

# جامعة الإمام عبد الرحمن بن فيصل

IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

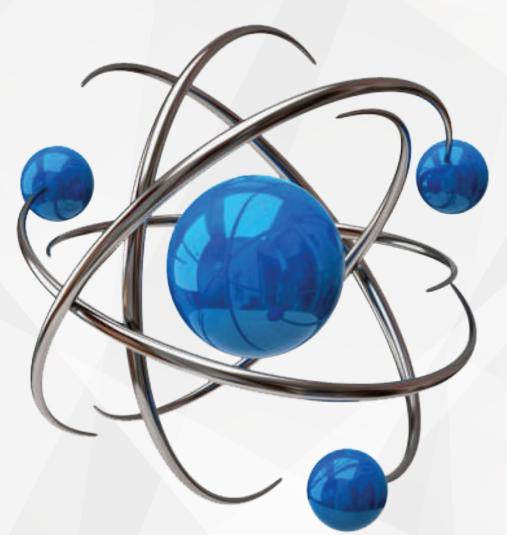
عمادة البحث العلمي
Deanship of Scientific Research

# The Definition of research laboratories

In College of \_\_\_

Applied Medical Sciences - Dammam







The research laboratories at the College of Medical and Applied Sciences in Dammam are important, as they are many and varied and seek to achieve a number of goals as follows:

#### Lab Name

## **Lab Definition**

**Clinical Nutrition Research Lab** 

Studying the beneficial effects of dietary antioxidants, functional foods and phytochemicals in human health and disease.

**Echocardiography Lab** 

Used to train students on performing non-invasive procedures (Echocardiography study).

**Cardiac Catheterization Lab** 

Used to train students on performing invasive procedures (Cardiac Catheterization).

**Lab Definition** 

Computer and ECG Lab

Used to train students on ECG and computer sciences

Cardiac skill Lab

Used to train students on auscultation of cardiac pathologies.

BLS & ACLS Lab

Used to train students on performing BLS & ACLS.

# **Lab Definition**

# Computed tomography lab

Imaging and dose measurements.

# Digital Radiography lab

Imaging and dose measurements

# DEXA lab

Measurements of fat and bone mineral density.

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**Lab Name** 

**Lab Definition** 

Physics lab

dose measurements

RC basic skill lab

Teaching basic RC skills

Pulmonary Function Testing Lab

Teaching basic and advance PFT.

# **Lab Definition**

# Polysomnography Lab

Teaching basic and advance polysomnography

## **Respiratory Care Simulation Lab**

training RC students on Simulated patient in respiratory care

# CARDIOPULMONRY LAB

Cardiopulmonary lab utilized to perform activities for invasive and noninvasive diagnostic cardiac procedures, pulmonary function, and respiratory testing.



## **Lab Definition**

#### **ELECTROTHERAPY LAB**

Electrotherapy lab used to treat a range of treatments using electricity to reduce pain, improve circulation, repair tissues, strengthen muscles, and promote bone growth, leading to improvements in physical functioning.

#### **VIRTUAL REALITY LAB**

This laboratory is a unique facility that serves as a research, testing, and rehabilitation to explore the educational potential of existing virtual reality experiences during walking. This lab also has motion capture system, in order to get complete kinematic and kinetic analysis of gait within a simulated natural environment.

#### **BIOMECHANIC LAB**

This lab used to analysis layman, sportsman, and patient with or without disability during static and dynamic motion.

## **Lab Definition**

## **BRAINSTIM LAB**

Measuring higher cognitive functions of the brain and electrical stimulation of the brain

## **CLINCAL SKILLS LAB**

Clinical skill lab provide a positive and student-centered learning environment for specialized training to evaluate and diagnose patients through interactive teaching models.

## **EXERCISE PHYSIOLOGY LAB**

Exercise laboratory equipped with many resources to do research and exercise testing to facilitate human health and performance.



#### **Lab Definition**

Microbiology Research Laboratory Microbiology research includes research activity in the investigation of clinically significant microbial pathogens from different sources to better understand their existence and spread by using several advance molecular microbiology techniques for detecting and typing microbial pathogens to provide reliable epidemiological data for tracing the sources of human infections

Molecular Medicine Research Laboratory The molecular medicine laboratory is focused on research at the RNA and DNA level for cancer and genetic disorders to study pathways interaction and genetic mutation. The lab is well equipped with sophisticated instruments to achieve the theme goal which include qPCR and GelDoc systems



## **Lab Definition**

#### Tissue Culture and Stem Cell

Tissue culture laboratory is a facility where cells are grown in-vitro under specific conditions for research purposes

Immunology and Infection Research Laboratory

In this laboratory, the research is focused on infectious and allergic causes of disease conditions such as microbiome alteration in Asthma. Additionally, human immunological and allergic responses are studied.

Hematology Research Laboratory

Haematology research lab studies blood cells and their associated disorders, including anaemia, haematological cancers, and haemostasis disorders. Our lab mainly investigates pathological, diagnostic and management aspects, focusing on the region's most prevalent disorders



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