



## SKILLS & SIMULATION CENTER OF EXCELLENCE

# REPORT

# ABOUT US

Skill and Simulation Center of Excellence (SSCE), Swami Rama Himalayan University is fully accredited state of the art medical training facility that incorporates simulation-based education highlighting the commitment of the institution in providing cutting-edge technology in the field of health care. SSCE is first Skills & Simulation Lab in Uttarakhand, to provide state of art health care education, SRHU has established a comprehensive medical & surgical Skills & Simulation Center of Excellence in Himalayan Institute of Medical sciences, which is one among the top private Medical College in India, which is also recognized as a Regional Centre for Faculty Development by National Medical Commission of India, to train medical College faculty of 19 Medical Colleges of Uttarakhand, Uttar Pradesh, Himachal Pradesh and Jammu & Kashmir.

The Skill and Simulation Center is committed to supporting and participating in offering high-quality education to individuals and assisting in their preparation to be effective and compassionate health care providers in accordance with standards established nationally. We provide realistic, risk-free environments for medical, nursing, and allied health students and professionals to develop procedure-based and decision-making skills before working with actual patients.

Our centers support competency-based curricula (e.g., National Medical Commission, Indian Nursing Council, and American Heart Association guidelines), simulation-based assessment, inter-professional teamwork, faculty/teacher leadership training, and crisis management scenarios.



# FUNCTIONS

- Clinical & Communication Skills Training
- High-Fidelity Simulation Environments
- Virtual & Mixed Reality Training
- Educational Design & Curriculum Integration
- Debriefing & Feedback Infrastructure



# OBJECTIVES

- **Develop Clinical Competencies to enhance Patient Safety & Quality of Care**
- **Integrate skill /simulation in UG /PG Curriculum & Assessment**
- **Promote Interprofessional Collaboration**
- **Conduct workshops, faculty development programs, and live practical projects**
- **Conduct educational research activities on simulation impact, reduce errors, enhance preparedness, psychological safety, and publish outcomes, and enforce quality standards**



# COMMITTEE

## Chairperson:

**Dr. Ashok K Deorari,  
Pro Vice-Chancellor, SRHU**

## Members:

**Lt. Gen. Dr. Daljit Singh,  
Dean cum Principal, HIMS**

**Dr. Renu Dhasmana,  
Vice Principal (Admin), HIMS**

**Nodal faculty from each Department**

## Member Secretary:

**Dr. Rajesh Kumar Sharma,  
Professor, HCN**



# RESOURCES

Item name	QTY.
<b>Abdominal Examination Trainer (Abdominal Examination)</b>	1
<b>Advance Breast Examination Trainer (Breast examination)</b>	1
<b>AMT (IE)Tracheal Intubation (Airway Manikin)</b>	3
<b>Arterial (Various Types of Injection Trainer)</b>	2
<b>BSS day 1 kit 5th Ed (basic surgical skill trainer)</b>	5
<b>BSS day 2 kit 5th Ed (basic surgical skill trainer)</b>	5
<b>CFPT MK 3 Advanced (Gyn exam Manikin Pelvic trainer)</b>	2
<b>EXTRL Kelly-STD (First Aid, Splinting ad Bandaging)</b>	3
<b>Infant ACLS (ACLS Infant)</b>	1
<b>Pediatric Airway Management Manikin</b>	3
<b>Infant Airway management Trainer (Airway Manikins)</b>	1
<b>Intraosseous trainer Kit Arm STK (S) intra (Various types of Injection Trainer)</b>	2
<b>Kit Arm MLTIVEIN AM-STD (Various types of Injection Trainer)</b>	10
<b>Kit PEDI MV IV Arm (S) (Various types of Injection trainer)</b>	10
<b>Injector Trainer (various types of Injection trainer)</b>	2

# RESOURCES

Item name	QTY.
<b>Knot typing trainer (basic surgical skill trainer)</b>	<b>5</b>
<b>Little Anne QCPR (BLS)</b>	<b>10</b>
<b>Little Baby QCPR (BLS)</b>	<b>4</b>
<b>Little Junior QCPR (BLS)</b>	<b>4</b>
<b>Male Rectal Examination Trainer Advanced (Male Rectal examination)</b>	<b>1</b>
<b>Mamabirthie (Light) Normal delivery</b>	<b>2</b>
<b>MC Kid (S) (ACLS Child)</b>	<b>1</b>
<b>Nerve Blocks</b>	<b>1</b>
<b>Newborn Anne (NRP Manikin)</b>	<b>5</b>
<b>Paracentesis trainer (Paracentesis)</b>	<b>1</b>
<b>Pediatric INTUB Trainer (Airway Manikin)</b>	<b>2</b>
<b>Peter PICC Line Advanced Epidural and Lumber (Urine Catheter insertion PICC)</b>	<b>1</b>
<b>Pre-Mature NRP simulator</b>	<b>1</b>
<b>Mature NRP simulator</b>	<b>5</b>
<b>Puncture Model (Lumbar Puncture)</b>	<b>1</b>
<b>Knot typing trainer (basic surgical skill trainer)</b>	<b>5</b>
<b>Little Anne QCPR (BLS)</b>	<b>10</b>
<b>Little Baby QCPR (BLS)</b>	<b>4</b>

# RESOURCES

Item name	QTY.
Little Junior QCPR (BLS)	4
Male Rectal Examination Trainer Advanced (Male Rectal examination)	1
Mamabirthie (Light) Normal delivery	2
MC Kid (S) (ACLS Child)	1
Nerve Blocks	1
Newborn Anne (NRP Manikin)	5
Paracentesis trainer (Paracentesis)	1
Pediatric INTUB Trainer (Airway Manikin)	2
Peter PICC Line Advanced Epidural and Lumber (Urine Catheter insertion PICC)	1
Pre-Mature NRP simulator	1
Mature NRP simulator	5
Puncture Model (Lumbar Puncture)	1
RA Adv Skill trainer (ACLS Adult)	2
Right Infant IV Arm (S) (Various Types of Injection Trainer)	5
Set BTLS Victim-Std (first Aid, Splinting and Bandaging)	3
SimPad PLUS Lieap (ACLS Adult)	1
SimPad PLUS System (IE) (ACLS Child)	2
Suture Tutor Plus Hands on Kit (Skin Fascia Suturing)	8
Task TRNR Enema/Cath (Urine Catheter insertion	2
Uterus Collection (Sister U, Training Tools) (IUD insertion Manikin)	2
Uterus Collection (MammU)	2

# HARDWARE

Item Name	Quantity
Computer	2
Printer	1
Projector	1
Simulation All in one System (PC)	2
Laptop (SonoSim-Ultrasound)	15

# PROGRAMS CONDUCTED / TRAININGS

S No.	Training Name	No. of trainings	No. of participants
1	<b>American Heart Association-Basic Life Support (AHA-BLS)</b>	17	342
2	<b>American Heart Association-Advanced Cardio vascular Life Support (AHA-ACLS)</b>	7	106
3	<b>American Heart Association-Heart Saver</b>	2	35
4	<b>Basic Life Support (BLS-In house)</b>	37	1293
5	<b>Advanced Cardio vascular Life Support(ACLS-In house)</b>	12	339
6	<b>Pediatric Advanced Life Support(PALS-In house)</b>	2	163
7	<b>CPR &amp; First Aid (In house)</b>	15	484
8	<b>Neonatal Resuscitation Program (NRP)</b>	11	224

# WORKSHOP

S No.	Workshops	No. of Participants
1	Mechanical Ventilation “Venti-2024”	67
2	IIIrd ISA YUVACON & XIIith UKISACON 2024 Workshop	100
3	"Safe Infusion Practices" IV Canalization	30
4	Healthcare simulation Training of Trainers Workshop	40
5	Neopocus Workshop	30
6	Crisiscardio Workshop	30
7	Virtual Reality in Health Care Education (FDP)	7
8	CNE on Integral Skill	70
9	2nd Healthcare simulation Training of Trainers Workshop	32
10	Neonatal Resuscitation Program ToT	20
11	AHA Instructor updation training and audit	8
12	Medical PG First year Orientation Program	106
13	Neonatal Resuscitation Program and Labor care guide	28
14	Child birth and newborn	24
15	ANC & Labor Care	23
16	Essential newborn care and other practice	32
17	Newborn Care	20

# INTERNATIONAL TRAINING CENTER

SWAMI RAMA HIMALAYAN UNIVERSITY IS AN AUTHORIZED INTERNATIONAL TRAINING CENTER (ITC) OF AMERICAN HEART ASSOCIATION (AHA). IT INDEPENDENTLY CONDUCT AND DELIVER AHA-CERTIFIED COURSES, INCLUDING BASIC LIFE SUPPORT (BLS), ADVANCED CARDIAC LIFE SUPPORT (ACLS), PEDIATRIC ADVANCED LIFE SUPPORT (PALS), HEART SAVER, CPR, AND FIRST AID

## KEY FEATURES OF AHA INTERNATIONAL TRAINING CENTERS

- AUTHORIZED COURSE CURRICULUM
- INSTRUCTOR & FACULTY DEVELOPMENT
- INFRASTRUCTURE & SIMULATION FACILITIES
- REGIONAL & GLOBAL ACCREDITATION
- GLOBAL REACH & IMPACT



# DEPARTMENT WISE SIMULATION TEACHINGS

S No.	Department name	Competencies	No. of teachings	No. of participants
1	Anesthesia	Basic Life Support Airway Management IV Cannulation Lumbar Puncture	16	126
2	Biochemistry	Blood Sample Collection	2	166
3	Department of Medical Education	Kangaroo Mother Care (KMC) Neonatal Emergency Triage and Manual Expression of Breastmilk Severe Acute Malnutrition	3	20
4	Emergency Medicine	Basic Life Support Airway Management ACLS Mega-Code Scenario PALS Mega code Scenario Suturing Demonstration of Normal Delivery	34	175

Curriculum for Clinical Skills				
S.No	Subject	Total Marks		
		Practical	Theoretical	Total
5	General Medicine	Pleural & Ascitic Aspiration / Abdominal assessment		
		Ryle's Tube insertion		
		Lumbar Puncture		
		Urinary Catheterization		
		Venipuncture, Intra-Cath Insertion /IV Access, Setting up IV infusion and drip		
		Intramuscular Injection, Subcutaneous Injection, Intradermal Injection, Blood Transfusion	40	1132
		Respiratory Examination		
		Examination of Cardiovascular system - Palpation and Auscultation		
		Examination of Liver & Examination of Spleen		
		Demonstration of Breast, Rectal and Vaginal		
6	General Surgery	Dressing & Bandaging		
		Knotting		
		Suturing		
		Rectal & Abdominal Examination	35	482
		Urinary Catheterization		
		IV Cannulation & IM Injection		
7	Microbiology	Hands-on Technique for Injection Administration	2	275

8	<b>Obs. &amp; Gynae</b>	<b>Obstetrical Examination &amp;</b>	52	587
		<b>PS &amp; PV Examination and</b>		
		<b>Obtain a PAP smear in a stimulated</b>		
9	<b>Orthopedics</b>	<b>Intra-Articular Injection</b>	10	91
		<b>Aspiration of Joints and drainage of</b>		
10	<b>Otorhinolaryngology (ENT)</b>	<b>Tracheostomy Tube care</b>	16	178
		<b>Dysphagia</b>		
		<b>Airway Management</b>		
		<b>Basic Suturing</b>		
11	<b>Pediatric</b>	<b>Perform Neonatal Resuscitation</b>	51	848
		<b>PALS-Scenario</b>		
		<b>NG tube insertion</b>		
		<b>IV cannulation</b>		
		<b>Basic Life Support</b>		
		<b>Intraosseous</b>		
12	<b>Pharmacology</b>	<b>Parenteral Routes</b>	8	247
13	<b>Respiratory</b>	<b>Airway</b>	1	4
14	<b>School of Pharmaceutical Sciences</b>	<b>IV cannulation and</b>	2	61
		<b>Basic Life Support</b>		
15	<b>Himalayan College of Nursing</b>	<b>PV Examination,</b>	25	958
		<b>Essential Newborn</b>		
		<b>BSE and Abdominal</b>		
		<b>Basic Life Support &amp;</b>		
		<b>IV Cannulation</b>		
		<b>Airway</b>		

# ABOUT TRAINING

## BASIC LIFE SUPPORT (BLS) PROVIDER

THE PARTICIPANTS ARE TAUGHT ABOUT TECHNIQUES OF CHEST COMPRESSION, AIRWAY MANAGEMENT, AED HANDLING AND RELIEVING OF CHOKING AMONG ADULT, PEDIATRIC AND NEONATES.



## ADVANCE CARDIOVASCULAR LIFE SUPPORT (ACLS) PROVIDER:

THE PARTICIPANTS ARE TAUGHT ABOUT TECHNIQUES AND THE SCIENCE OF RESUSCITATION, SYSTEM OF CARE AND ASSESSMENT. DURING THE COURSE TECHNIQUES OF DEFIBRILLATOR & AED, AIRWAY MANAGEMENT, HIGH QUALITY BLs, ACUTE CORONARY SYNDROME, CARDIAC ARREST, STROKE, BRADY & TACHYCARDIA, TEAM DYNAMICS, VF/PULSELESS /PEA/ASYSTOLE, MANAGEMENT OF PATIENT WITH ROSC, MANAGEMENT OF PATIENT WITH ROSC AND MEGA CODE SCENARIO.



## NEONATAL RESUSCITATION PROGRAM (NRP)

PARTICIPANTS ARE TAUGHT ABOUT TECHNIQUES OF PREPARATION FOR BIRTH, BIRTH & ROUTINE CARE, BIRTH & INITIAL STEPS AND BAG & MASK VENTILATION.



## PEDIATRIC ADVANCE LIFE SUPPORT (PALS)

THE PARTICIPANTS ARE TAUGHT ABOUT TECHNIQUES AND THE SCIENCE OF RESUSCITATION, SYSTEM OF CARE AND ASSESSMENT, SYSTEM OF CARE AND PRIMARY & SECONDARY ASSESSMENT. DURING THE COURSE TECHNIQUES OF HIGH QUALITY CPR FOR CHILD AND INFANT, INFANT CHOKING MANAGEMENT, INFANT AND CHILD CASE STUDIES OF DIFFERENT SCENARIO'S, MANAGEMENT OF RESPIRATORY EMERGENCIES WITH DIFFERENT CASE SCENARIO'S, AIRWAY MANAGEMENT, MANAGEMENT OF SHOCK EMERGENCIES WITH DIFFERENT SCENARIO'S, VASCULAR ACCESS, MANAGEMENT OF ARRHYTHMIA EMERGENCIES, MANAGEMENT OF PATIENT WITH ROSC AND MEGA CORD SCENARIO.



## CPR (CARDIOPULMONARY RESUSCITATION)

**& FIRST AID:** IN THIS COURSE WE TEACH ABOUT BASICS OF CARDIOPULMONARY RESUSCITATION (CPR), STEPS OF CPR IN ADULTS & NEONATES AND CHOKING MANAGEMENT, FIRST AID MANAGEMENT LIKE SNAKE BITE, POISONING, BLEEDING & FRACTURE MANAGEMENT. DURING PRACTICAL SESSION INSTRUCTORS DEMONSTRATED THE STEPS OF CPR, MANAGEMENT OF POISONING, BLEEDING, FRACTURE AND TRANSPORTATION OF SICK PATIENT.

