

Sri Siddhartha Academy of Higher Education

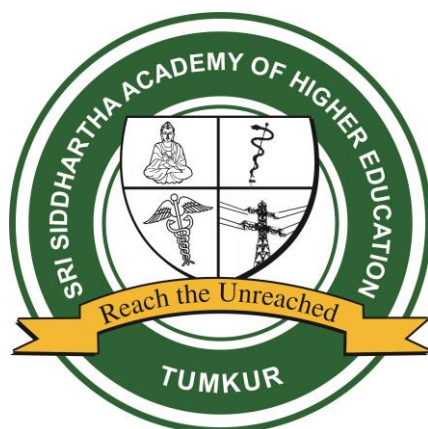
Deemed-to-be-University

Accredited 'A' Grade by NAAC

(Declared under Section 3 of the UGC Act, 1956

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Agalakote, B.H. Road, Tumkur – 572107, Karnataka, India



Research Facilities in SSAHE

Medical College

Sl. NO.	Department	Equipment	Scope for Research	Contact Person Name
1.	Anatomy	Microtome blades Microtome Water bath Paraffin embeded bath	Diagnostic -Tissue Histology Research	Dr Lakshmi Prabha
		PCR Machine Gel Documentation unit Centrifuge – 1.5 ml	Diagnostic -Molecular Genetics, Chromosomal Researches	Dr Lakshmi Prabha
		Anthropometer Brass made Spreading calipers – Brass made, range 0- 300 mm pointed Sliding caliper – Brass made, range 0- 200 mm Martin type Sliding caliper – Brass made, range 0- 250 mm Poech type Cubic craniophore made of metal with bone holder Horizontal tracing needle 0 – 450 mm Goniometer attachable mollison type Goniometer – full circle 12 inches long Osteometric board / table made of metal Mandibulometer Dioptriograph with attachments Body fat monitor visceral fat analysis	Diagnostic research- Anthrometric research based on cadavers	Dr Lakshmi Prabha
2.	Physiology	Treadmill	Diagnostic research Cardiac studies Cases	Dr Basavaraju
		Polygraph	Diagnostic Research Physiological parameter changes like Blood pressure, pulse, respiration and skin conduction changes)	Dr Basavaraju
		Digital Spirometer	Diagnostic Research (Respiratory studies)	Dr Basavaraju
		Research Microscope	Blood parameter Studies	Dr Basavaraju
3.	Biochemistry	Centrifuges	Diagnostic- Haematological Analysis related studies	Dr.Hamsaveena
		Fine care POCT device	Diagnostic- Hormonal Analysis Related Studies	Dr.Hamsaveena
		Semi Automatic analyser	Diagnostic- Haematological Analysis related studies	Dr.Hamsaveena
		Spectrophotometer with accessories	Diagnostic- Blood Chemistry Analysis Studies	Dr.Hamsaveena

Sl. NO.	Department	Equipment	Scope for Research	Contact Person Name
	Biochemistry	Fully Automated Analyser - EM 200	Diagnostic- Haematological Analysis related studies	Dr.Hamsaveena
		Electrolyte Analyzer - 9180	Diagnostic- Electrolyte Based Studies	Dr.Hamsaveena
		Automatic Blood Gas Analyzer	Diagnostic- Blood Gas Analysis Studies	Dr.Hamsaveena
		Electrophoresis apparatus with power supply	Diagnostic- Plasma, haemoglobin and Lipoprotein Analysis studies	Dr.Hamsaveena
		Colorimeter	Diagnostic -Blood chemistry Analysis Studies	Dr.Hamsaveena
4.	Microbiology	Fully Automated ELISA	Diagnostic- Peptides,Proteins antibiotics and hormones related Studies	Dr Prashanth
		QBC	Diagnostic- Parasite related Studies	Dr Prashanth
5.	Dermatology	Laser (co2 and Q switch)	Therapeutic- Pihmentery Disorder and acne related Case Studies	Dr Narendra G 9980528543
		Intense pulse light	Therapeutic- Acne Hair disorder studies	Dr Narendra G 9980528543
		Phototherapy chamber	Therapeutic- Vitiligo, Psoriasis, related studies	Dr Narendra G 9980528543
		Electrosurgery unit	Therapeutic- Benign Lesion related studies	Dr Narendra G 9980528543
6.	General Medicine	ABG Analyser	Diagnostic- Blood Gas Related studies	Dr Sharath Shah
		Ventillator	Diagnostic and therapeutic- Blood gas, respiratory analysis Related studies	Dr Sharath Shah
		Bronchoscope	Diagnostic and therapeutic- Rrespiratory system related studies	Dr Sharath Shah
		2D Echo	Diagnostic and therapeutic- Cardiovascular system related studies	Dr Sharath Shah
		EEG, EMG	Diagnostic and therapeutic- Neuro muscular system related studies	Dr Sharath Shah
		Nerve conduction Studies	Diagnostic and therapeutic- Neuro muscular system related studies	Dr Sharath Shah
		Wrights Respirometer	Diagnostic and therapeutic- Respiratory system related studies	Dr Sharath Shah

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	General Medicine	Cardiac Cath Lab	Diagnostic and therapeutic- Cardiovascular system related studies	Dr Sharath Shah
		Bedside USG in ICU	Diagnostic – Abdominal and Doppler studies	Dr Sharath Shah
		Dialysis Unit	Diagnostic and Therapeutic – Urology Related studies	Dr Sharath Shah
7.	General surgery	Laparoscopes	Diagnostic and therapeutic- Intraabdominal Related studies	Dr Jaganath
		Upper GI Endoscope	Diagnostic and therapeutic- Gastro intestinal related studies	Dr Jaganath
8.	Orthopaedics	Hip Arthroplasty Set	Therapeutic Procedures (Research on Hemi Replacement Arthroplasty, Total Hip Replacement)	Dr. Kiran Kalaiiah
		Knee Arthroplasty Set	Therapeutic Procedures (Research on Total Knee Replacement)	Dr. Kiran Kalaiiah
		Arthroscope	Diagnostic Research (Ligament Injuries around knee, Rotator Cuff Injury, Bankart lesion, Shoulder Impingement, Biopsy)	Dr. Kiran Kalaiiah
		Arthroscope	Therapeutic Procedures (Research on ACL Repair, PCL Repair, Meniscus Repair, Bankart Repair, Rotator Cuff Repair)	Dr. Kiran Kalaiiah
		DHS Set	Therapeutic Procedures (Research on Intertrochanteric Fracture Femur, subtrochanteric fracture femur)	Dr. Kiran Kalaiiah
		Interlocking Nail Set	Therapeutic Procedures (Research on Tibia shaft Fracture, Femur shaft fracture, Humerus shaft Fracture)	Dr. Kiran Kalaiiah
		PFN Set	Therapeutic Procedures (Research on intertrochanteric fracture Femur, Subtrochanteric fracture Femur)	Dr. Kiran Kalaiiah
		Spine Surgery Set	Therapeutic Procedures (Research on IVDP, Spondylolisthesis, TB Spine, Canal Stenosis, Fusion)	Dr. Kiran Kalaiiah

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	Orthopaedics	DCP set (3.5 system, 4.5 system)	Therapeutic Procedures (Research on Fracture shaft humerus, fracture both bone forearm, fracture shaft femur)	Dr. Kiran Kalaiah
		1/3 rd Tubular Plate Set	Therapeutic Procedures (Research on Fracture ulna, fracture lateral malleolus)	Dr. Kiran Kalaiah
		LCP Set (3.5 system, 4.5 system)	Therapeutic Procedures (Research on fracture clavicle, fracture proximal humerus, fracture distal radius, intertrochanteric fracture femur, distal femur fracture, proximal tibia fracture)	Dr. Kiran Kalaiah
		TBW set	Therapeutic Procedures (Research on fracture patella, malleolar fracture, olecranon fracture, AC joint dislocation, Greater Trochanter fracture, Greater tuberosity fracture, Jones fracture)	Dr. Kiran Kalaiah
		CC Screw Set (4 mm, 6.5 mm)	Therapeutic Procedures (Research on fracture neck of femur, fracture lateral condyle proximal tibia, , Greater Trochanter fracture, Greater tuberosity fracture, Jones fracture, Femoral condyle fracture, malleolar fracture, calcaneal fracture)	Dr. Kiran Kalaiah
		Mini Fragment Set	Therapeutic Procedures (Research on Fractures of metacarpals, metatarsals and phalanx)	Dr. Kiran Kalaiah
		TENS Nail Set	Therapeutic Procedures (Research on Paediatric long bone fracture)	Dr. Kiran Kalaiah
		9.	Department of Psychiatry	EEG
ECT	Therapeutic – CNS Related studies	Dr Sathyanarayana M T		
Alco - Meter	Diagnostic – Breath Analyser studies	Dr Sathyanarayana M T		
Psychological Test Materials	Diagnostic and Therapeutic	Dr Sathyanarayana M T		

Sl. NO.	Department	Equipment	Scope for Research	Contact Person Name
10.	Ophthalmology	Autorefractometer	Diagnostic research Refraction and Keratometric studies	Dr Jayshree S Shah
		A-scan Biomicroscope	Diagnostic Research (Vitreous, Retinal, intraocular spikes study)	Dr Jayshree S Shah
		Fundus camera	Diagnostic Research (Retinal profile diagnostic procedure, Angiogram studies)	Dr Jayshree S Shah
		Iridex Laser Machine with PRP and grid lens	Therapeutic Laser Procedures (Laser treatment procedure for Retinopathies, Vaso-occlusive disease)	Dr Jayshree S Shah
		Phacoemulsification Machine	Therapeutic Machine (Intraocular Surgical Procedure)	Dr Jayshree S Shah
		YAG Laser Machine	Diagnostic and Therapeutic Machine (Capsulotomies, Iridotomies vitreolysis)	Dr Jayshree S Shah
		Synaphophore	Diagnostic and Therapeutic (Strabismus cases)	Dr Jayshree S Shah
		Prism Bar , Bagolinis glasses	Diagnostic (Strabismus cases)	Dr Jayshree S Shah
		3 Step Slit Lamp	Diagnostic	Dr Jayshree S Shah
		Applanation Tonometer	Diagnostic Glaucoma cases	Dr Jayshree S Shah
		Operating Microscope	Therapeutic Surgical Case Studies	Dr Jayshree S Shah
11.	Pathology	Sysmex XN -330 -Haematology autoanalyser (6 Part)	Diagnostic research - - Blood parameter studies	Dr Niranjana Murthy
		Sysmex Xp-100 -Haematology autoanalyser (8 Part)	Diagnostic and research purpose - Blood parameter studies	Dr Niranjana Murthy
		Medonics M- Series Haematology autoanalyser (8 Part)	Diagnostic and research purpose - Blood parameter studies	Dr Niranjana Murthy
		Erba 29 -ECL412- Mannheim-Coagulometer	Diagnostic and research purpose - Blood parameter studies)	Dr Niranjana Murthy
		Cytospin	Diagnostic research-cytological studies	Dr Niranjana Murthy

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	Pathology	Automated tissue Processor	Diagnostic- Histopathological Studies	Dr Niranjan Murthy
		Electrophoresis	Diagnostic – Haematological research	Dr Niranjan Murthy
		Immunohistochemistry apparatus	Diagnostic- IHC marker studies	Dr Niranjan Murthy
		Immunofluorescence microscopes	Diagnostic research on tissue markers	Dr Niranjan Murthy
12.	ENT	Pure tone audiometry	Diagnostic research – evaluation of hearing loss of diseases of ear	Dr. Mohan M.
		Impedance audiometry	Diagnostic research – evaluation of eustachian tube function and middle ear pressure	Dr. Mohan M.
		BERA	Diagnostic research – Evaluation of cochlear and retrocochlear auditory pathway	Dr. Mohan M.
		Nasal endoscopes	1. Diagnostic research – Diagnostic nasal endoscopy to evaluate diseases of nasal cavity and nasopharynx 2. Therapeutic research – Functional endoscopic sinus surgery	Dr. Mohan M.
		Operating microscope	1. Diagnostic research – Evaluation of a case of CSOM 2. Therapeutic research – Management of CSOM – tympanoplasty and mastoidectomy	Dr. Mohan M.
		Rigid oesophagoscopy	Therapeutic research – Removal of foreign bodies from oesophagus	Dr. Mohan M.
		Rigid bronchoscopy	Therapeutic research – Removal of foreign bodies from trachea and bronchus	Dr. Mohan M.
		Flexible fibre optic nasopharyngolaryngoscope	Diagnostic research – Diseases of nasopharynx, hypopharynx and larynx	Dr. Mohan M.

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13.	Obstetrics and Gynaecology	Cardiotocogram	Diagnostic (studies on foetal oxygen saturation, Hypoxia) Therapeutic (Labour management studies)	Dr Dhananjay
		Vent House	Therapeutic (Assisted Delivery related studies)	Dr Dhananjay
		Forceps	Therapeutic (Assisted Delivery related studies)	Dr Dhananjay
		Colposcopy studies	Dignostic – (observational studies of the anatomical structures) Therapeutic- Biopsy related studies)	Dr Dhananjay
		Hysteroscope	Diagnostic- (Observational studies on the anatomical structures) Therapeutic – (Biopsy, ablation related studies	Dr Dhananjay
		Laproscope	Diagnostic – Intraabdominal reproductive organ related studies) Therapeutic- Surgical interventions and Biopsy related Studies.	Dr Dhananjay
14.	Paediatrics	ABG machine Digital weighing and machine Infantometer Shakirs tape Bone marrow needle Pulse oximeter	Diagnostic- Studies related to anthropometric parameter. Haematological Diagnostic studies.	Dr Rangaswamy
		Ambu Bag Nebuliser Umbilical vein catheter CPAP Machine Mechanical Ventilator Infusion Pumps Syringe pump Phototherapy unit Radiant warmer	Therapeutic- Researches based on respiratory studies. Research based on Neonatal support systems.	Dr Rangaswamy
15.	Anaesthesia	Higher end Multipara Monitors and Work stations.	Diagnostic – Blood parameter related studies	Dr Gangadhar

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	Anaesthesia	Blood Gas Analysers	Diagnostic – Blood gas related studies	Dr Gangadhar
		USG Guided nerve Blocks	Therapeutic- Neural Anaesthesia related studies	Dr Gangadhar
16.	Community Medicine	Herpenden calipers Baby / Adult weighing Machine MUAC Tape Height measuring tape	Diagnostic studies based on the nutritional status	Dr Krishna Iyenger
		Chloroscope Horrocks apparatus	Diagnostic – water purification based studies Free chlorine related studies	Dr Krishna Iyenger
		Microscope oil immersion Dissecting Microscope	Diagnostic- studies on Medically important Insects	Dr Krishna Iyenger
		Glucometer Stethoscopes BP Apparatus	Diagnostic-Field studies on Hypertension and Diabetes	Dr Krishna Iyenger
17.	Radio-diagnosis	1.MRI – 1.5 Tesla	1. Role of MRI brain in epilepsy 2. Evaluation of stroke in MRI brain 3. MRI in space occupying lesions of brain 4. MRI Evaluation of the congenital abnormalities of brain 5. CNS evaluation in fetal MRI 6. Role of MRI in focal liver lesions 7. Evaluation of renal tumors by MRI 8. Evaluation of peritoneal diseases by MRI 9. MRI of carcinoma of prostate 10. Role of MRI in traumatic conditions of knee joint. 11. Role of MRI in shoulder joint lesions	Dr G Gurushankar

			12. Evaluation of wrist joint by MRI	
			13. Value of MRI in spinal tumours	
			14. Role of MRI in degenerative disease of the spine	
			15. Role of MRI in bone marrow diseases	
		2. CT scan-16 slice	1. Role of CT in head injury	
			2. Role of CT in brain tumors	
			3. Role of CT in stroke patients	
			4. HRCT of temporal bone in evaluation of deafness	
			5. Role of CT in evaluation of neck masses	
			6. HRCT of thorax in diffuse lung diseases	
			7. Role of contrast CT in lung tumours	
			8. CT orbits in evaluation of proptosis	
			9. CT evaluation of paranasal sinuses	
			10. CT evaluation of mediastinal tumors	
			11. CT evaluation in CP angle lesions	
			12. CT evaluation of acute abdomen	
			13. CT evaluation of pelvic mass lesions	
			14. CT evaluation of bone tumors	

			15. CT evaluation of neck mass lesions	
			16. CT evaluation of acute abdominal trauma	
	3. Ultrasound		1. Role of Ultrasound of acute abdomen	
			2. Role of sonography in characterization of thyroid nodules	
			3. Role of colour doppler in lower limb arterial diseases	
			4. Role of sonography in adnexal masses	
			5. Ultrasound evaluation of hepatobiliary disorders	
			6. Ultrasound evaluation of acute right lower quadrant abdominal pain	
			7. Value of colour doppler in the evaluation of IUGR	
			8. Ultrasound in soft tissue mass lesions	
			9. Neuro sonogram in seizures	
			10. Ultrasound in renal colic	
			11. Sonomammography in the evaluation of breast lesions	
			12. Ultrasound in acute scrotum	
			13. Ultrasound in early pregnancy	
			14. Ultrasound in evaluation of congenital abnormalities	
	4. X RAY 600MA, 800MA, 300 MA		1. Value of Radiographs in skeletal dysplasia	

			2. Radiographs in evaluation of fractures	
			3. Value of Radiographs in assessment of chest diseases	
	5.SPECIAL INVESTIGATIONS		1. Evaluation of KUB in IVP, CT/MR urogram	
			2. Evaluation of RGU and clinical correlation	
			3. Evaluation of vesicouretricreflux in ultrasound and MCU	
			4. Correlation of esophageal lesions in barium study & endoscopy	
			5. Evaluation of large bowel loops in barium enema and colonoscopy	
			6. Correlation of conventional fistulogramandMR fistulogram	
	6.Mammography		Role of mammography in evaluation of breast lesions	

Dental College

Sl. NO.	Department	Equipment	Scope for Research	Contact Person Name
1.	Oral Medicine & Radiology - SSDC	OPG with Cephalostat	<ol style="list-style-type: none"> 1. Diagnostics (Bone and teeth) 2. Skull/jaws -Growth pattern studies 3. Forensic odontology 4. TMJ studies 5. BMD studies 	Dr. Suhas S
2.	Oral Medicine & Radiology-SSDC	TENS unit	<ol style="list-style-type: none"> 1. Pain studies 	Dr. Suhas S
3.	Oral Medicine & Radiology-SSDC	Radiovisiography	<ol style="list-style-type: none"> 1. Diagnostics (Teeth and periapical bone) 	Dr. Suhas S
4.	Oral Pathology and Microbiology - SSDC	RESEARCH MICROSCOPE OLYMPUS BX43	<ol style="list-style-type: none"> 1. Polarising Microscopical studies (Connective tissue fibres Assessment studies) 2. Fluorescent Microscopical studies (diagnostic for dermal and mucosal pathologies) 3. Phase contrast (cell culture and live cell imaging studies) 4. Dark field microscopy (microbiological studies) 5. Image analysis software (Cell and nuclear morphological studies) 	Dr. Kokila G
5.	Oral Pathology and Microbiology - SSDC	STEREOMICROSCOPE	<ol style="list-style-type: none"> 1. Observation of micro leakages in the restorations and dye penetration studies in endodontic studies 	Dr. Kokila G
6.	Orthodontics -SSDC	Cephalometric software	<ol style="list-style-type: none"> 2. 1. Diagnostic - Skull/jaws -Growth pattern studies 	Dr. Srinivas

Sl. NO.	Department	Equipment	1. Scope for Research	Contact Person Name
7.	Oral Pathology and Microbiology - SSDC	IMMUNOHISTOCHEMISTRY LAB 1. PH METER 2. DIGITAL BALANCE 3. MICROWAVE OVEN	2. Preparation of reagents for Immunohistochemical studies 3. Helps in appropriate measurement of chemicals for the preparation of reagents 4. Antigen retrieval for immunohistochemistry staining	Dr. Kokila G
8.	Oral Pathology and Microbiology - SSDC	SEMIAUTOMATIC MICROTOME HMB45	1. Enables taking thin sections of the specimen for staining which facilitates studies on different microscopy 2. Hematoxylin and Eosin staining studies	Dr. Kokila G
9.	Oral Pathology and Microbiology - SSDC	1. CENTRIFUGE 2. COLORIMETER	1. Studies can be done using the blood samples of diabetics and non-diabetics and analysing the exfoliated cells of such patients from the oral cavity.	Dr. Kokila G