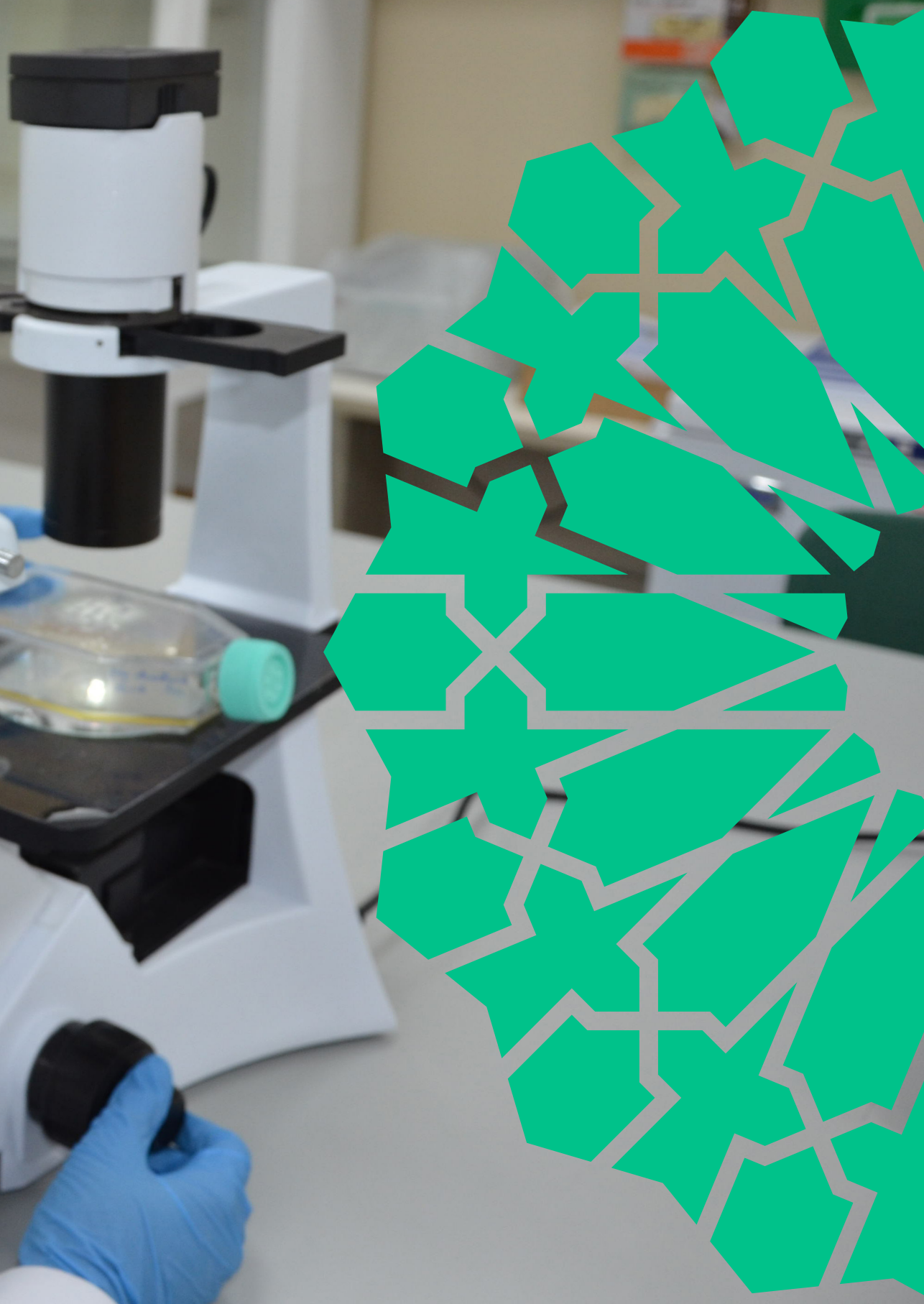


COLLEGE OF **MEDICINE**





Medicine College Laboratories

Lab Name	Location	Person in Charge	Programs Served	Courses Served
OB-GYN SKILLS LAB	M27-149	Maria Apellana	Clinical Sciences Dept.	Ob-gyn simulation workshop
PATHOLOGY MUSEUM LAB	M27-150			
BIOMEDICAL LAB	M27 039 & 040			-Human Biology 1&2 (Foundation) -Microbiology (Year 1,2 & 3) -Biochemistry Year 1,2 & 3 -Modern Techniques in Molecular Biology (Master Students)
PEDIATRIC SKILL LAB	M27-035B			Pediatric simulation workshop

Medicine College Lab Staff

#	Name	Ext.	Email
1.	Maria Apellana	065057284	maqui@sharjah.ac.ae

OB-GYN SKILLS LAB



Location	Lab Staff in Charge	Contacts
M27-149	Maria Apellana	065057284

INTRODUCTION

Students are trained for the basic Ob-Gyn clinical skills in the College of Medicine simulation and clinical skill laboratory. Both high fidelity and low fidelity models are available to support the training of students. Basic and cores skills are first demonstrated by the tutor and then practiced by students individually under supervision. Other more advanced skills are demonstrated by the tutor with the involvement of students.

PURPOSE

For students to gain hands on experience and get involved in skills possibly difficult to handle in hospitals due to patients refusal or procedures being advance to their level.

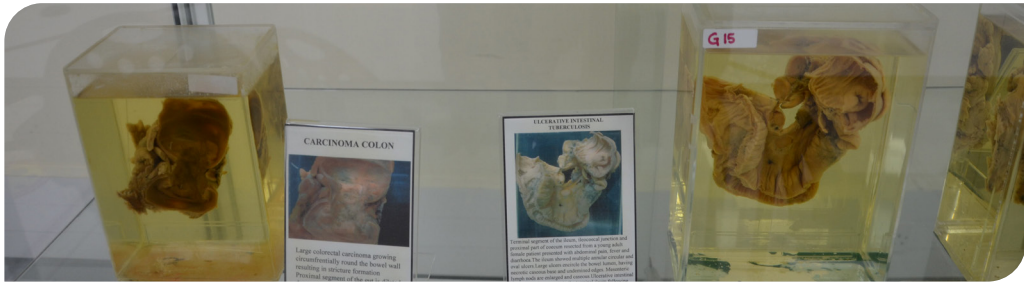
EQUIPMENT & INSTRUMENTS

- CAE Lucina birthing simulator: High-fidelity birthing simulator. Awireless childbirth simulator with validated, integrated maternal-fetal physiology and interchangeable static cervices to train on all the stages of delivery and the rare emergency scenario.
- Prompt Flex Cervical Dilatation & Effacement Module: It allows for training in management of both the latent and active first stages of labor.
- Task Trainers manikin: Allows the students to practice the vaginal assessment, Leopold's maneuver and normal to breech delivery.
- Pelvic Anatomy model with or without fetus: Allows student to study the anatomy.
- Clinical Female Pelvic Trainer Advanced: Ideal platform for hands-on examination for student to practice with the pelvis because it is anatomically accurate and tactile representation of the female pelvis.
- Instrumental Delivery (Vacuum/Forceps): It allows student to practice on how to handle difficult delivery by using the device.
- Ob-Gyn Basic Surgical Instruments: A tools that student can practice suturing, cutting, and holding.

EXPERIMENTS

- Obstetric Examination
- Assessment of Labor Progress
- Vaginal Delivery (Cephalic)
- Abnormal Labour and Delivery (Shoulder Dystocia and Breech delivery)
- Bimanual examination
- Speculum examination/Papsmear/Vaginal swab
- OBG Basic surgical instruments
- Contraceptive methods
- Instrumental Delivery (Vacuum/Forceps)

PATHOLOGY MUSEUM



Location	Lab Staff in Charge	Contacts
M27-150	Maria Apellana	065057284

INTRODUCTION

It contains a unique and valuable collection of surgical specimens covering a wide range of diseases that affect the human body. Most of the specimens were generously donated by the Pathology Department of "AL Baraha hospital", MOH.

The displayed specimens in the Pathology Museum represent an important learning resource for medical students that enables them to visualize and appreciate the different morphological abnormalities underlying disease processes. Each displayed specimen is accompanied with a small note describing its history as well as its final diagnosis.

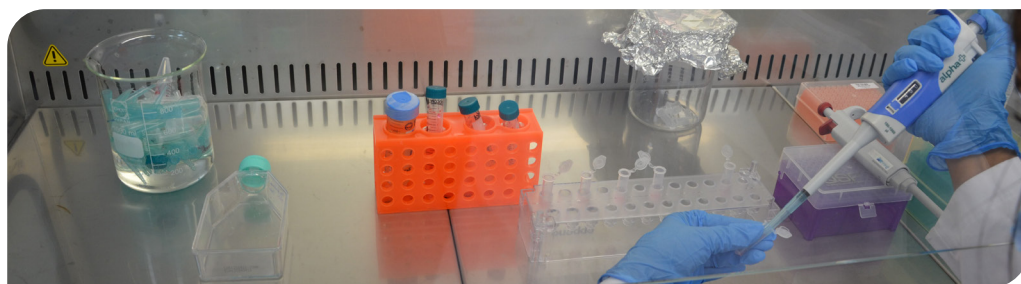
MUSEUM FUNCTIONS

- The Pathology Museum features a collection of diseased specimens (organ tissue) complete with histories from different regions of the human body. The facility is a resource available to staff and students and is regularly utilized for scheduled classes including practical examinations and personal study. Specimens retained in our museum are used in the teaching of our undergraduate medical students. Several specimens are also used for presentations to high schools students.
- Integrate the teaching of histology and histopathology, introducing students to the microscopic features of tissues and organs, and giving them the opportunity to compare the normal with the abnormal in various disease states. Students explore the histological features of tissues, identify the changes in various pathological states, and recognize their relationship to clinical manifestations.

MUSEUM FACILITIES

- Post-surgical specimens representing a variety of diseases, preserved in 10% buffered formalin, in glass jars. The jars are arranged in cupboards.
- Ten-headed microscopes, equipped with a camera and software and attached to a PC and projector (Equipment provided by Leica, a Germany company)

BIOMEDICAL LAB



Location	Lab Staff in Charge	Contacts
M27- 039 & 040	Maria Apellana	065057284

INTRODUCTION

The Biomedical Laboratory is designed in the College of Medicine M27(39-40), it is one of the most important laboratories in the College of Medicine. The Biomedical Laboratory is composed of three sub-laboratories: Human Biology, Microbiology, and Biochemistry. The laboratory is fully equipped with modern facilities and modern medical lab equipment to meet local and international standards that will help the students in scientific progress and scientific research.

PURPOSE

Biomedical Laboratory is established to introduce the undergraduate and postgraduate medical students to basic experiments and Bo- techniques used in the medical field.

EQUIPMENT AND INSTRUMENTS

- Bench top centrifuge
- Absorbance Microplate Elisa Reader
- Spectrophotometer
- Microscopes
- Precision balance
- Vortex Mixer
- Thermal Cycler
- Water Distiller
- Micro Litre Centrifuge
- Lab Refrigerator
- Vertical Gel Electrophoresis
- -20 Freezer
- Cell Density Meter

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- Microbiological Incubator
 - Vertical Loading Autoclave
 - Shaking Water Bath
 - Hematocrit Centrifuge
 - Benchtop Orbital Shaker with Incubation
 - Biosafety Cabinet (Class II Type A2)
 - Refrigerated Micro Centrifuge
 - ECG Machine
 - Flammable Cabinet
 - Blood pressure simulator
 - Blood pressure device
 - Gel documentation system

EXPERIMENTS

- Human Biology 1 &2
 - Microscope
 - Osmosis and tonicity
 - Micro-pipetting
 - Total white blood cell count / Hemocytometer
 - Differential white blood cell count
 - Hematocrit / Packed Cell Volume (PCV)
 - Hemoglobin concentration
 - Erythrocyte Sedimentation Rate (ESR)
 - Blood typing (ABO Rh)
 - Platelets- Bleeding time & Coagulation time
- Microbiology
 - Staining and Microscopy (Gram Staining)
 - Culture Media
 - Antibiotic Sensitivity
 - Serology
 - Molecular Methods
 - Identification of Bacteria (Biochemical tests)
- Biochemistry
 - Blood cholesterol determination
 - Glucose measurement
 - Uria measurement

PEDIATRIC SKILL LAB



Location	Lab Staff in Charge	Contacts
M27-035B	Maria Apellana	065057284

INTRODUCTION

The pediatrics simulation lab is the theater where all Medicine 4 students learn, practice and demonstrate the systematic approach to the management of a pediatric patient. They also practice good team dynamics and understand its importance in the efficient management of the patient. Cases are usually related to 4 main pediatric emergencies: Respiratory, shock, cardiac rhythm disturbances and arrest. Every session starts with an overview of the subject and a review of the systematic approach to managing a pediatric patient. The learning outcomes are then defined so that the students have a clear understanding of the skills that they are required to demonstrate and retain in each session. Every session is followed by a debriefing session and take home messages.

PURPOSE

It is the theater where medical students practice management of pediatric basic and advanced life support. This will develop their analytical reasoning and uncover the gaps in their knowledge. They will also have hands on the required skills in pediatrics. Students learn how to recognize a patient who needs help and the systematic approach to his management. They practice and execute the steps which allows them to see the results of their actions. Debriefing is also conducted where the students analyze their own actions as well as the actions of their team. This allows them to develop improvement plans and optimizes their clinical reasoning.

EQUIPMENT AND INSTRUMENTS

- Pediatric HAL High Fidelity Simulator.
- debriefing system.

SKILLS

The simulation sessions are conducted during the pediatrics rotation. They complement the hospital bedside teaching. These simulation sessions enable our students to practice relevant pediatric scenarios and acquire basic pediatric care skills which are mainly summarized below:

- Systematic approach to the management of a sick pediatric patient
- Primary impression
- Primary and secondary assessment of a sick patient
- Recognizing a patient who needs help
- Practicing good team dynamics
- High quality CPR
- Improving teamwork and building team-leading skills
- Enhancing communication skills
- Developing and improving critical-thinking skills
- Practicing new procedures or testing new equipment
- Administering medications safely and based on pediatric dosing
- Improving patient assessment and bedside decision making
- Enhancing competency-based assessment skills
- Practicing infrequently used emergency treatment skills