

(DEEMED TO BE UNIVERSITY)
Recognized under Sec 3(A) of the UGC Act 1956
Accredited by NAAC with 'A' Grade

1.1.3 Courses with focus on competency/ employability/ entrepreneurship/ skill-development offered either by the University or in collaboration with partner Institutions/ Industries during the last five years (2016-2021).

#### Any other documents

Advanced Comprehensive Clinical Training and Simulation Centre
(ACTS YEN)

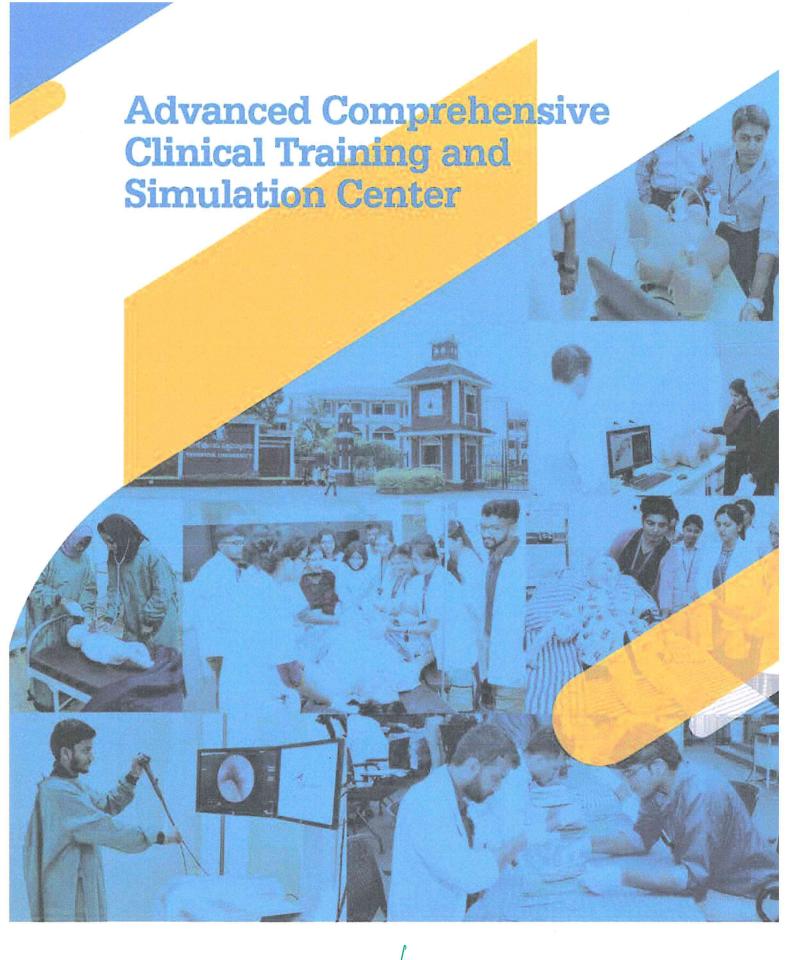
**Testimonials from students** 

1.Click Here

2.Click Here

ATTESTED

Dr.Gangadhara Somayaji K.S. Registrar Yenapoya(Deemed to be University) University Road, Deralakatte Mangalore- 575 018, Karnataka





YENEPOYA

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(DEEMED TO BE UNIVERSITY)

Recognised under Sec 3(A) of the UGC APT George adhara Some yell K.S.

Accredited by NAAC with 'A' Grade Registrar Registrar Yenepoya (Deemed to be University)

University Road, Deralakatte Mangalore- 575 018, Karnataka

### ACTS-YEN

Advanced Comprehensive Clinical Training and Simulation Centre (ACTS-YEN) at Yenepoya (Deemed to be University) was inaugurated in 2016. It is one of the largest state-of-the-art simulation facilities in the private health care sector of the country. It is equipped with the widest range of latest simulators, Virtual reality simulators & task trainers and boasts of a well-trained team of simulation facilitators and ancillary staff.

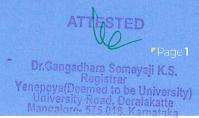
ACTS YEN endeavors to achieve the goal of enhancing patient safety. To achieve this goal a team of dedicated well-trained faculty has designed a variety of courses following the principles of Simulation-based training. The courses are executed involving in house as well as expert national & international invited simulation trainers

#### SIMULATION BASED TRAINING

The simulation lab is designed to offer a controlled virtual setting to enable the student / professional to process and analyze clinical decision-making. The simulation lab enables learners to make errors in these settings, by providing them with tasks to test & challenges their skills including decision making ability in critical situations.

#### ADVANTAGES OF SIMULATION BASED TRAINING

- Reduces human error
- Skill development
- Practice skills in a controlled and safe environment
- On-demand access to patients
- Provides uniform learning opportunity to all students
- Customization of scenario as per level of learner
- Promotes development of non technical skills like team work, human factors etc.



#### WHY ACTS YEN?

Skill based active learning with personal attention to each learner contributes to the high quality learning experiences at ACTS YEN. ACTS-YEN the center offers the facility which encourages all levels of learners to engage in an incomparable clinical education experience in a safe, realistic, stress free and effective environment. This allows learners to develop self confidence through skill mastery.

### APPLICATIONS OF SIMULATION CENTRE & BENEFICIARIES

The center can be used by individual students for improving skills and for self-appraisal. It can be used by faculty for training concepts as well as evaluation. It also finds application in training health care professionals including newly inducted nursing and ancillary staff in regarding protocols, standard operating procedures, and codes related to hospital as well as accreditation bodies like NABH and NABL. Certification of skills both technical as well as communication skills mandated as per regulatory bodies can be very effectively performed at simulation center.

Basic workshops aim at undergraduate & internship level students. The advanced workshops target postgraduates as well as consultants. A very important use of Simulation laboratory is the utilization of the facility for creating awareness & training of school students and the general public towards medicine and basic life support skills.

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# COURSES OFFERED AT ACTS-YEN

#### **ACTS-YEN CERTIFIED WORKSHOPS**

Intensive Care Unit Protocols

0	Accidents And Emergency Training For General Practitioners	1 Day
0	Advanced Training In Biomedical Applications	3 Months
0	Airway Management	3 Hours
0	Basic & Advanced Trauma Management	1.5 Days
0	Basic Clinical Simulation Educator	1 Day
0	Basic Laparoscopic Skill	1 Day
0	Basics Of Bronchoscopy Skill	1 Day
•	Basics Of ECG And Pharmacology	3 Hours
	Cardio Pulmonary Resuscitation (Adult & Paediatrics)	4 Hours
0	Communication Skills Course For Healthcare Providers	3 Hours
	Difficult Airway Management	1 Day
	Finishing School For Nurses	6 Days
0	Fundamentals Of Critical Care Support Course	1 Day
	Fundamentals Of Simulation And Art Of Debriefing	1 Day

1 Day

Interns Competency Building Course

6 Days

Management Of Adverse Drug Reaction And Toxicity

2 Hours

Management Of Arrhythmias

2.5 Hours

Management Of Poisoning

2 Hours

Obstetric Examination And Emergency Management

1 Dav

Regional Block

4 Hours

Simulation Facilitator Course

6 Months

Ventilator care and management

1 Day

Trauma And Basic Life Support Training For

1.5 Hours

General Public

#### **AMERICAN HEART ASSOCIATION COURSES**

Basic life support (BLS)

1 Day

Advanced Cardiac Life Support (ACLS)

2 Days

#### WHO CAN ATTEND / BENEFICIARIES

- Hospital /consultants/teachers
- Medical undergraduates and post graduates
- Nursing students
- Paramedical students
- Teachers with aptitude & interest to be simulation trainer



# ACTS-YEN FACILITIES



Dr.Gangadhara Somayaji K.S. Registrar Yenepoya(Deemed to be University) University Road, Deralakatte Mangalore- 575 018, Karnataka



The Table is the most technologically advanced anatomy visualization system for anatomy education. CT-based virtual dissection improves student performance in gross anatomy courses. Clinical education & surgical planning with the Anatomage table will improve. Detailed exploration of 3D structures used by the anatomy department.



### CATHLAB VIRTUAL REALITY SIMULATOR - CathLabVR<sup>TM</sup>

Cath lab VR provides quality training in accessing and navigating diverse Anatomy with cardiac and vascular abnormalities. With cath lab VR, instructors can easily customize case parameters (Percutaneous coronary interventions, Transcatheter aortic valve implantation, Advanced percutaneous coronary interventions) to match each learner & performance level. At the conclusion of each case, learners can be debriefed with evidence-based metrics and outcome measurements. C-arm manipulation is also possible.





### INFANT PATIENT SIMULATOR - BabySIM®

This is a high fidelity infant simulator, which delivers automatic response to clinical interventions to prepare healthcare professionals for critical events relating to infants. It can be used for life saving interventions related to cardiovascular, pulmonary and neurological systems.



#### PAEDIATRIC PATIENT SIMULATOR - PediaSIM®

The pediatric patient simulator mimics a six year old child that provides advanced pediatric simulation training. It has realistic cardiac, breathing, bowel and vocal sounds which allow an immersive learning environment. Pharmacology system automatically calculates pharmacokinetics and pharmacodynamics for 56 intravenous and inhaled medications



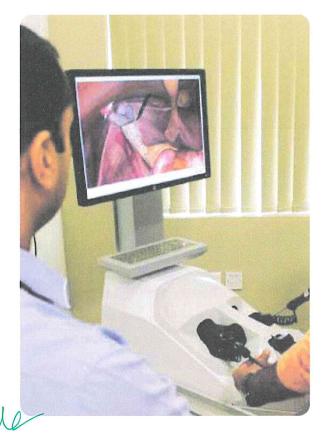
### ENDOSCOPIC VIRTUAL REALITY SIMULATOR - EndoVRTM

The EndoVR is a new generation of interventional simulation where virtual reality, haptics, and real patient cases push the limits of medical simulation. Designed for better performance with a state-of-the-art user interface, the EndoVR is easier to configure and use. Supporting three learning environments in an all-in-one platform, including basic to advanced bronchoscopic, upper gastrointestinal tract (GI) and lower gastrointestinal tract (GI) endoscopy training procedures.



## LAPAROSCOPIC VIRTUAL REALITY SIMULATOR - LapVR<sup>TM</sup>

Enables practice, learning and improving minimally invasive surgical skills, from basic to advanced laparoscopic procedures. LapVR gives learners the opportunity to develop proficiency in techniques such as suturing, knot tying and loop ligation as well as some frequently performed laparoscopic surgeries like cholecystectomy and appendectomy for risk-free learning.



#### **ADULT HUMAN PATIENT SIMULATOR (HPS)**

The Adult HPS is the only human patient simulators available currently, that provides a true respiratory gas exchange. The HPS interfaces with real clinical monitors and ventilators, and automatically responds to the administration of real anesthetic gases, oxygen therapy, and medications. HPS is the Gold Standard in high fidelity patient simulation for respiratory and critical care training. Adequate chest compressions result in simulated circulation, cardiac output, central and peripheral blood pressures, carbon dioxide return. Enhanced Drug Recognition System that automatically identifies the drug, concentration, and dose, requiring no interaction from the instructor. Team dynamics and non-technical skills can be enhanced by unique patient voice features of HPS which enables interaction between manikin and students.







#### **MATERNAL FETAL SIMULATOR (MFS)**

MFS is the only wireless childbirth simulator with validated, integrated maternal-fetal physiology and interchangeable static services to train on all the stages of delivery and various emergency scenario. From realistic palpable uterine contractions, normal delivery and breech birth to shoulder dystocia, Postpartum hemorrhaging, including Class III hemorrhage and eclampsia are possible in MFS.





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#### WIRELESS ADULT PATIENT SIMULATOR - METIman®

The METIMAN has a wide range of powerful new features to deliver realistic simulation-based healthcare training. With the simulated patient model (Pre hospital), METIMAN offers versatility in high fidelity simulation training. Metiman simulation is best described as an ER trauma and simulator, suitable for in-situ simulations.





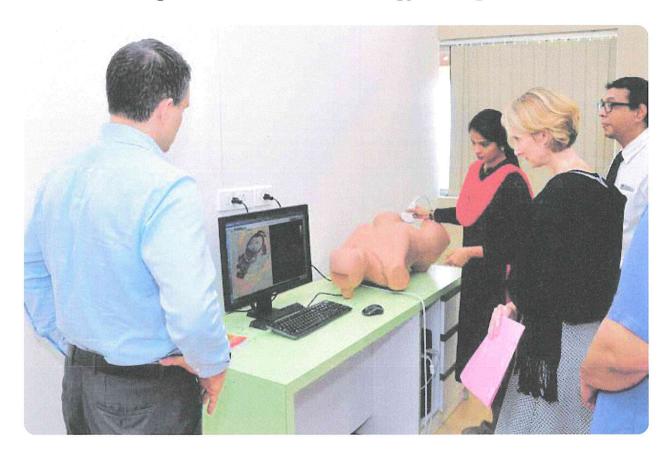
#### VIMEDIX ULTRASOUND SIMULATOR - Vimedix

Vimedix is a high-fidelity ultrasound simulator designed to make learning more engaging and intuitive. It allows to develop psychomotor skills needed to handle ultrasound probes as well as cognitive skills to

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interpret ultrasound images, make diagnoses and clinical decisions. Vimedix Cardiac, Abdo and Vimedix Ob/Gyn allow simulation of transthoracic echocardiography (TTE), transesophageal echocardiography (TEE), general abdominal ultrasound, lung ultrasound, obstetric and gynecologic ultrasound.



#### **CPR TASK TRAINER**

Effective Basic life support (BLS) and (ACLS) training can be provided to students and public.



### OPHTHALMOSCOPY TRAINING & SIMULATION SYSTEM - OphthoSim ™

This is a hands-on simulation system that empower students to actively diagnose retinal conditions within a simulated environment. Allows students to practice monocular vision and improve their ophthalmoscopic technique. It permits tracking movements of the Ophthalmoscope and so verifies student progress and learning.



### OTOSCOPY TRAINING & SIMULATION SYSTEM - OtoSim ™

OtoSim is hands-on simulation system to train students for otoscopy skills. The tracked simulated otoscope interacts with a library of normal ear anatomy as well as hundreds of pathologies. This ensures authentic learning.



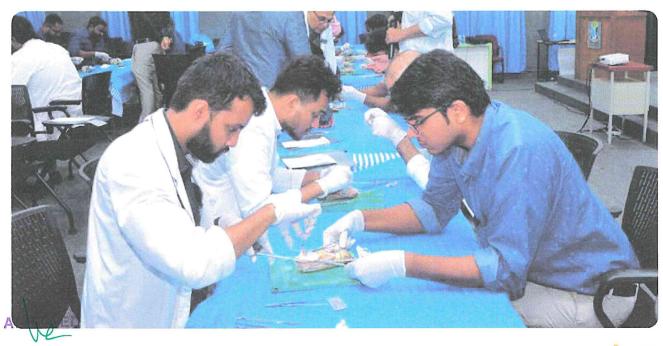
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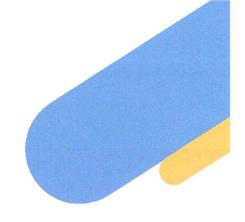
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#### **IV CANNULIZATION & SUTURING ARM**

This is a task trainer arm, made of silicone, unique in quality and design and allows realistic injection training to health care professionals.









life is why™



### YENEPOYA

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