

# **ANNAUL REPORT**

**2020**



## **DEPARTMENT OF BIOCHEMISTRY**



**INTRODUCTION  
TO  
BIOCHEMISTRY DEPARTMENT**



## **INFRASTRUCTURE OF DEPARTMENT**

The Biochemistry Department of Rawalpindi Medical University

01 Lecture Hall

01 Laboratory

01 Tutorial Room

01 Departmental Library

### **Lecture Theater**

An air-conditioned lecture theater with accommodating capacity of 200 student each. Over head projector multimedia and white boards are used as teaching aid to facilitate the students.

### **Tutorial Room**

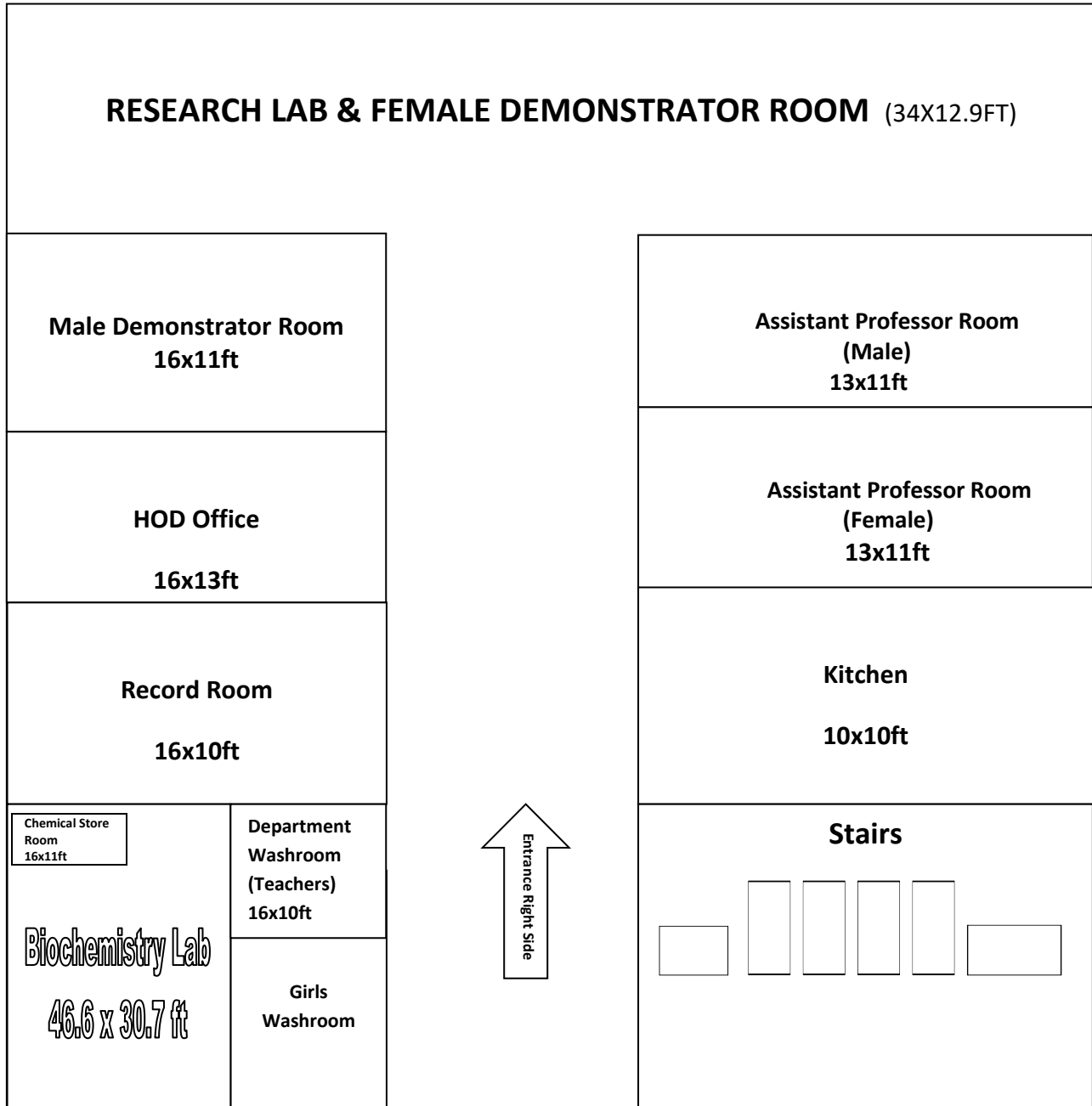
One room with capacity of 100 students for small group discussion.

## **Biochemistry Laboratory**

It is well equipped with the basic gadgets required for Biochemical research

- ❖ Equipment available in Lab
  - Spectrophotometer
  - Centrifuge machine
  - Analytical Balance
  - pH meter
  - Refrigerator
  - Water Distillation plant
  - other items used in routine such as  
( test tubes, pipettes, burettes, stoves etc)

### MAP OF THE DEPARTMENT OF BIOCHEMISTRY



## **The aims and objectives of teaching Biochemistry:**

1. To make the students aware of the basic biochemical processes occurring in the human body
2. To help them understand biochemical basis of commonly encountered disorders
3. To provide them solid foundations to become good doctors in future, by applying their knowledge of biochemistry to diagnose and treat common illnesses

## **INTRODUCTION TO THE DEPARTMENT OF BIOCHEMISTRY**

<b><i>S.NS. No</i></b>	<b><i>Teacher Name</i></b>
1.	Dr. Tehmina Qamar
2.	Dr. Aneela Jamil
3.	Dr. Kashif Rauf
4.	Dr. Shahrukh Khan
5.	Dr. Almas Ijaz
6.	Dr. Rahat Afzal
7.	Dr. Faiza Zafar
8.	Dr. Nayyab Ramzan
9.	Dr. Uzma Zafar



## **LIST OF SUPPORT STAFF BIOCHEMISTRY DEPARTMENT**

Mushtaq Ahmad	Lab Technician
Rehman Ali	Clerk
Muhammad Farooq	Lab Attendant
Muhammad Irfan	Lab Attendant
Muhammad Ishfaq	Lab Attendant
Muhammad Asif	Peon
Shamoon Masih	Sweeper
Arif Youhana	Sweeper

## **TRAINING PROGRAMMES UNDERGOING IN RMU**

### **UNDERGRADUATE COURSES**

1. 1<sup>st</sup> Year MBBS
2. 2<sup>nd</sup> Year MBBS

### **ALLIED HEALTH SCIENCES**

1. DPT (Doctor of Physiotherapy)
2. B.Sc Allied Health Sciences
  - Medical Imaging Technology (MIT)
  - Optometry
  - Medical Laboratory Technology (MLT)
  - Orthodontics

### **PNS Nursing**

## **Methods of Teaching**

- The Teaching and training program for Medical students during the first two years of MBBS course at the Department of Biochemistry comprises of:
  1. Lecture 2 Batches(Odd & Even)
  2. Tutorial Batch 70 Students
  3. Practical Batch 70 Students

### **LECTURES**

Approximately 150-200 Lectures are delivered to cover the important aspects of human Biochemistry

The modern audiovisual methods of teaching are used.

### **PRACTICALS**

The applied and Clinical aspects of Biochemistry are taught in the form of practical's consisting of a number of experiments in the Biochemistry laboratory

### **TUTORIALS**

Tutorials are group discussions. The students are encouraged to discuss their problems in the learning of Biochemistry

They are given problems to solve in the light of their knowledge obtained during lectures

# **1<sup>st</sup> Year BIOCHEMISTRY SYLLABUS**

## **Block I**

1. Cell organelles
2. Cell membrane and transport across cell membrane
3. Physicochemical properties of cell
4. Enzymes
5. Cancer
6. Genetics
7. PCR and recombinant DNA technology
8. Minerals
9. Fat soluble vitamins A, D & E
10. Water soluble vitamins B1, B3 & C
11. Amino acid structure & classification

## **Block II**

1. Protein chemistry
2. Hemoglobin and related disorders
3. Heme synthesis and porphyrias
4. Heme degradation and jaundice
5. Plasma proteins & immunoglobulins
6. Vitamin K, B12 & folic acid
7. Iron
8. HIV & AIDs

## **Block III**

1. Carbohydrate chemistry
2. Lipid chemistry
3. Electron transport chain and its inhibitors
4. Oxidative phosphorylation and uncouplers
5. Xenobiotics
6. Normal pH regulation
7. Vitamins: riboflavin, biotin, pantothenic acid and pyridoxine

## **2<sup>nd</sup> Year BIOCHEMISTRY SYLLABUS**

### **Block –I**

Metabolism of Carbohydrates

Biochemistry of Gastrointestinal Tract

Nutrition

Protein metabolism

Water and Electrolyte Metabolism

Acid Base Imbalance

### **Block – II**

Metabolism of Lipids

Metabolism of Nucleic acids

Sex hormones

### **Block- III**

Receptors

Second messengers, signal transduction

Hormones classification, mechanism of action

Thyroid, adrenocortical, insulin, glucagon and PTH

Blood glucose regulation

## ACTIVITES DURING 2020 BEFORE AND DURING COVID 19 PENDING

### PROVISIONAL SCHEDULE FOR FIRST AND SECOND YEAR MBBS 2020-21

	<b>1<sup>ST</sup> YEAR MBBS</b>	<b>2<sup>ND</sup> YEAR MBBS</b>
End of Session	7 <sup>th</sup> October,2020	24 <sup>th</sup> October,2020
Sendup Dates	16 <sup>th</sup> Nov to 30 <sup>th</sup> Nov,2020	27 <sup>th</sup> Nov to 14 <sup>th</sup> Dec,2020
Result Receiving in DME	1 <sup>st</sup> December,2020	18 <sup>th</sup> December,2020
HOD, Meeting for admission criteria	2 <sup>nd</sup> December,2020	19 <sup>th</sup> December,2020
UHS Admission date with single fee	14-12-2020	28-12-2020
UHS Admission date with double fee	21-12-2020	4-1-2021
Annual dates of examination by UHS	1-1-2021 to 8-1-2021	12-1-2021 to 22-1-2021

**ACTIVITIES BEFORE PANDEMIC 2020**

<b>FIRST YEAR MBBS</b>	
<b>Activities</b>	<b>Date</b>
Foundation Module	18-11-2019 to 04-01-2020 ( On Campus)
MSK-I Module	6-01-2020 to 08-02-2020( On Campus)
Block-I	03-02-2020 ( On Campus)
OSPE	04-02-2020 ( On Campus)
MSK-II Module	10-02-2020 to 07-03-2020 ( On Campus)
Module Exam	07-03-2020 ( On Campus)
Blood & Immunity Module	09-03-2020 to 14-03-2020 ( On Campus)
<b>SECOND YEAR MBBS</b>	
GIT Module	20-01-2020 to 22-02-2020 ( On Campus)
GIT Module Exam	22-02-2020 ( On Campus)
Renal Module	24-02-2020 to 14-03-2020 ( On Campus)
Renal Module Exam	14-03-2020 ( On Campus)
<b>ACTIVITIES DURING PANDEMIC 2020</b>	
<b>FIRST YEAR MBBS</b>	
<b>Activities</b>	<b>Date</b>
Blood & Immunity Module (LMS)	16-03-2020 to 11-04-2020
CVS Module (LMS)	20-04-2020 to 20-05-2020
Respiration Module (Microsoft Team)	08-06-2020 to 27-06-2020
Send-up	Conducted On Campus 16-11-2020 to 30-11-2020
<b>SECOND YEAR MBBS</b>	
Reproduction Module(LMS)	17-03-2020 to 29-03-2020
CNS Module (LMS)	30-03-2020 to 29-04-2020
Special Senses Module (Microsoft Team)	22-06-2020 to 04-07-2020
Endocrinology Module (Microsoft Team)	06-07-2020 to 23-07-2020
Send-up	Conducted On Campus 27-11-2020 to 14-12-2020

**INTER DEPARTMENTAL MEETING**

