

INFRASTRUCTURE
DEPARTMENT OF PHYSIOLOGY

The Department of Physiology occupies three wings in the second floor of the Sri Ramachandra Medical College and Research Institute, Sri Ramachandra Institute of Higher Education and Research . The first wing contains the Human Research Laboratory, Departmental Library and one Demonstration Hall. The second wing contains the Hematology Laboratory and Clinical Laboratory. The third wing contains the Mammalian Laboratory, Amphibian Laboratory and one Demonstration Hall.

The following laboratories are provided with adequate space to accommodate 125 - 136 students.

- I. **Amphibian Laboratory (300sq.m.area):** It is used for the demonstration of amphibian experiments to the students. One preparation room is provided with the amphibian laboratory. This is equipped with working tables along with drawers, cupboards with electric point and Biometric systems.
- II. **Mammalian Laboratory (120sq.m.area):** It is equipped for the demonstration of mammalian experiments. One preparation room is provided with the mammalian laboratory. This is provided with tables. The laboratory is also provided with instrument rack, two large size wash-basins and cupboards for storing equipments.
- III. **Human Laboratories:**
 - a. **Haematology Lab (250sq.m.area):** This is used by the medical students to perform hematology experiments. One preparation room is provided with the hematology laboratory. This is equipped with continuous working tables. Every seat is provided with washbasin. Every working table is provided with one drawer, one cupboard, an electric point with fire and steam proof top and Biometric system.
 - b. **Clinical Lab (120sq.m.area):** This is used by the medical students to perform clinical experiments, which forms a substantial part of the preclinical laboratory curriculum. This is provided with 12 tables (height0.8m.) It is equipped with the Bicycle Ergometer, Benedict Roth apparatus, Spirometer, Ergograph, Stethograph etc.
- IV. **RESEARCH LAB (56 sq.m.area):** This is utilized for research purposes and patient care. Autonomic Laboratory is available and it is equipped with RMS-CANWIN and RMS Polyrite to perform autonomic function tests. Research lab is also equipped with 8 Channel polygraph, Physiograph, RMS-EEG, RMS-Evoked potential, RMS-EMG, RMS-NCS, RMS-VARIOWIN(HRV), SMART-MEE PFT, Computerized KOKO spirometer, Stereotaxic instruments, pH meter, Colorimeter, UV spectrophotometer etc.

EQUIPMENTS IN LAB

S.No	RESEARCH	HAEMATOLOGY	CLINICAL
1.	Polyrite RMS Computerised	Microscopy on the move (Cilika)	Benedict's Roth Recording Spirometer
2.	Spirometer PESO computerized	Microscope – Binocular	Martin Bicycle Ergometer (Inco)
3.	Data Acquisition System 4 Channel with acc	Neubauer Chamber - Weber	Computerized ECG Machine BPL
4.	ECG Machine Computerised GE	Centrifuge Electrical 4 Tube	Colour Perception Lantern Edridge Green
5.	Martin Bicycle Ergometer (Inco)	Distillation Plant-S.S	Mosso's Ergometer
6.	Physiograph Recorder-Student Type Sc/dc with accessories)	Neubauer Chamber – Gdr	Perimeter-Student Type
7.	Centrifuge High Speed	Incubator	Physiograph Recorder-Student Type TC
8.	Stereo Taxic Equipment	Micropipette	Colour Mixer
9.	Spectrophotometer	Balance-Physical	Ishihara's Chart
10.	Mixie – (Remi), Dessicator, Mortar & Pestle	Mini Autoclave	Ophthalmoscope
11.	Refrigerator	Haemoglobinometer-Set	Stethograph & Marey's Tambour
12.	Slide Warming Table	Microscope-Student Type	Sphygmomanometer Aneroid Type
13.	Stirrer Electrical with 2mm Hot Plate 2 Lit Cap – Magnetic	Microscope-Eye Piece 5x	S.S.Drum Electrical
14.	Tissue Floation & Process Unit	Microscope-Eye Piece 15x	Oxygen Cylinder-Regulator,Flowmeter,Key&Trolly
15.	Soxlet Apparatus	Porcelain Tile Square & Rectangle	Spirometer Student Type
16.	Algometer	Rack - Tube-Aluminium	Snellen's Chart (Built in Lamp)
17.	Colour Perception Lantern Edridge green	Rack - Tube.-Wooden	Percussion Hammer- Regular
18.	Newtons Colour Wheel	Stop Watch – 1/10,1/5 &1/100	Stethoscope
19.	Tissue Paraffin Embedding bath – Elec, Op	Slide Box- Plastic (Glass Slide 50)	Stethoscope-Demonstration with multiple ear pieces
20.	Function Generator	Timer HES	Wright Peak Flow meter
21.	Homogenous Tissue Grinder	Stand-Wintrobe For 3	Hair & Compass Aesthesiometer
22.	Weighing Machine	Wall Clock Quartz	Tuning Forks
23.	Elec. Burr Variable speed	Esrite (ESR Kit)	Hand Grip Dynamometer
24.	Instrument Trolley – SS Top	Micro Haemotocrit	Hand – Refractometer

EQUIPMENTS IN LAB

S.No	AMPHIBIAN	MAMMALIAN
1	Dissection Board	Aerator
2	S.S.Drum Elec	Kymograph Long Paper (Museum)
3	Enamel Tray- Rectangular 7"X9", 9"X11",10"X13",11"X13",12"X15"	Perfusion Funnel
4	Lever- Heart	Operation Table Large Animal(Museum)
5	Muscle-Isotonic-Lever	Organ Bath Isolated Tissue
6	Lucas Muscle Trough	Physiograph Recorder-Student Type Dc
7	Pohl's Commutator	Physiograph Recorder-Student Type Tc
8	Clamp-Muscle Grip Femur Clamp	Respiratory Pump (Museum)
9	Clamp-Muscle Grip V-Clamp Small	Retractor- Longer
10	Crank Myograph-Frog Board	Retractor-Moses
11	Scissors-Curved 3 1/2"	Stimulator Research
12	Scissors-Straight Blunt 5" – 7"	Stimulator Student
13	Electrode simple	Thermometer Lab 0-110c
14	Enamel Bowl 11cm	Thermometer Lab 0-600 C
15	Scissors- Plaster Cutting 7 1/2"	Time Marker Elec-Single Lever
16	Scissors- Sharp 4" – 8"	Time Marker Elec-Double
17	X-Blocked –Closed/ Opened, Large/ Small	Time Marker Direct
18	Bone Cutter	Stand for Enamel Basin
19	Short Circuit Key -2t,4t	Vibrating Interrupter
20	Forceps- Ordinary Straight 4" -7"	Water Bath – Electrical
21	Forceps- Cheatle 7 1/2	Hot Air Oven
22	Forceps-Artery Curved & Straight 6"	Extension Board- Large
23	Forceps-Alice Tissue	Forceps- Iris -Curved 3 1/2
24	Forceps-Iris -Curved 4"	Forceps- Artery Curved 3 1/2