the resident supplement of JRMC and is and official publication. It is the property of Rawalpindi Medical University; a not-for-profit provincially chartered Public Sector University. RJRMC is the next feather in the cap of RMU as it is the first resident journal in Pakistan. It was first published in 2020 and is planned to be published annually. Its editorial board is comprised of both national and international members. It is patronized by Prof. Naeem Zia. It is being published by Resident Research Forum (RRF) that is comprised of dedicated young doctors.





Its objectives are:

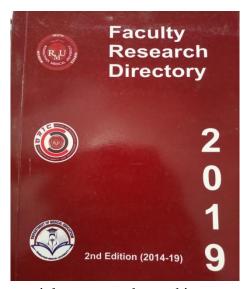
- 1. To published original well documented peer reviewed manuscripts from diverse fields of medical sciences (basic as well as clinical sciences).
- 2. To inculcate the habit of medical writing among postgraduate residents
- 3. To achieve a high level of ethical medical journalism
- 4. To produce credible and authentic publications

RJRMC provides open access to its content with the vision that making research freely available to the public supports the global exchange of knowledge.

Faculty Research Directory

Faculty Research Directory of Rawalpindi Medical College was published in 2013. Published original research articles, case reports and thesis based articles of all the 44 departments of RMC / Allied Hospitals were mentioned in this directory. The second Research Directory is also published that contains the whole research data of RMU faculty members from 2014-19. This depicts the aptitude and concern of our doctors towards research.





The institutional research directories are mainly composed to achieve some long-term objectives which are:

- 1. To ensure provision of research environment among the faculty members, research scholars and postgraduate trainees
- 2. To create an awareness regarding the research work carried out by fellow researcher in a department to facilitate collaborative research
- 3. To motivate interdisciplinary research proposals to funding agencies
- 4. To get innovative ideas for further research
- 5. To develop strengths of existing researchers by conducting workshops in order to facilitate conduction of research and medical writing

Student Research Directory

Numerous researches are being carried out by undergraduate medical students at Rawalpindi Medical University following establishment of its milestones, development of Institutional Research Forum (IRF) and promotion of research culture by Prof. Muhammad Umar, Vice Chancellor RMU during 2014. Therefore Student Research Directory 2019 is compiled based on studies conducted by undergraduate students under guidance and direction of worthy Vice Chancellor, esteemed teachers and institutional research coordinator.



The undergraduate students are enrolled in researches with an intention:

- 1. To facilitate them in acquisition with basic knowledge and skills deemed necessary for research
- 2. To introduce them to research methodology in detail
- 3. To ensure appraisal of ethical aspects of research
- 4. To confirm comprehension of policies of plagiarism
- 5. To acquaint them with critical appraisal of research articles
- 6. To familiarize them with data analysis software
- 7. To assist them in use of various citation managers

Internationalization of RMU

Numerous Memorandum of Understanding (MoU) have been signed between Rawalpindi Medical University and various national as well as international medical universities under the worthy guidance of Prof. Muhammad Umar, Vice Chancellor RMU. These are meant to formally create a mutually beneficial working relationship between RMU and other institutes worldwide. Without effective international collaboration, we would have limited access to the global advancements in health sciences. This Initiative will not only facilitate RMU residents and undergraduate students in completion of their rotations and electives but also bestow them with a golden opportunity in getting acquainted with recent advancements and skills in medical sciences.











RMCAANA

Apart from our national healthcare institutes, MoU has been signed with the following international organizations for acquisition of our young doctors with adequate knowledge and skills in various specialties and sub-specialties:

- Rahii Institute: (Rawalians Healthcare Improvement Initiative)
- RMCAANA: (Rawalpindi Medical College Alumni Association of North America)
- APPNA: (Association of Physicians of Pakistani Descent of North America)
- London College of Kingdom & Tropical Medicine
- Georgia College of Medicine, Augusta University, USA
- Hull York Medical School, UK
- Liver pool University, UK
- UK Tutors
- IAMRA (An International Association of Medical Regulatory Authority

Institutional Research Forum (IRF)

The foundation of Institutional Research Forum (IRF) at Rawalpindi Medical University was laid down by Prof. Muhammad Umar in January 2014 to supervise the research activities planned by faculty, postgraduate trainees, undergraduate students and visitor researches. Ethical Review Board was established for this purpose. This board is comprised of all senior research experts to get our researchers benefitted from their vast experience.

SOPS FOR APPRAISAL OF RESEARCH PROJECTS BY IRF

Any individual researcher or research groups interested in conducting research or data collection at RMU or any of its teaching hospitals must seek approval by IRF of RMU through following Standard Operating Procedures:

- 1. Download research application proforma from RMU website (www.rmur.edu.pk.) according to your status that are: Application proforma for undergraduates / postgraduates / faculty of RMU or for visitor researchers.
- 2. After filling the proforma electronically and after endorsement by supervisor / Head of Department / Principal Investigator, submit eight copies along with research proposal and data collection tools to research unit of RMU at least one week before IRF meeting.
- Five minutes power point presentation will be given in the meeting followed by question &
 answer session. IRF will review it and provide on spot decision regarding its appraisal,
 rejection or modification.
- 4. An approval letter of IRF endorsed by all members will be issued only after which research can be initiated.



IRF meeting for ethical approval of research proposals

Constitution of Ethical Review Board

Following members constitute Ethical Review Board of RMU:

Prof. Muhammad Umar	Chairperson
Vice Chancellor, RMU	
Prof. Hamama-tul-Bushra Khar	Member
Ex-Professor of Medicine, RMU	
Prof. Syed Irfan Ahmed	Member
Ex-Professor of Medicine, RMU	
Prof. Naeem Akhtar	Member
Ex-Professor of Pathology, RMU	
Prof. Shagufta Saeed Sial	Member
Director, RMU	
Prof. Jahangir Sarwar Khan	Member
Professor of Surgery & Dean of Postgraduate Stuies, RMU	
Prof. Muhammad Khurram	Member
Professor of Medicine, Dean of Medicine & Allied, RMU	
Prof. Syed Arshad Sabir	Member
dean of Community Medicine & Public Health, RMU	
Dr. Asad Tameezuddin Nizami	Member
Associate Professor of Psychiatry	
Dr. Ahmed Hassan Ashfaq	Member
Associate Professor of ENT, RMU	
Dr. Shaiza Zeb	Liaison Officer
Deputy Registrar Academics, Deputy Director DME, RMU	
Dr. Hana Mahmood	Member
Director Health & Market Research / Health Informatics	
Dr. Faiza Aslam	Member
Rawalpindi Medical University	
Dr. Abdul Qudoos	Member
Demonstrator Community Medicine, RMU	
Dr. Uzma Hayat	Research Coordinator
Additional Director Research, RMU	
Dr. Usman Khalil	Member
Community Member	
Dr. Muhammad Tariq	Member
Legal Advisor	
EDD :- 1 1 1 - 1 COD-	

ERB is bound to perform its functions as per prescribed SOPs.

Rawalian Students' Research Society (RSRS)

The first ever Rawalian Students' Research Society (RSRS) was established in March 2014, comprising of a team of motivated and proficient undergraduates of RMU, selected from all the five academic years. About 7-8 members of RSRS have been selected annually by a team of senior faculty members as the 'core team' which includes Presidents, Vice presidents, General Secretaries and Publication In Charges, etc, the duties of whom were to coordinate all the activities of undergraduate research proficiently under the direct supervision and guidance of the Vice Chancellor of RMU, IRF and research unit.



Prof .Muhammad Umar Vice Chancellor RMU Patron In Chief RSRS



Prof. Syed Arshad Sabir Dean of Community Medicine & Public Health



Dr. Afifa Kulsoom Assistant Professor Community Medicine Chief Coordinator RSRS

The core team of RSRS has been selecting students from each academic year; two research class coordinators who form a bridge between every student and the RSRS and research coordinator of RMC. The members of RSRS have facilitated their colleagues in all the activities related to research and play a vital role in organizing the student's research conferences. The RSRS members were trained in research via workshops at research unit and they conveyed this knowledge and skill in research to their colleagues. The Presidents and Vice presidents of RSRS held introductory sessions regarding research, literature review and development of synopsis termed as "Master classes" for each academic year annually. RSRS has organized 7 sessions so far that were attended by more than 1000 students in total.

RSRS also organizes an Undergraduate Medical Research Conference "RECON" every year in which students of RMU present their research projects as posters as well as verbally in moderated sessions. Winners of the competition are presented with Gold Medals and Shields. In "Young Researcher's Forum" organized last year in 2017, more than 65 posters and 10 verbal presentations were put forward by the students of RMU.

A total of 445 Research Projects have been initiated by Undergraduate Students of RMU from 2014 to 2018 and a total of 163 research publications have been made so far.

Rawalian Students' Research Society has organized 3 Medical Research Competitions (RECON 2016, '17 & '18) in last three years including 40, 65 and 74 research presentations from RMU respectively.

However, in 2018, RECON was organized as National Medical Researchers Forum in which medical students of 72 institutions from across the country were invited to present their research papers. A total of 102 abstracts were accepted for verbal and poster presentations.



Rawalian Students Research Society also organized 7 workshops for Undergraduate Students of RMU regarding:

- 1- How to Choose a Research Topic
- 2- How to Write a Research Proposal
- 3- Research Methodology
- 4- SPSS-Data Entry
- 5- SPSS-Data Analysis
- 6- How to present a paper
- 7- Common Problems encountered during Data Analysis

Rawalian Students' Research Society also plays a vital role in publication of Students Supplement of Journal of Rawalpindi Medical College (SJRMC). Latest Publications include:

- ▶ SJRMC 2017:21(S-1)
- ▶ SJRMC 2018:22(S-1)
- ▶ SJRMC 2018:22(S-2)
- ▶ SJRMC 2019:23(S-1)

Undergraduate Students of Rawalpindi Medical University have made 284 research presentations in various conferences held across the country as well as across the oceans. Among those 284, 105 were made outside RMU in various National as well as International Conference.

Resident Research Forum (RRF)

First Rawalian Resident Research Forum was organized on 15th December, 2018 at Rawalpindi Medical University under commendable leadership of Prof. Muhammad Umar, Vice Chancellor RMU. Prof. Muhammad Hanif, Chairperson of Surgery was the In Charge of this Research Forum. This event was inaugurated by worthy Chief Guest Justice Retired Shakirullah Jan who is the President of Pakistan Medical & Dental Council.



Prof. Muhammad Umar, Vice Chancellor RMU emphasizing the significance of research among doctors

Prof. Bushra Khaar along with other doctors attending the Resident Research Fourm at RMU

More than 100 research projects were submitted for poster and paper presentations by our hardworking and enthusiastic residents on this prestigious occasion that depicted the rooted culture of research among our young doctors.



RMU residents elaborating about research projects through poster and paper presentations

E-Posters Presentations

Surgery	Medicine	Gynae/Ob	Orthopedic	Plastic	Dermatolog	EN	Gastroenterolog
		S	s	Surgery	y	T	у
8	4	5	5	1	1	1	2

Paper Presentations

Surgery	Medicine	Paediatrics	Gynae/Obs	Gastroenterology	Plastic	ENT
					Surgery	
30	02	01	18	4	5	3

Psychiatry	Neurosurgery	Nephrology	Hematology	Urology
2	3	1	1	1

<u>TOTAL VERBAL PRESENTATIONS = 21</u>

- Surgery & Allied 6
- Medicine & Allied 5
- Pathology 5
- Public Health 5

TOTAL POSTERS: 92

• Surgery & Allied: 14

13 RMU & Allied Hospitals	01 outside RMU
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• Pathology: 22

21 RMU & Allied Hospitals 01 outside RMU
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• Public Health: 33

27 RMU & Allied Hospitals	06 outside RMU
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• Medicine & Allied: 23

13 RMU & Allied Hosp	oitals 10 outside RMU

Faculty Research Forum (FRF)

Faculty Research Forum is to be organized in RMU with an objective to ensure participation of faculty members from all departments of RMU / Allied Hospitals in research paper presentation.



Prof. Muhammad Umar Vice Chancellor RMU Patron In Chief FRF



Prof. Naeem Zia Professor of Surgery Patron In charge FRF

This prestigious event will definitely be comprised of high quality presentations. This forum is aimed to provide a platform for reflection of esteemed faculty in terms of academic standards, efficient service and quality research. The leading objectives of Faculty Research Forum are:

- 1. To upgrade educational process
- 2. To achieve excellence in research
- 3. To expand the horizon of medical education
- 4. To ensure provision of an interactive learning climate in which teaching, research, training, upgrading skills and practical application are integrated
- 5. To broaden the knowledge of the faculty pertinent to research
- 6. To bridge the gap between theoretical knowledge and practical reality
- 7. To promote inter-disciplinary collaboration in setting up joint research projects
- 8. To facilitate the faculty in authenticity of research based results
- 9. To assist in assurance of validity and reliability of established data collection tools
- 10. To foster the capability of critical thinking and problem solving among faculty
- 11. To draw valid conclusions based upon sound analysis of reliable data
- 12. To comprehend existing and emerging technologies pertinent to effective management of prevailing healthcare problems

Research Grant Management Office (RMU-RGM)

In order to establish systems, policies and expertise compliant with international research funding requirements and to strengthen capacity in research support at Rawalpindi Medical University, RMU Research Grant Management (RMU-RGM) office is established. Following team will function at RMU-RGM office in leadership of Prof. Muhammad Umar, Vice Chancellor RMU:

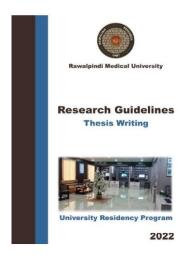
- 1. Dr. Faiza Aslam, Director RMU-RGM office
- 2. Mr. Shahzad Munir, Finance Manager
- 3. Mr. Umair Ghous, Administrator

The functions of this office are as follows:

- 1. To horizon the scan for opportunities to apply for national and international research grants and share such opportunities with RMU faculty members and postgraduate trainees.
- To support clinical academics applying for extramural research grants by preparing research budgets, providing evidence of meeting Due Diligence requirements (required at the application and award stage) and providing pre-submission sign-offs on behalf of the University.
- 3. To advise and support clinical academics in managing awarded extramural research grants to meet the funding organizations' requirements. This includes but is not limited to:
 - a. Reviewing and arranging to sign contracts, collaboration agreements and Memorandum of Understanding
 - b. Administering and maintaining research accounts
 - c. Establishing a rigorous and responsive mechanism for the financial flow, monitoring and auditing research expenditure
 - d. Responding to requests from funding organizations in relation to Due Diligence and financial reporting

Guidelines for Synopsis & Thesis Writing

Guidelines for synopsis / thesis writing have also been drafted for the convenience and understanding of the university residents.



Evaluation & Acceptance of Thesis

The candidate will submit the thesis at least 6 months prior to completion of training. The thesis along with a certificate of approval from the supervisor will be submitted to the Research & Development department of the University for further facilitation.

The Controller of Examination will submit a panel of 8 examiners within 7 days for selection of 4 examiners by the Vice Chancellor. The supervisor shall not act as an examiner of the candidate and will not take part in evaluation of thesis.

The Controller of Examination will make sure that the thesis is submitted to examiners in appropriate manner and reminder is sent after every 10 days.

The thesis will be evaluated by external and internal evaluators within a period of 6 weeks.

Section-VI
RMU Community Development Program



Community Health Transformation Program (CHTP)

Community health Transformation Program (CHTP) was launched at Rawalpindi Medical University to identify its role in the improvement of the health of region. Department of Community Medicine & Public Health of RMU proposed a strategic plan to strengthen the social integration component of the University. Prof. Muhammad Umar, Vice Chancellor RMU realized that public sector healthcare institutions are run by the public resources, so the people have full right of getting benefited pertinent to the matters of health in all possible ways.

This vision is based on the philosophy of shifting the notion of "healthcare for the people" to the "healthcare by the people". Its approach is participatory and spirit is missionary.

This program intends to combine university intellect and community strengths through a meaningful mechanism for a visible health gain. Work with highly disease – susceptible population would open many avenues for epidemiological research. This program engages the faculty and students of RMU in corrective health work for the service of the community. Substantial health problems in a community are attributed to its inadequate attitudes and behavior pertinent to health and hence are amenable to change. This program comprises of three inter-related work circles as depicted below:



Health issues of a population cannot be adequately solved alone by the health sector without active involvement of the community. Health promotion demands coordinated efforts from all sectors of the society. Using multidisciplinary public health approach, involving all key stakeholders and employing real community real health needs based interventions is imperative for successful execution of CHTP.

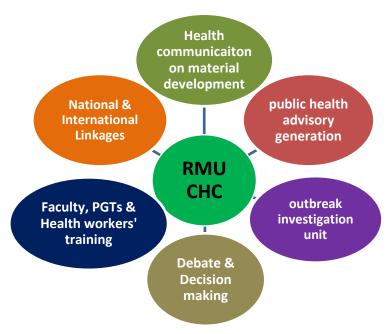
Centre for Health Communication (CHC)

Centre for Health Communication (CHC) is a university resource for planning and execution of various public health interventions for prevention of disease and promotion of health of the people. Mission of CHC is to improve the health of our community through behavior modification. It is basically working on "Information, Education & Communication" model.



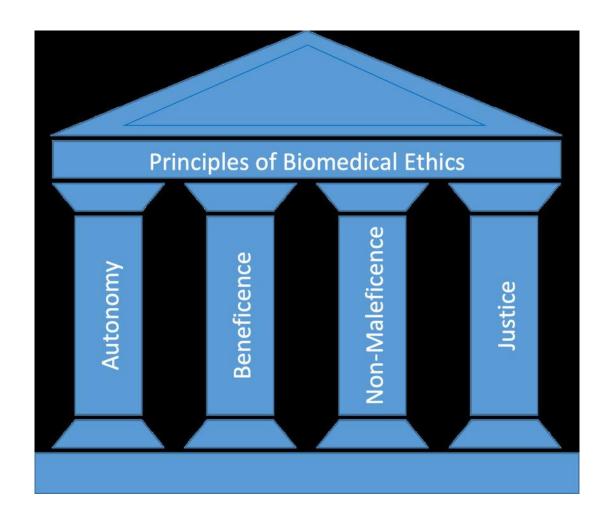


It is more a mental capacity than a physical place for continuous thought generation and materialization in the spirit of service for the community. Work profile for CHC is depicted below:



Health awareness activities under umbrella of CHC are carried out periodically for the well-being of the community.

Section-VII Biomedical Ethics



Department of Biomedical Ethics

Department of Biomedical Ethics is established on 13th July 2022 at Rawalpindi Medical University. This department was missionized for execution of research work by our faculty, undergraduate students and postgraduate trainees with adequate consideration of equity, social justice, rights and responsibilities of the patient as person. Bioethics not only provides the guidelines to medical professionals about clinical decision-making and advancements in medical technologies, but also plays vital role in policy changes and legislation. This department is comprised of the following members:

Prof. Muhammad Akram Randhawa	Chairperson
Professor of Pharmacology, RMU	
Prof. Naeem Akhtar	Member
Professor of Pathology, RMU	
Prof. Syed Arshad Sabir	Member
Dean of Community Medicine & Public Health, RMU	
Prof. Samia Sarwar	Member
Head of Physiology, RMU	
Dr. Sadia Khan	Member
Head of Family Medicine, RMU	
Dr. Amna Noor	Member
Senior Demonstrator Pathology, RMU	
Dr. Syed Muhammad Ali	Member
Senior Demonstrator Pathology, RMU	

This department would really prove beneficial and constructive towards promoting ethical healthcare practices for well-being of the individuals and high-quality research comparable to international standards.

List of Abbreviations

ACLS	Advanced Cardiac Life Support
BASR	Board of Advanced Studies & Research
BLS	Basic Life Support
BOM	Board of Management
B.Sc	Bachelor of Science
CBD / CSR	Case Based Discussion / Chart Stimulated Recall
CCU	Coronary Care Unit
CEO	Chief Executive Officer
CFR	Cardiac First Response
CHC	Centre for Health Communication
CHTP	Community Health Transformation Program
CIP	Central Induction Policy
CIS	Continuous Internal Assessment
CPSP	College of Physicians & Surgeons Pakistan
DA	Diploma in Anaesthesia
DAI	Degree Awarding Institute
DCH	Diploma in Child Health
DHA	District Health Authority
DHQH	District Head Quarters Hospital
DME	Department of Medical Education
DOPS	Direct Observation of Procedural Skills
ERB	Ethical Review Board
FCPS	Fellowship of the College of Physicians & Surgeons Pakistan
FLCF	First Level Care Facility
FTA	Final Training Assessment
HEC	Higher Education Commission
HOD	Head of Department

ICU	Intensive Care Unit
IRF	Institutional Research Forum
JRMC	Journal of Rawalpindi Medical College
KPK	Khyber Pakhtunkhwa
MBBS`	Bachelor of Medicine & Bachelor of Surgery
MCPS	Member of College of Physicians & Surgeons Pakistan
MCQs	Multiple Choice Questions
MD	Doctor of Medicine
MDT	Multidisciplinary Team
MeSH	Medical Subject Heading
Mini-CEX	Mini Clinical Evaluation Exercise
MIT	Medical Information Technology
MLT	Medical Laboratory Technology
MoU	Memorandum of Understanding
MPH	Masters of Public Health
M.Phil	Master of Philosophy
MS	Master of Surgery
MSF	Multi-Source Feedback
MTA	Mid Training Assessment
NGO	Non-Government Organization
NIH	National Institute of Health
NIPS	National Institute of Population Statistics
NORI	Nuclear Medicine Oncology & Radiotherapy Institute
NUST	National University of Science & Technology
OSPE	Objectively Structured Practical Examination
PGME	Post Graduate Medical Education
PhD	Doctor of Philosophy
PM&DC	Pakistan Medical and Dental Council
PNC	Pakistan Nursing Council
PRP	Punjab Residency Program

Pro VC	Pro Vice Chancellor
QEC	Quality Enhancement Cell
RIC	Rawalpindi Institute of Cardiology
RMB&DW	Research Methodology Biostatistics & Dissertation Writing
RMU	Rawalpindi Medical University
RN	Registered Nurse
RSRS	Rawalian Students' Research Society
URTMC	University Residency Training & Monitoring Cell
SAQs	Short Answer Questions
SDL	Self-Directed Learning
SEQs	Short Essay Questions
SHC & ME	Specialized Health Care & Medical Education
SI	Sitara-e-Imtiaz
SJRMC	Student Journal of Rawalpindi Medical College
SOP	Standard Operating Procedure
SPSS	Statistical Package for Social Sciences
TOACS	Task Oriented Assessment of Clinical Skills
UHS	University of Health Sciences
VC	Vice Chancellor
WPBA	Workplace Based Assessment