

**Infrastructure/facilities & Expertise: Academic-Industry research project collaboration.**

Sr. NO.	Name of Laboratory	Major Equipments	Experimental Setup
1.	Pharmacology Lab (M. Pharm students)	<p><b>Pharmacology : Power lab</b></p> <p>Isolated organ bath Assemblies for Isolated tissue experiments, Rota rod apparatus, Actophotometer, Analgesiometer, Convulsiometer, Cook's Pole apparatus, histamine chamber etc.</p>	<p>Pharmacology: B.P, H.R and measurements of other related parameters-. (Invasive and non-invasive).</p> <p><i>In vitro</i>: Isolated tissue experiments.</p> <p>In vivo pharmacological screening experiments for CNS, CVS, Respiratory, GIT, Renal drugs.</p>
2.	Pharmacology Lab (B. Pharm. students)	<p>Pharmacology: Isolated organ bath Assemblies for isolated tissue experiments, Rota rod apparatus, Analgesiometer, Convulsiometer, Cook's Pole apparatus etc.</p>	<p>Pharmacology:</p> <p><i>In vitro</i>: Isolated tissue experiments.</p> <p><i>In vivo</i> pharmacological screening experiments for CNS, CVS, Respiratory, GIT, Renal drugs.</p>
3.	A.P.H.E Lab (1 <sup>st</sup> year students)	<p>Anatomy &amp; Physiology: Haemocytometers, B.P. Measurement apparatus (Sphygmomanometer) , ECG machine, Muscle - Physiology experiment apparatus, Isolated heart experiments, Anatomical Models and Charts etc</p>	<p>Basic haematological Experiments, Respiratory and Cardiovascular physiology experiments, Experiments on human anatomy using histological slides, anatomy charts and models.</p>
4.	Animal house	<p>Racks and cages for housing Rats, Mice and Rabbits in sufficient numbers</p>	<p>To cater to both U.G and P.G experiments and also industry sponsored projects.</p>

**Research projects/Expertise:**

Evaluation of medicinal agents and dosage forms with particular reference to drugs and indigenous drugs acting on CVS and CNS, Renal and reproductive systems.

1. Preclinical: (a) *In vitro* and *in vivo* pharmacological screening biological actions, mechanism and site of actions and toxicology of drugs/herbal extracts on biological tissues.

Cardiovascular pharmacology, Neuroscience, Metabolic disorders (weight, behaviour, pharmacological actions, blood biochemistry and others).

**For example, evaluation of drugs in:**

- **Neuropharmacology:**
  - Epilepsy
  - Depression and Anxiety
  - Cognitive Mechanisms
  - Analgesics
  - Antipsychotics
  
- **Cardiovascular Pharmacology:**
  - Hypertension
  - Anti arrhythmic drugs
  - Atherosclerosis
  - Congestive cardiac failure
  
- **Endocrinology:**
  - Diabetes and Anti-diabetic agents
  
- **GIT :**
  - Anti ulcer drugs and herbs.
  - Inflammatory bowel disease
  - Laxatives and anti diarrhoeals
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- **Others**
  - Respiratory system: Bronchodilators
  - Anti inflammatory drugs.
  - Anti diuretics.
  - Drugs acting on sexual behaviour
  - Toxicological studies including teratogenicity and carcinogenicity.

**Clinical:**

Pharmacovigilance studies  
Drug interactions  
ADR monitoring

**3. PCR (in collaboration with Biotechnology department).**

DNA amplification, tissue typing and genetic testing.  
DNA aberration studies.