

# Department of Pharmacology

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Our college has a well-established Pharmacology department that plays a crucial role in UG teaching, providing in-depth knowledge about drug mechanisms, therapeutic uses, and adverse effects. Students gain practical exposure through laboratory sessions, prescription writing exercises, and pharmacovigilance activities. It is one of the subjects for phase II MBBS students. The department started from the inception of the college.

## HIGHLIGHTS

There are 4 laboratories in the department namely

1. Research lab
2. Clinical Pharmacology lab
3. Experimental lab
4. CAL lab

Each lab has a facility to accommodate 75 students at a time.

### **Research Laboratory:**

The Research Lab is designed to facilitate training in drug formulations, pharmacological experiment techniques, and hands-on simulation. It features models and practical equipment including IV (Intravenous), IM (Intramuscular), and Subcutaneous mannequins—five each—for training students in drug administration techniques. Students also conduct experiments such as ORS preparation and study various drug delivery systems like metered dose inhalers, rotahalers, insulin pens, and nebulisers.

### **Clinical Pharmacology Lab:**

This lab is designed to facilitate the understanding of prescription practices, adverse drug reactions (ADR), evaluation of drug literature, pharmacoepidemiology, and pharmacoeconomics.

### **Experimental Pharmacology Lab:**

The department has a well-equipped experimental pharmacology laboratory to study drug actions. The lab also includes Computer-Assisted Learning (CAL) software for simulations and toxicity studies, reducing reliance on animal experimentation while maintaining research quality.

### **Adverse Drug Reaction Monitoring Centre (AMC):**

The department actively promotes and enhances pharmacovigilance activities through a well-established AMC, ensuring drug safety and reporting mechanisms.

### **Institutional Ethics Committee (IEC):**

The IEC meets every six months to promote research activities, oversee clinical trials, and ensure ethical compliance in all research endeavors.

#### **Library and Research Resources:**

A separate library cum seminar room is available, equipped with 80 Pharmacology reference books, three Indian journals, and one international journal to support academic and research activities.

#### **Animal Holding Facility:**

A dedicated animal holding area with adequate water supply, sinks, and cages is available. It is managed by a veterinary officer for animal-based experimental pharmacology research.

#### **Museum:**

The Pharmacology Museum serves as a vital resource for visual learning. It contains a system-wise arrangement of 300 drug samples and 15 catalogues for reference. The museum also showcases nearly 50 educational charts, 10 models, and includes a dedicated section on the 'History of Medicine' with exhibits of pioneers in pharmacology. This setup supports self-learning and helps students better understand the evolution and application of pharmacological agents.

#### **Demonstration Room:**

There are two demonstration room with a seating capacity of 75 students with audio visual aids to engage the students during practical sessions, clinical demonstrations, small group teachings, case scenario based discussions.

#### **ACADEMIC SESSION:**

Innovative Teaching Methodologies: The department follows modern teaching methodologies, including Self-Directed Learning (SDL), academic and lab-based activities. **Infrastructure includes:**

#### **Two demonstration rooms, One lecture hall and One seminar room**

Every academic year 150 undergraduate students will be trained effectively by

Didactic Lectures

Small-Group Teaching Sessions

Student Symposium

Self Directed Learning

Integrated Teaching with other Departments(Both Vertical & Horizontal)

Early Clinical Exposure - Second MBBS students will be introduced to the patients and various Clinical Departments

Problem Based Learning

Formative and Summative assessments

Roleplay

AETCOM (Attitude, Ethics and Communication)

The candidates will be periodically assessed by Internal Assessments (Theory & Practicals). The performance of the Second MBBS students will be intimated to their Parents / Guardians periodically.

### **ACADEMIC ACTIVITIES**

The large group and small group teachings are scheduled as per the weekly planner issued by the Tamilnadu Dr.MGR Medical University, in accordance with the CBME guidelines, 2024.

Students are encouraged and trained to participate in the state level Pharmacology UG quiz competition that is held every year in various medical colleges.

### **CME / ACADEMIC EVENTS CONDUCTED**

Annual Scientific CMEs: Regular annual Continuing Medical Education (CME) programs are conducted on various pharmacological topics like Pharmacovigilance, Good Clinical Practice and Antibiotic Stewardship to enhance learning and keep faculty and students updated with recent advancements