

2018

PRODUCT CATALOG




SIMULAB
ALMOST HUMAN

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A message from **Christopher Toly**

CHIEF EXECUTIVE OFFICER



To the Worldwide Medical Simulation Community,

Our goal at Simulab has always been to help the healthcare education community improve patient outcomes with clinically relevant, easy-to-use and cost-effective products. Early on we realized our most groundbreaking discoveries came when we collaborated with leading educators. From realistic soft-tissue models that replicated the familiar nuances of human anatomy—to the introduction of TraumaMan, the most widely used ATLS surgical simulator in the world—our most successful product innovations are credited to long term relationships with our customers.

It is in the spirit of listening and responding to customers that we begin 2018. We continue to improve our simulated tissues so they look, feel, suture, bleed, ultrasound and are conductive like real human tissue. Each year we innovate, designing more realistic tissue planes, landmarks and ultrasound anatomy for our trainers; and we encourage users to create even more immersive simulation scenarios. Our high-fidelity transvenous pacing simulator, PacerMan is a recent example. PacerMan responds to your pacing generator and communicates back to a simulated patient monitor. This dynamic interaction gets us even closer to *Almost Human*.

Yet, while our products are constantly improving, we strive never to leave our customers behind with useless, obsolete products. We innovate without planned obsolescence. We support and evolve each system with every new generation of products. From the New 2018 TraumaMan System (free of charge for TraumaMan Maintenance customers)—to AirwayMan and the Right Heart Catheter Module for PacerMan—we make it simple and affordable to bring existing products up to the next level of training.

At Simulab, every year we get closer to delivering *Almost Human* medical simulation. If you haven't already, we invite you touch our products and experience the difference.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Toly". The signature is fluid and cursive, written over a white background.

Christopher Toly
CEO/CTO

TraumaMan®

NEW AND IMPROVED FOR 2018

Mobile Needle and
Surgical Cricothyroidotomy

Bilateral Needle
Decompression

Bilateral Chest
Tube Insertion

New lower body form
with integrated,
quieter ventilator

Tetherless learning with
battery power option





TraumaMan Never Grows Old

TraumaMan is the most widely used surgical trainer in the world. Over 400,000 clinicians in 45 countries have completed advanced surgical training using TraumaMan over the product's rich history. Evaluated and approved for use in Advanced Trauma Life Support (ATLS) since 2001, TraumaMan remains the current choice for ATLS training worldwide, and meets the requirements for the upcoming 10th Edition.

Year after year, through collaboration with the medical community, TraumaMan continues to evolve with upgrades, technology and new procedural modules. As always, all 2018 system upgrades are available free of charge to our TraumaMan Maintenance program customers.

Become immersed in procedural realism from the first incision with TraumaMan's bleeding, multi-layered tissues, breathing responses and palpable landmarks

New mobile neck module seamlessly moves between skill stations for surgical cricothyroidotomy and tracheostomy training

The system's bilateral thoracostomy chest tube placement has true-to-life pleural resistance and tissues that are now easier to change-out between students





New bilateral needle decompression for tension pneumothorax at 2nd, 4th and 5th intercostal space

Perform pericardiocentesis to detect and aspirate pericardial effusion

Quieter new internal ventilator, designed to power procedurally relevant air responses

Incise through layers of fat, abdominal muscle and peritoneum to evaluate an intraperitoneal hemorrhage with DPL procedure



For advanced training to address patient needs, ask about our *New TraumaMan obese tissue.*



CHEST TUBE INSERTION
(Thoracostomy)



NEEDLE DECOMPRESSION



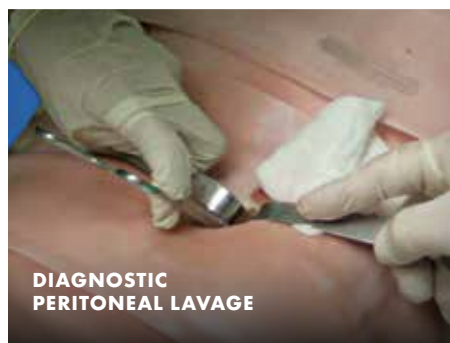
PERICARDIOCENTESIS



CRICOTHYROIDOTOMY



TRACHEOSTOMY



DIAGNOSTIC
PERITONEAL LAVAGE



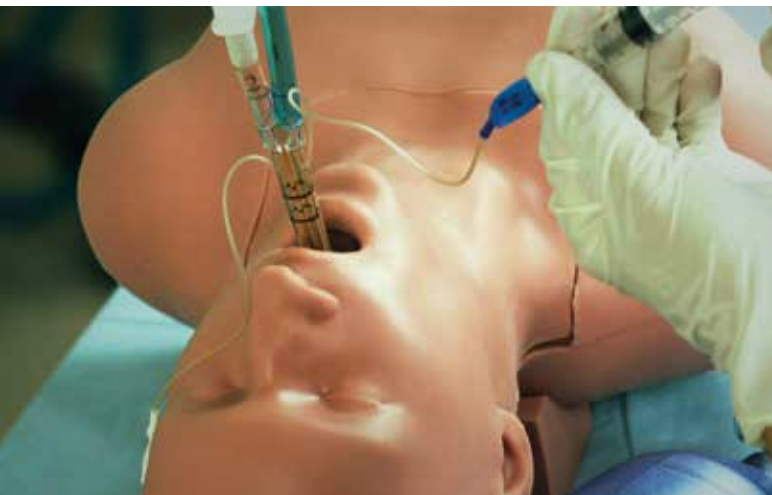
AirwayMan™

NEW

Introducing **AirwayMan**, Simulab's new complete airway management training system, with a full range of basic to difficult airway skills—from intubation to needle and surgical cricothyroidotomy. Every part of AirwayMan is carefully engineered to recreate the familiar movements, textures and delicate nuances of human anatomy. And, AirwayMan includes the same cricothyroid structures found in TraumaMan—the most widely used cricothyroidotomy trainer on the market today.

PRACTICE A WIDE ARRAY OF TECHNIQUES:

- Direct and video laryngoscopy
- Endotracheal tube insertion
- Naso-tracheal intubation
- Bag and mask ventilation techniques
- Full range of supraglottic devices
- Combi tube insertion
- Needle and surgical cricothyroidotomy



ORAL INTUBATION





AirwayMan™



FEATURES

- ▶ Movement, weight and landmarks closely mimic human anatomy
- ▶ Multi-layered, wrap-around replaceable neck skin has unsurpassed realism
- ▶ Soft palate anatomy allows visual identification during intubation
- ▶ Bifurcated bronchi for left or right intubation practice with confirmation
- ▶ Palpable landmarks and life-like tissue to incise
- ▶ Visible rise in chest area confirms when successful intubation is achieved

SKILL DEVELOPMENT

- ▶ Learn complete airway management from nasal or oral intubation—to cricothyroidotomy
- ▶ Visually confirm key landmarks: vocal cords, vallecular, and functioning epiglottis
- ▶ Practice patient positioning and access strength needed for each procedure.
- ▶ Practice proper technique for laryngoscope insertion and confirm intubation with auscultation and chest excursion
- ▶ Detect intubation errors
- ▶ Learn to perform surgical cricothyroidotomy



NASAL INTUBATION

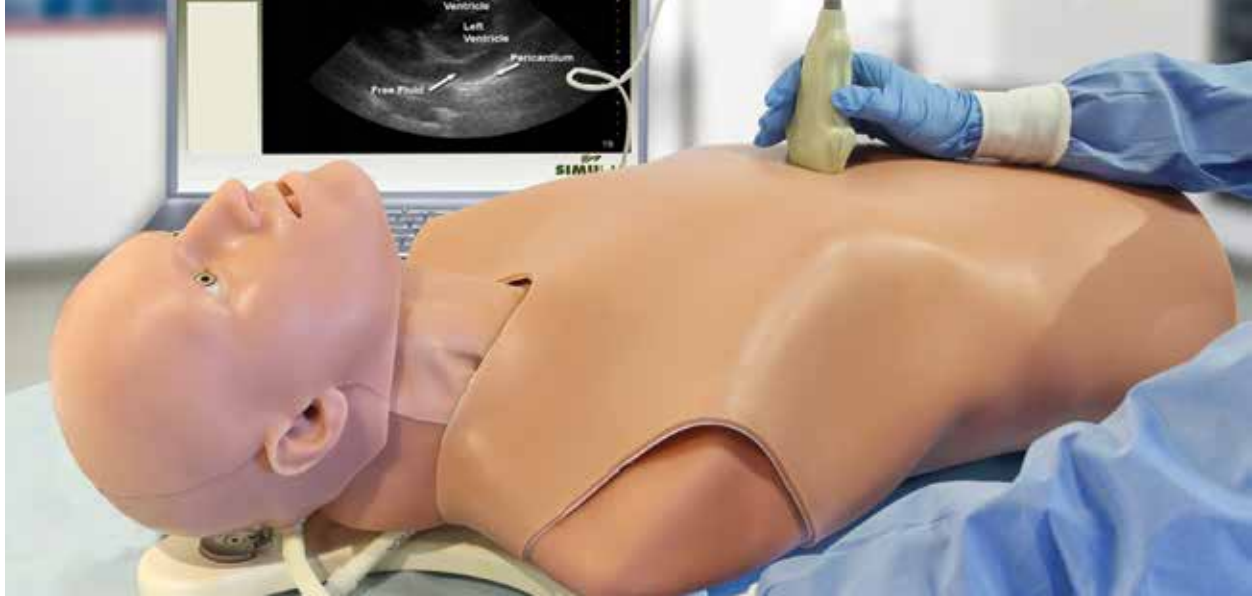


CRICOTHYROIDOTOMY



SonoSkin™

ULTRASOUND DIAGNOSTIC WEARABLE FOR FAST AND EFAST EXAM



SonoSkin is a wearable, diagnostic ultrasound training platform that's easily added to virtually any training scenario for FAST and eFAST exam learning. SonoSkin can be worn on a standardized patient, TraumaMan or your own patient simulator. With SonoSkin software, instructors can illustrate views during the FAST and eFAST exams. Our extensive pathology library includes images and videos from up to ten actual patients. SonoSkin can be set to "mentor" mode, which includes visual instruction and space for unique notations or "student" mode, which randomly selects patient scenarios for hands-on learning.

SonoSkin with FAST and eFAST Training Package
PART #SSTP-10

SonoSkin with FAST Module
PART #SSF-10

FEATURES

- ▶ Simulated ultrasound probe that plugs into a PC
- ▶ Software that allows any Windows based PC to simulate an ultrasound machine.
- ▶ Body form with embedded targets for each of the viewing windows based on the computer module selected
- ▶ Transverse and longitudinal viewing options
- ▶ Available rare pathology not commonly seen when training on real patients

SKILL DEVELOPMENT

- ▶ Understand and diagnose disease states using real patient ultrasound images and videos
- ▶ Gain a broad view of patient pathologies through reading and interpreting various normal and abnormal images and videos



ANY PC CAN SIMULATE AN ULTRASOUND MACHINE



BRINGS STANDARDIZED PATIENTS INTO THE SCENARIO



ACTUAL PATIENT IMAGES AND VIDEO



Interosseous (IO) Line Training Pad



The new **Interosseus (I/O) Line Training Pad** offers an opportunity to repeatedly run-through critical I/O insertion training techniques outside of emergency cases. At a 45 or 90 degree angle, practice pushing the needle tip through the skin until it rests against the bone, and then learn to gently drill into the bone until the hub is close to the skin. This cost-effective pad is large enough for repeated use and includes skin, bone and medullary cavity.

FEATURES

- ▶ Cost-effective model includes skin, bone and medullary cavity
- ▶ Large stable surface for repeated use
- ▶ Realistic, tactile feedback

SKILL DEVELOPMENT

- ▶ Learn to insert needle at varying angles
- ▶ Practice appropriate pressure application and drilling techniques with realistic, tactile feedback



Interosseous (IO) Line Training Pad
PART #IOP-10

Venous Cutdown

When peripheral cannulation is difficult or impossible, practitioners turn to the greater saphenous vein in the ankle and leg. Simulab's simulated **Venous Cutdown** ankle allows users to practice surgically exposing the vein and cannulating the vessel under direct vision. Our realistic, bleeding replaceable tissues allow for a two student surgical cut experience.

FEATURES

- ▶ Ankle base with all relevant landmarks
- ▶ Multi-layered tissues with epidermis and subdermal layers
- ▶ Bleeding replaceable tissue for surgical cutdown
- ▶ Full cannulation

SKILL DEVELOPMENT

- ▶ Palpate relevant landmarks to locate the saphenous vein
- ▶ Surgical incision and tie off of vein
- ▶ Full cannulation under direct vision

Venous Cutdown
PART #TM-IVB



CUTDOWN



CANNULATION



TraumaChild™

ADVANCED PEDIATRIC TRAUMA **SURGICAL SKILLS**



TraumaChild, our high-fidelity soft tissue simulator was created in the likeness of TraumaMan®, the world's most widely used surgical simulator. Simulab leveraged 15 years of global experience, customer feedback, and manufacturing advancements to bring TraumaChild to life. This simulated five-year-old breathes and bleeds; and has replaceable tissues. It is designed to help medical professionals with advanced pediatric trauma training.

SYSTEM FEATURES

- ▶ Realistic, anatomically correct five year old body form with articulating head
- ▶ Replaceable tissues bleed when cut, enhancing realism
- ▶ Airway system powered by internal ventilator; providing an airway response to the trachea, lungs & thoracic cavity
- ▶ Anatomically correct tissues are easy to replace and offer each student a first cut experience
- ▶ Designed with the course coordinator in mind with simplified cleaning and maintenance of replaceable parts

TRAUMACHILD PROCEDURES

- | | |
|-----------------------------|--------------------------------|
| ▶ Cricothyroidotomy | ▶ Pericardiocentesis |
| ▶ Percutaneous Tracheostomy | ▶ Chest Tube Insertion |
| ▶ Needle Decompression | ▶ Diagnostic Peritoneal Lavage |

PART #TCPP-11



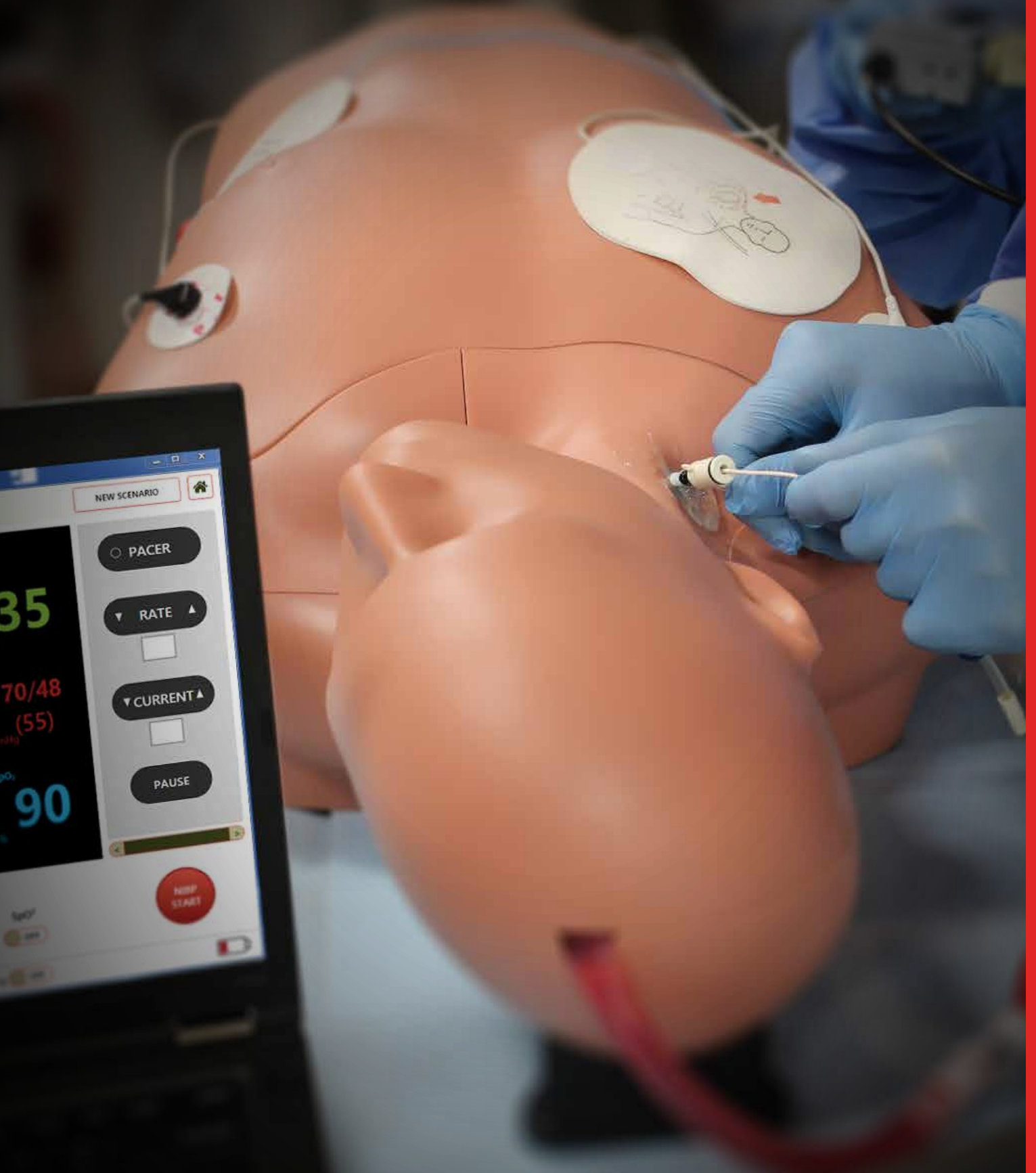
INTERNAL VENTILATOR PROVIDES AIRWAY RESPONSE



ARTICULATING HEAD PROVIDES PROCEDURAL REALISM



EASY-TO-REPLACE BLEEDING TISSUES ALLOW FIRST CUT EXPERIENCE





PacerMan™



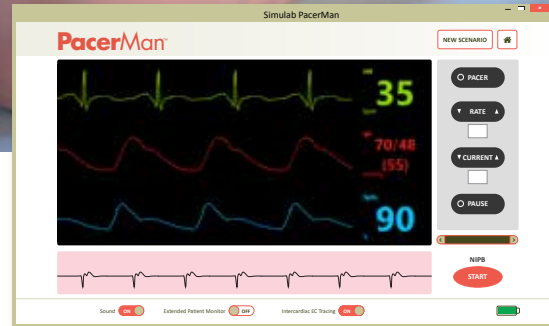
Meet **PacerMan** and get your equipment ready for training high-risk, low-frequency, emergent transvenous pacing —from initial diagnosis to capture.

Simulab's patented, SimuSensor® technology, powers a high-fidelity simulator with ultrasound compatible soft tissues. The system communicates with a simulated patient monitor for real time, immersive training.

Take your students through multiple outcomes using a blind or ECG guided approach. They'll assess waveforms and manipulate their own pacing generator, while learning to respond to the system's live physiological responses.

During scenario based training, transport PacerMan from a pre-hospital setting to the emergency room without interrupting the flow of simulation and learning. PacerMan is completely self-contained and battery powered for easy-to-use mobile simulation.

NOTE: PacerMan comes with SimuSensor® software. An optional Laptop can be included.



ASSESS REAL TIME CARDIAC MONITOR CHANGES

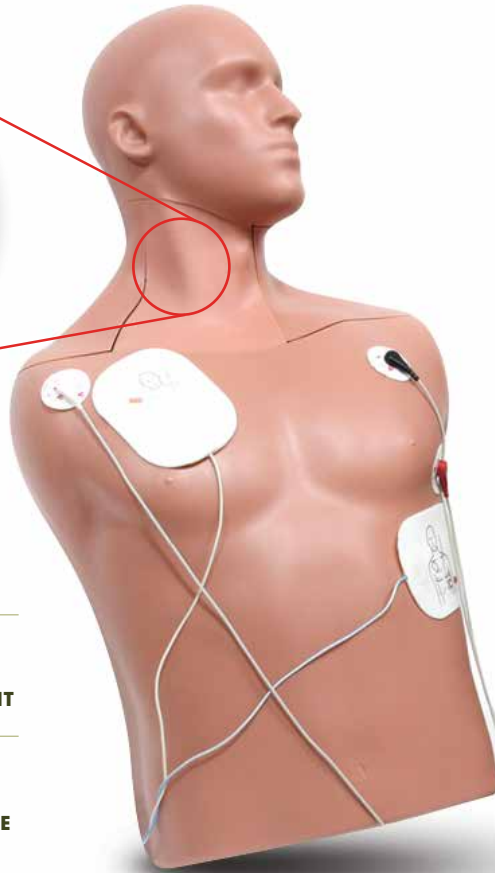
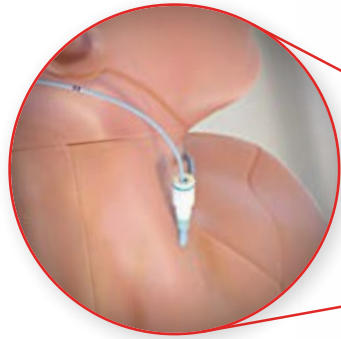
TRANSVENOUS PACING MODULE

- ▶ Customize patient vitals to display: Heart Rate, Oxygen Saturation, Arterial Blood Pressure and Non-Invasive Blood Pressure
- ▶ Seamlessly works with your own pacing generator and catheter kit
- ▶ Practice blind approach or identify pacing wire location with optional ECG tracing display
- ▶ SimuSensor® software responds directly to your pacing generator when you manipulate rate and output
- ▶ Self-priming fluid system makes setting up the system easy
- ▶ Define outcomes such as movement into the Inferior Vena Cava, Pulmonary Artery or a coiled lead and allow for real time clinical decision making
- ▶ Choose from two defibrillator interface panels for simulated transcutaneous pacing



PACERMAN FOR TEMPORARY TRANSVENOUS CARDIAC PACING

Easy-to-Use for Scenario Delivered Training



PERFORM ULTRASOUND GUIDED IJ INSERTION FOR FULL CATHETERIZATION

SEAMLESSLY WORKS WITH YOUR OWN PACING GENERATOR AND CATHETER KIT

LEARN TO MANIPULATE THE PACING GENERATOR TO ACHIEVE SUCCESSFUL CAPTURE



PRESENTS RARE COMPLICATIONS WITH REAL-TIME PATHWAYS FOR RESOLUTION

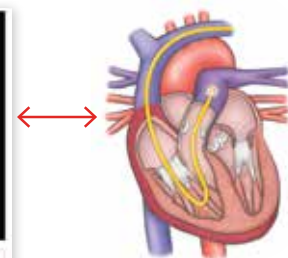
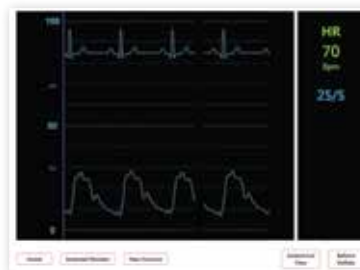


SELF-PRIMING FLUID SYSTEM MAKES SETTING UP THE SYSTEM EASY



OUR RIGHT HEART CATHETERIZATION MODULE ALLOWS USERS TO PRACTICE:

- ▶ Diagnosing conditions like pulmonary hypertension and decompensated heart failure
- ▶ Visualizing anatomical placement of catheter through anatomical renderings
- ▶ Measuring pulmonary wedge pressures
- ▶ Ultrasound guided insertion and full catheterization at the Internal Jugular Vein
- ▶ Pulmonary artery catheter insertion and full inflation of the balloon in the vessels



ANALYZING PRESSURE WAVEFORMS AS THE CATHETER MOVES THROUGH THE CHAMBERS



CentralLineMan™



CentralLineMan is the most widely used Central Venous Catheterization training solution on the market today. This flexible system offers unsurpassed value with clinically relevant anatomy, ultrasound compatible tissues, and market-leading durability. When used with rigorous training, CentralLineMan is proven to reduce patient complications from central venous catheter insertion.

THE MOST FLEXIBLE PLATFORM

CentralLineMan allows you to interchange your CVC learning experience by adding tissue variations, the Articulating Head, or Patient Positioning Tray. Replaceable tissues include:

- ▶ Normal
- ▶ Obese
- ▶ Advanced (anatomical anomaly)

SYSTEM FEATURES

- ▶ Complete procedure at the Internal Jugular and Subclavian vein sites
- ▶ Anatomically correct
- ▶ Ultrasound compatible
- ▶ Replaceable tissue variations allow for progressive skill development on diverse patient populations
- ▶ Self-sealing tissues provide the best value, in needle sticks and full catheterizations per access site, of any trainer on the market
- ▶ Needle sticks and full catheterizations do not significantly degrade the image acuity
- ▶ Arterial/venous fluid provides immediate feedback and simulates complications
- ▶ Portability allows for learners to practice simulation in settings of actual patient care



ULTRASOUND GUIDED WITH APPROPRIATE LANDMARKS



SELF-SEALING, DURABLE TISSUE FOR MULTIPLE CANNULATIONS



FULL CENTRAL VENOUS CATHETERIZATION



LANDMARKS AND ANATOMY

CentralLineMan features clinically relevant landmarks and anatomy that are palpable and visible under ultrasound. These include:

Palpable Landmarks

- ▶ Upper torso and neck
- ▶ Trachea
- ▶ Superior vena cava
- ▶ Sternocleidomastoid muscle
- ▶ Lateral border of the first rib
- ▶ Sternal/clavicular heads of the sternocleidomastoid muscle
- ▶ Clavicle
- ▶ Sternal notch
- ▶ Manubrium

Ultrasoundable Anatomy

- ▶ Internal Jugular Vein
- ▶ Brachiocephalic Vein
- ▶ Subclavian Vein
- ▶ Carotid Artery
- ▶ Subclavian Artery

CENTRALINEMAN SYSTEM

CentralLineMan System with Articulating Head
PART #: CLM-51

CentralLineMan System w/o Articulating Head
PART #: CLM-50

CentralLineMan System Components:

- ▶ CentralLineMan Body Form
- ▶ Articulating Head (optional)
- ▶ Replaceable Tissue
- ▶ Simulated Arterial/Venous Blood
- ▶ Pulse Bulb
- ▶ Venous Pressure Regulator
- ▶ Carrying Case
- ▶ User's Guide



Patient Positioning Tray

PART #: PPT-10

Add patient positioning to your training. It's perfect for Trendelenburg position!



SAVE ON TRAINING PACKAGES

CentralLineMan Package

- PART #: CLTP-51 (with Articulating Head)**
PART #: CLTP-50 (without Articulating Head)
- ▶ CentralLineMan Trainer
 - ▶ CentralLineWear Wearable Base
 - ▶ One extra replaceable tissue
 - ▶ 25 non-sterile guidewires

Deluxe CentralLineMan Package

- PART #: DCLTP-51 (with Articulating Head)**
PART #: DCLTP-50 (without Articulating Head)
- ▶ CentralLineMan Trainer
 - ▶ CentralLineWear Wearable Base
 - ▶ Normal, obese and advanced replaceable tissues
 - ▶ 25 non-sterile guidewires

Vascular Access Training Package

- PART #: CVC-51 (with Articulating Head)**
PART #: CVC-50 (without Articulating Head)
- ▶ CentralLineMan Trainer
 - ▶ FemoraLineMan Trainer
 - ▶ Extra replaceable tissue for each

CVC Family Training Package

- PART #: VAFP-31 (with articulating head)**
PART #: VAFP-30 (without Articulating Head)
- ▶ CentralLineMan Trainer
 - ▶ FemoraLineMan Trainer
 - ▶ VascularAccessChild Trainer
 - ▶ PICCLineMan Trainer
 - ▶ Extra replaceable tissue for each

FLEXIBLE PLATFORM

Add these accessories to create the most flexible training platform available.

CentralLineMan Replaceable Tissues

NORMAL TISSUE

PART #: CLMT-50

Practice complete blind/landmark or ultrasound-guided central venous catheter insertion skills.

OBESE TISSUE

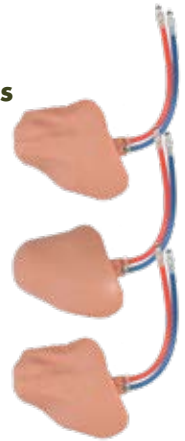
PART #: CLMOT-50

Practice on patients with thicker tissue layers, minimal landmarks, and deeper vessels—where palpation, ultrasound, and cannulation are more difficult.

ADVANCED TISSUE

PART #: CLMAT-50

Practice the advanced skills necessary during emergent situations – inserting a line on a patient with an anatomical anomaly where access options are limited.



CentralLineMan Tissue Package

PART #: CLM-TP

Enhance your training regimen with all three tissue variations. Our CentralLineMan Tissue Package features normal, obese and advanced replaceable tissues with the same life-like anatomical differences found in live patients.

CentralLineMan Non-Sterile Guidewires (25 pk)

PART #: NSG-10



CentralLineWear



CentralLineWear® is a hard shell wearable variation of the CentralLineMan body form that can be easily worn by Standardized Patients and Human Patient Simulators. It brings all the benefits of soft-tissue procedural training to your existing simulation settings. Carefully engineered to keep healthcare professionals and expensive manikins safe during interactive, hands-on learning.

Just like many of our other trainers, CentralLineWear allows you to interchange your CVC learning experience by adding tissue variations and shift to the Regional Anesthesia Nerve Block tissue using the same body form.

FEATURES

- ▶ All CentralLineMan tissue variations are seamlessly interchanged between systems
- ▶ Three replaceable tissue options allow users to gain experience in identifying and selecting appropriate access site based on patient anatomical variations
- ▶ Practice use of ultrasound guided venous cannulation

CentralLineWear System
PART #: CLW-50

CentralLineMan Normal Replaceable Tissue

PART #: CLMT-50

Practice complete blind/landmark or ultrasound-guided central venous catheter insertion skills.

CentralLineMan Guidewires (25 pk)

PART #: NSG-10

Non-sterile



Venipuncture Pads



Our ultrasound-compatible **Venipuncture Pads** are perfect for practicing venipuncture or peripheral catheterization on varying sized fluid filled veins. The three veins in the pads are slightly visible and palpable through the skin surface on one side and more obscured by a thicker tissue layer on the other side. This simulates patients with varying BMI and provides hand-eye coordination and tactile feel experience that easily transfers to patient care.

FEATURES

- ▶ Ultrasound compatible
- ▶ Three different sized veins
- ▶ Two-sided pad
- ▶ 3mm vessel depth on shallow side and 15 to 20 mm on deep side
- ▶ Veins slightly visible on shallow side
- ▶ Very durable, self-sealing tissue that, when viewed under ultrasound, does not show needle tracks
- ▶ Refill veins for multiple uses

Venipuncture Pad (4" x 4" x 1")

PART #: SVP-10

Large Venipuncture Pad (4" x 8" x 1")

PART #: LVP-10

Deep Vessel Venipuncture Pad (4" x 8" x 2")

PART #: DVP-10

Venipuncture Tissue Holder

PART #: VTH-10



FemoraLineMan™



FemoraLineMan is an ultrasound compatible task trainer, and an effective training solution for central venous or arterial access using the femoral site. This trainer utilizes the same patented technology as the highly acclaimed TraumaMan System and allows medical professionals to train with real-time ultrasound guidance during venous or arterial cannulation.

SYSTEM FEATURES

- ▶ Anatomically correct pelvis with identifiable landmarks, including anterior superior iliac spine, pubic tubercle, and inguinal ligament
- ▶ Durable replaceable tissues allow for many uses
Self sealing vessels and skin allow for multiple cannulations per tissue
- ▶ Quick set up: tissues come pre-filled with fluid, red for the artery and blue for the vein
- ▶ Vessels allow for full catheterization
- ▶ Arterial hand pump for a realistic arterial pulse

FemoraLineMan System
PART #: FLM-50

FemoraLineMan Replaceable Tissue
PART #: FLMT-50

FemoraLineMan Guidewires (25 pk)
PART #: NSG-10
Non-sterile



SAVE ON TRAINING PACKAGES

FemoraLineMan Training Package
PART #: FLTP-50

- ▶ **FemoraLineMan** Trainer
- ▶ One extra replaceable tissue
- ▶ 25 non-sterile guidewires





VascularAccessChild™



The **VascularAccessChild** is a femoral line insertion trainer and the only procedural trainer available for pediatric central line insertion. The system offers an effective ultrasound-guided solution for central venous access on a simulated five year old and includes three access sites.

SYSTEM FEATURES

- ▶ Anatomically correct, ultrasound compatible, with all relevant landmarks and vascular anatomy needed for catheter insertion
- ▶ Exceptional ultrasound imaging through repeated use
- ▶ Two colors of simulated blood differentiate the arterial and venous vessels and provide immediate feedback of unsuccessful cannulation
- ▶ Arterial pulse is present and vein realistically compresses and is visible under ultrasound

VascularAccessChild

PART #: VAC-30

VascularAccessChild Replaceable Neck Tissue

PART #: VACN-30

VascularAccessChild Replaceable Femoral Tissue

PART #: VACF-30

VascularAccessChild Training Package

PART #: VCTP-30

- ▶ VascularAccessChild Trainer
- ▶ One extra of femoral & neck replaceable tissues
- ▶ 25 non-sterile guidewires

Pediatric Non-sterile Guidewires (25 pk)

PART #: NSGP-10



PALPATE ARTERIAL PULSE



SELF-SEALING, DURABLE TISSUE FOR MULTIPLE USES



FULL CENTRAL VENOUS CATHETERIZATION



ArteriaLine Trainer

ULTRASOUNDABLE ARTERIAL LINE TRAINER



Introducing our New ultrasound **Arteria**Line Trainer. With this true-to-life hand and arm model, users can safely practice arterial cannulation and arterial puncture in order to complete continuous blood pressure measurement and blood gas sampling in critically ill patients.

FEATURES

- ▶ Pulse you can feel, with adjustable strength and beats per minute
- ▶ Simulated radial artery that gives realistic resistance when punctured
- ▶ Ultrasound compatible replaceable tissue technology with anatomical visualization
- ▶ Positive fluid flow with lifelike flashback of simulated blood to provide feedback upon successful vessel access.
- ▶ Easy set up and vessel replacement

SKILL DEVELOPMENT

- ▶ Master ultrasound guided vascular access of the radial artery
- ▶ Puncture and perform full radial artery catheterization
- ▶ Practice placing needles and guidewires and performing full catheterization
- ▶ Learn how to safely maintain an arterial line

PART #ALT-10



FULL CATHETERIZATION WITH BLOOD RETURN



LOCATE PULSE FOR BLIND TECHNIQUE



ADJUST PULSE AND MAINTAIN PRESSURE



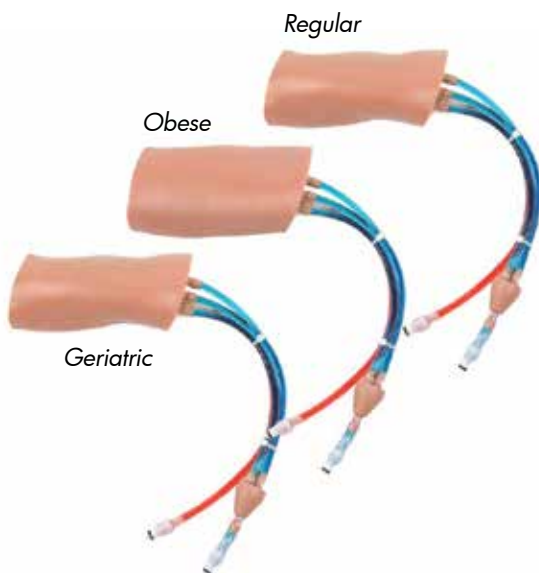
PICCLineMan™



PICCLineMan allows healthcare professionals to train using real-time ultrasound guidance during Peripheral Inserted Central Catheter (PICC) insertion. This PICC line trainer offers the best value with durable tissues that will endure repeated use. Veins of varying depth and location allow learners to develop anatomical expertise.

SYSTEM FEATURES

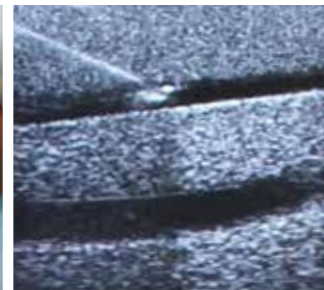
- ▶ Anatomically correct human torso and partial right arm at 90 degree of extension with landmarks
- ▶ Differentiates arterial and venous blood through pulsations
- ▶ Flashback of blue simulated blood upon successful venous access and red simulated blood upon arterial access
- ▶ Median Nerve is visible under ultrasound and adds realism in brachial vein access
- ▶ Self-sealing veins and skin for multiple cannulations
- ▶ Replaceable Normal, Obese or Geriatric tissue sets allow for multiple uses when training on aging or obese populations.
- ▶ Optional articulating head (AH-10) enhances realism.



TISSUE VARIATIONS FOR TRAINING ON AGING OR OBESE POPULATIONS



FULL CENTRAL VENOUS CATHETERIZATION



REALISTIC ULTRASOUND IMAGING



LANDMARKS AND ANATOMY

Palpable Landmarks

- ▶ Antecubital Fossa
- ▶ Clavicle
- ▶ Humeral Head
- ▶ Ribs 1-7
- ▶ Acromion
- ▶ Sternum
- ▶ 1st-3rd Intercostal Spaces

Ultrasoundable Anatomy

- ▶ Basilic Vein
- ▶ Brachial Vein
- ▶ Cephalic Vein
- ▶ Median Nerve
- ▶ Brachial Artery
- ▶ Humerus

PICCLINEMAN SYSTEM

PICCLineMan System with Articulating Head
PART #: PLM-11

PICCLineMan System w/o Articulating Head
PART #: PLM-10



PICCLineMan System Components

- ▶ **PICCLineMan** Body Form
- ▶ Articulating Head (optional)
- ▶ Replaceable Tissue
- ▶ Digital X-Rays showing Catheter insertion placement
- ▶ Simulated Arterial/Venous Blood
- ▶ Pulse Bulb/Venous Pressure Regulator
- ▶ Carrying Case
- ▶ User's Guide

Patient Positioning Tray

PART #: PPT-10

Add patient positioning to your training. It's perfect for Trendelenburg!



SAVE ON TRAINING PACKAGES

PICCLineMan Package without Articulating Head

PART #: PLMP-10

- ▶ **PICCLineMan** System
- ▶ One Extra Normal Tissue
- ▶ 25 Non-Sterile Guidewires
- ▶ Multiple X-rays Showing Catheter Insertion Placement

PICCLineMan Package with Articulating Head

PART #: PLMP-11

Deluxe PICCLineMan Package without Articulating Head

PART #: DPLMP-10

- ▶ **PICCLineMan** System
- ▶ One Extra Normal Tissue
- ▶ One Obese Tissue
- ▶ One Geriatric Tissue
- ▶ 25 Non-Sterile Guidewires
- ▶ Multiple X-rays Showing Catheter Insertion Placement

Deluxe PICCLineMan Package with Articulating Head

PART #: DPLMP-11

ACCESSORIES

PICCLineMan Replaceable Tissues

REGULAR TISSUE

Practice isolation and needle insertion on all three access sites using ultrasound guidance – increase skills and confidence in insertion depth, angle and location.

PART #: PLMT-10

OBESE TISSUE

Practice on patients with thicker tissue layers and deeper vessels - where palpation, ultrasound and cannulation are more difficult.

PART #: PLMOT-10

GERIATRIC TISSUE

Practice on patients with aged skin and smaller, superficial vessels – where needle insertion, tip placement and cannulation are more challenging.

PART #: PLMGT-10



PICCLineMan Tissue Package

PART #: PLM-TP

Our NEW PICCLineMan Tissue Package, features regular, obese and geriatric replaceable tissues.



PICCLineMan Non-Sterile Guidewires (25 pk)

PART #: NSG-20



Regional Anesthesia Trainer with **SmarTissue™**



The **Regional Anesthesia** Trainer with **SmarTissue™** is the only nerve block training solution that provides instructors and users a feedback mechanism to gain procedural accuracy and enhance the training experience during interscalene and supraclavicular nerve block skill development.

This trainer allows ultrasound practice with visualization of the most clinically relevant brachial plexus anatomy and needle tip to ensure proper manipulation, placement and proximity to the nerves. The trainer consists of a body form and replaceable tissue, each embedded with SmarTissue technology, allowing the system to connect with any PC to provide needle-to-nerve visuals and audio verification of proper technique.

ULTRASOUND ANATOMY

- ▶ Sternocleidomastoid, anterior and middle scalene muscles
- ▶ Brachial plexus
- ▶ Internal jugular vein and carotid artery

FEATURES

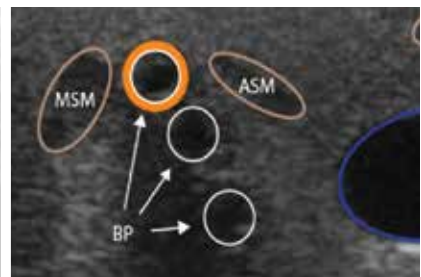
- ▶ Ultrasound guidance for accurate needle insertion
- ▶ Anatomically correct torso with landmarks for enhanced realism
- ▶ Distinct, realistic “pop” if the needle tip enters into the neural sheath
- ▶ Software shows amber when in contact and red when penetrating the nerve. Optional proximity alarm also sounds for additional training cues
- ▶ Optional articulating head increases realism



ANATOMICALLY CORRECT LANDMARKS



ULTRASOUND COMPATIBLE



AUDIO AND VISUAL NEEDLE-TO-NERVE VERIFICATION



LANDMARKS

- ▶ Sternocleidomastoid muscle
- ▶ Clavicle
- ▶ Interscalene groove
- ▶ Internal jugular and carotid artery (which pulses)
 - ▶ Anterior and middle scalene muscle
 - ▶ Brachial plexus

Regional Anesthesia Trainer Systems and Training Packages

Regional Anesthesia Block Trainer with SmartTissue comes in a variety of packages to suit your needs.

REGIONAL ANESTHESIA TRAINER

Regional Anesthesia Trainer with SmartTissue and Articulating Head

PART #: ISBS-31

- ▶ **SmartTissue** Upper Body Form
- ▶ Articulating Head
- ▶ One Replaceable **SmartTissue**
- ▶ **SmartTissue** Software
- ▶ Universal Needle Adaptor
- ▶ Arterial Pulse Hand Pump
- ▶ Carrying Case
- ▶ User's Guide

Regional Anesthesia Trainer with SmartTissue without Articulating Head

PART #: ISBS-30

SAVE ON TRAINING PACKAGES



Regional Anesthesia Trainer with SmartTissue and Articulating Head Package

PART #: ISSTP-31

- ▶ **SmartTissue** Upper Body Form
- ▶ Articulating Head
- ▶ Two Replaceable **SmartTissues**
- ▶ SmartTissue Software
- ▶ Universal Needle Adaptor
- ▶ Arterial Pulse Hand Pump
- ▶ Carrying Case
- ▶ User's Guide
- ▶ Venipuncture Pad with Nerves (4" x 8" x 1")

Regional Anesthesia Trainer with SmartTissue without Articulating Head Package

PART #: ISSTP-30

ACCESSORIES

Regional Anesthesia Trainer Replaceable SmartTissue

PART #: ISBST-30

Articulating Head

PART #: AH-10

Patient Positioning Tray

PART #: PPT-10

Add patient positioning to your training. It's perfect for Trendelenburg!



PC and ultrasound machine not included.



Regional Anesthesia Femoral Trainer with **SmarTissue™**



The **Regional Anesthesia** Femoral Trainer with **SmarTissue™** allows ultrasound practice with visualization of the most clinically relevant femoral anatomy and needle tip to ensure proper manipulation, placement and proximity to the nerves. You will receive a body form and replaceable tissue, each embedded with SmarTissue technology, allowing the system to connect with any PC to provide needle-to-nerve visuals and audio verification of proper technique.

FEATURES

- ▶ Ultrasound compatible for guidance during needle insertion.
- ▶ Anatomically correct lower torso with landmarks for placing femoral blocks
- ▶ Distinct realistic “pop” is visualized and palpated if the needle passes through the fascia layers
- ▶ SmarTissue software interprets unique signals, showing orange when in contact and red when penetrating the nerve



Regional Anesthesia Femoral Trainer with **SmarTissue**
PART #: FNBS-10

Regional Anesthesia Femoral Trainer with **SmarTissue Package**
PART #: FNBTP-10

Regional Anesthesia Femoral Replaceable **SmarTissue**
PART #: FNBST-10

Venipuncture Pads with Nerves



Our ultrasound-compatible **Venipuncture Pads** with nerves are perfect for nerve identification. Practice manipulating the needle tip around various anatomically correct structures until the nerve is located and penetrated.

FEATURES

- ▶ Three simulated vessels and nerves
- ▶ Vessels and nerves can be accessed using ultrasound guidance
- ▶ Highly durable for repeated use

SKILL DEVELOPMENT

- ▶ Acquire and target solitary nerve via ultrasound
- ▶ Simulated anesthetics can be injected to verify needle tip location and practice entire regional anesthesia procedure
- ▶ Vascular access can be practiced with positive flashback and cannulation

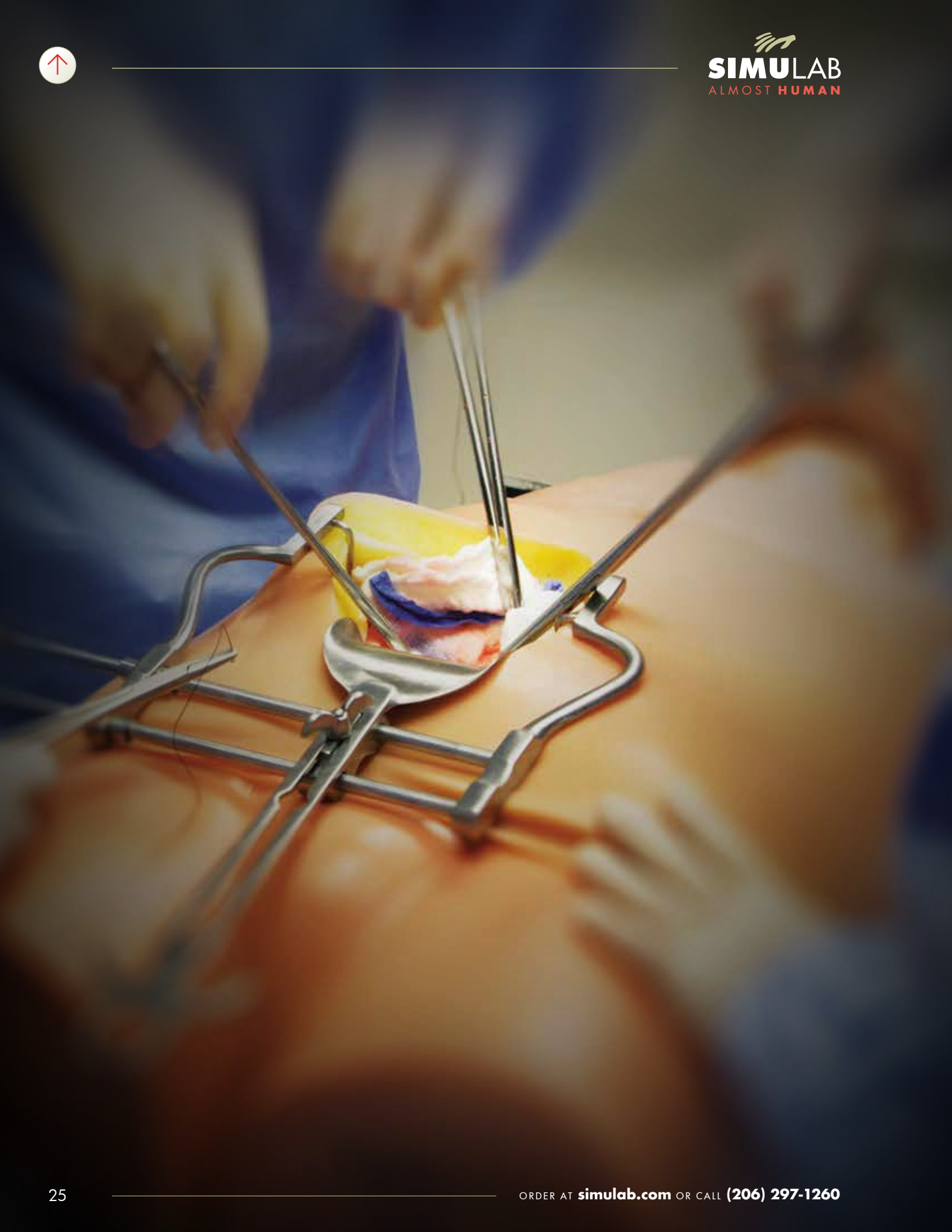
Venipuncture Pad with Nerves (4" X 8" X 1")
PART #: LVNP-10

Deep Vessel Venipuncture Pad with Nerves (4" X 8" X 2")
PART #: DVNP-10

Venipuncture Tissue Holder
PART #: VTH-10

Venipuncture Pad with Nerves Package
PART #: VPNP-10

- ▶ Large Venipuncture Pad with Nerves
- ▶ Red Concentrate and Luer Lock Syringe
- ▶ Venipuncture Tissue Holder





Lumbar Puncture/Epidural Trainer



Safely master critical techniques for lumbar puncture and spinal epidural insertion with Simulab's easy-to-use, ultrasound guided **Lumbar Puncture/Epidural** trainer. Our true-to-life simulator sits upright or in a lateral decubitus position and features the lumbar vertebrae, iliac crest, spinous process, ligamentum flavum, epidural space and dura —with a fluid filled compartment for simulated cerebrospinal fluid.

The trainer is available with four varieties of life-like, ultrasound compatible replaceable tissues that mirror significant anatomical differences found in obese, geriatric, geriatric-obese, and normal patient populations. Every tissue allows users to experience variances in disc thickness and soft tissue depth on top of the vertebrae.

LANDMARKS

- ▶ Lumbar vertebrae
- ▶ Iliac crest
- ▶ Spinous process
- ▶ Ligamentum flavum
- ▶ Epidural space and dura

FEATURES

- ▶ Position on its side (lateral decubitus) or upright sitting
- ▶ Re-fillable tissue for repeated procedures
- ▶ Durable and replaceable tissue
- ▶ Most realistic tactile feedback on the market

SKILL DEVELOPMENT

- ▶ Use ultrasound to identify landmarks
- ▶ Practice a lumbar puncture (spinal tap)
- ▶ Practice spinal and epidural injections



ULTRASOUND COMPATIBLE TISSUE



SPINAL FLUID CAN BE COLLECTED



SELF-SEALING, DURABLE TISSUE



Normal Adult LPE Trainer

PART #: LPE-20

- ▶ Lumbar Puncture/Epidural Trainer
- ▶ Normal Adult Replaceable Tissue
- ▶ Two IV Bags with IV Pole (IVB-20)
- ▶ Luer Lock Syringe
- ▶ Fill Line
- ▶ Red Concentrate

Geriatric Adult LPE Trainer

PART #: LPG-20

Geriatric Obese LPE Adult Trainer

PART #: LPGO-20

Obese Adult LPE Trainer

PART #: LPO-20

INTERCHANGEABLE TISSUE VARIATIONS

Normal Adult Replaceable Tissue

PART #: LPEN-20

Geriatric Adult Replaceable Tissue

PART #: LPEG-20

Geriatric Obese Adult Replaceable Tissue

PART #: LPEGO-20

Obese Adult Replaceable Tissue

PART #: LPEO-20

Lumbar Puncture/Epidural Tissue Package

PART #: LPE-TP

The Lumbar Puncture/Epidural Tissue Pack features normal, geriatric, obese and geriatric obese replaceable tissues.

SAVE ON TRAINING PACKAGES

Normal Adult LPE Training Package

PART #: LPNP-20

- ▶ Lumbar Puncture/Epidural Trainer with Normal Tissue (LPE-20)
- ▶ Additional Normal Tissue (LPEN-20)
- ▶ Two IV Bags with IV Pole (IVB-20)
- ▶ Luer Lock Syringe
- ▶ Fill Line
- ▶ Red Concentrate

Geriatric Adult Training Package

PART #: LPGP-20

Geriatric Obese Adult Training Package

PART #: LPGOP-20

Obese Adult Training Package

PART #: LPOP-20

DELUXE PACKAGE

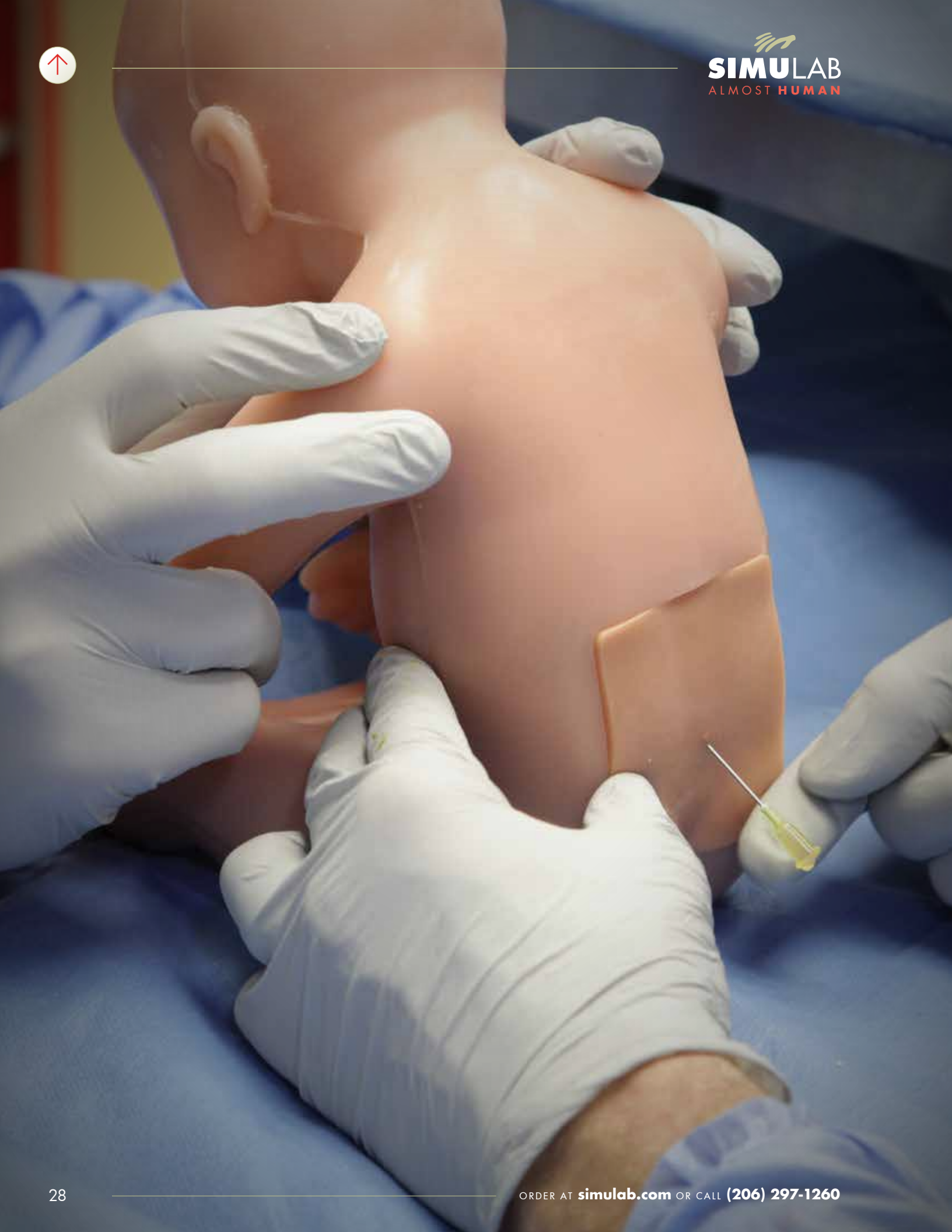
Lumbar Puncture/Epidural Deluxe Training Package

PART #: DLPTP-20



- ▶ Lumbar Puncture/Epidural Trainer with Normal Tissue (LPE-20)
- ▶ Two IV Bags with IV Pole (IVB-20)
- ▶ Luer Lock Syringe
- ▶ Fill Line
- ▶ Red Concentrate
- ▶ Obese Tissue (LPEO-20)
- ▶ Geriatric Tissue (LPEG-20)
- ▶ Geriatric Obese Tissue (LPEGO-20)







LumbarPunctureBaby



The **LumbarPunctureBaby** Trainer simulates a two week old infant that can be positioned either lateral or decubitus for ultrasound or blind technique lumbar puncture training.

FEATURES

- ▶ Articulating vertebrae creates realism when flexing the infant in knee-chest position
- ▶ L3-L4, L4-L5 and L5-S1 insertion sites
- ▶ Accurate insertion gives positive response and collection of simulated cerebrospinal fluid (CSF)
- ▶ Epidural venous plexus vein and bony spinous process provide feedback for improper placement

LANDMARKS

- ▶ Umbilicus, gluteal fold, iliac crest and L3-L5 vertebrae

LumbarPunctureBaby Trainer

PART #: LPB-40

- ▶ LumbarPunctureBaby Body Form with Hospital Bracelet
- ▶ Replaceable Tissue
- ▶ Simulated Arterial Blood
- ▶ Luer Lock Syringe
- ▶ Two IV Bags with IV Pole (IVB-10)
- ▶ Red Concentrate
- ▶ Carrying Case

LumbarPunctureBaby Training Package

PART #: LPBP-40

- ▶ LumbarPunctureBaby Trainer (LPB-40)
- ▶ Extra LumbarPunctureBaby Replaceable Tissue (LPBT-40)

LumbarPunctureBaby Replaceable Tissue

PART #: LPBT-40



**SIMULATED
ARTICULATING SPINE**



**COLLECT SIMULATED
CEREBROSPINAL FLUID**

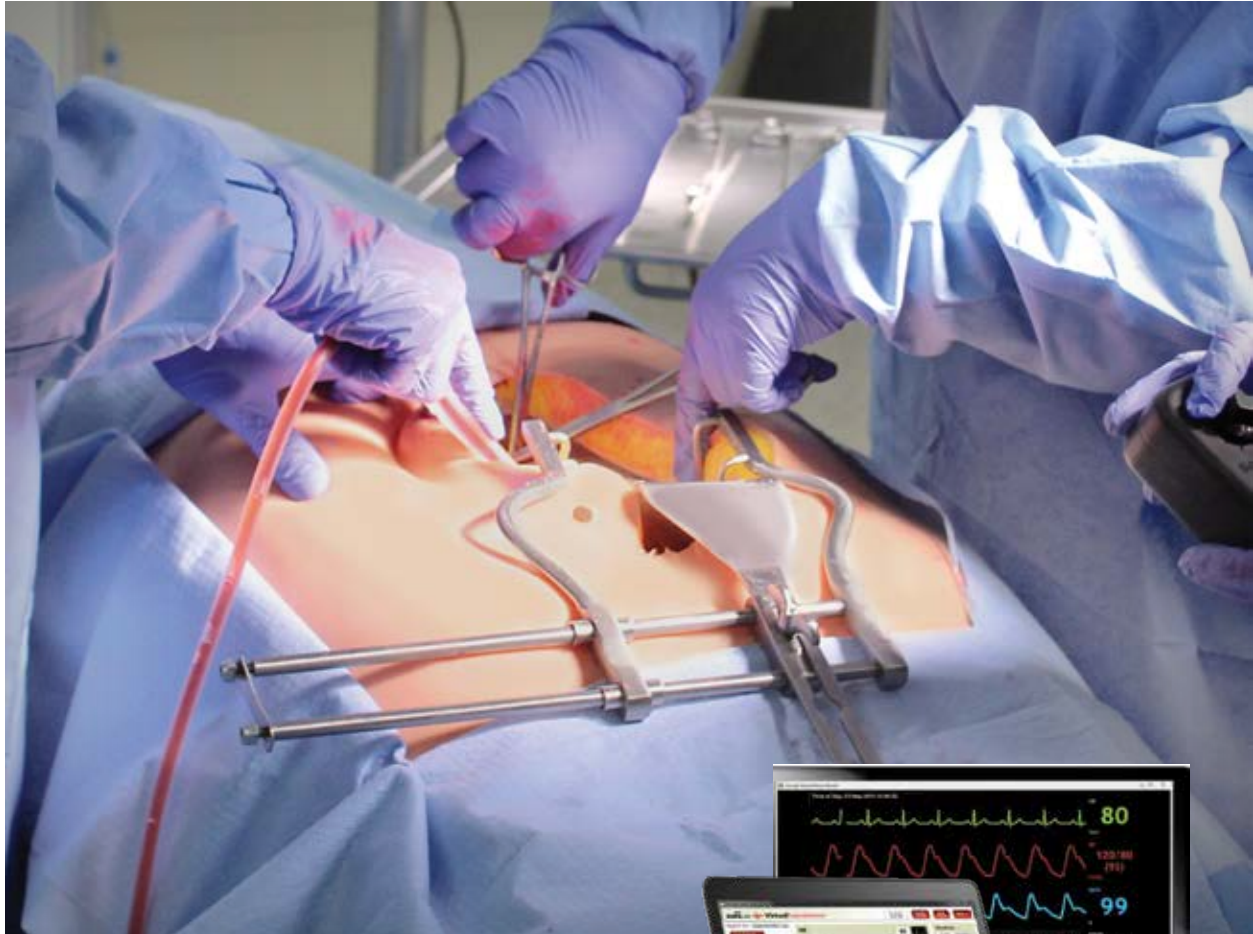


**INCLUDES EPIDURAL VENOUS PLEXUS
WITH BLOOD RESPONSE**



Surgical Abdomen Training System

TRAUMAMAN OR STAND-ALONE OPTIONS



The **Surgical Abdomen Training Platform** is a flexible solution in the growing area of team training and can be added to any simulation setting. Full surgical teams can work on improving technical, task-related skills along with critical communication and teamwork abilities during trauma.

The surgical abdomen offers an opportunity to diagnose and treat renal or aortic injury, the management of an emergency surgery, preparation for a catastrophic surgical event; and building confidence and reliability in an individual role within a team framework. It is powered by Simulab's new blood circulation system so students can assess and control blood loss with suction and an easy-to-use remote control.



VIRTUAL PATIENT MONITOR



LAPAROSCOPIC AND OPEN SCENARIOS



BLOOD FLOW AND SUCTION CONTROL



FEATURES

- ▶ Anatomically correct human abdominal cavity including vertebral column, kidneys, intestines, complete digestive tract, renal artery and aorta
- ▶ Adjustable blood flow to the operative site
- ▶ Large, replaceable abdominal tissue that can be reused for multiple scenarios
- ▶ Includes multiple catastrophic event scenarios to increase team training opportunities

SCENARIO OPTIONS

- ▶ Nicked Aorta repair
- ▶ Nicked Renal Artery repair
- ▶ Lacerated Kidney repair
- ▶ Cholecystectomy procedure with replaceable gallbladders and insufflation device

SKILL DEVELOPMENT

- ▶ Interact and communicate through emergency protocols within a large team scenario
- ▶ Diagnose and treat an aortic or renal artery injury, or a lacerated kidney
- ▶ Manage blood flow
- ▶ Locate wound site, stop the bleed and repair it



Choose the **Surgical Abdomen For TraumaMan** or our **Universal, Stand-Alone Platform**

TRAUMAMAN

Transform your TraumaMan System's abdominal area into a blood pumping surgical site by choosing the Surgical Abdomen for TraumaMan, which integrates the platform into your existing system.

UNIVERSAL

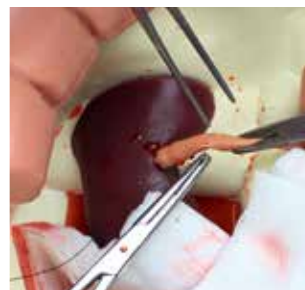
Surgical Abdomen is also available as a Universal, stand-alone version. This flexible platform accommodates a wide range of simulation settings and easily integrates with CentralineMan, our Regional Anesthesia Nerve Block, or any upper body simulator.



CHOLECYSTECTOMY



NICKED AORTA



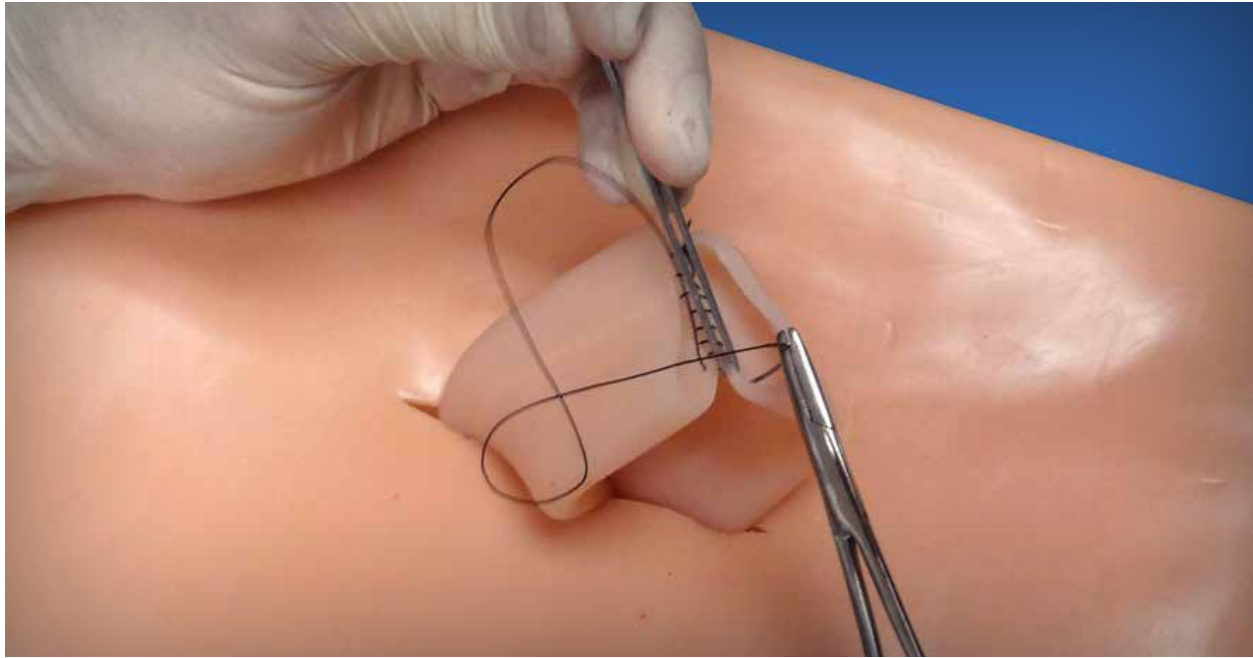
NICKED RENAL ARTERY



LACERATED KIDNEY



Laparotomy Trainer



The **Laparotomy Model** simulates open laparotomy. This simulator includes a replaceable abdominal tissue cover that includes skin, subcutaneous fat, fascia, preperitoneal fat, and peritoneum.

The base is water tight and can be filled with fluid. It also includes two alligator clips for securing internal tissue structures like a simulated intestine. Additional replaceable tissues are sold separately.

SKILL DEVELOPMENT

- ▶ Incision and closure of the midline abdominal region
- ▶ Bowel anastomosis
- ▶ Surgery in the abdominal region

Laparotomy Trainer

PART #: LPM-10
▶ Laparotomy Model

Laparotomy Training Package

PART #: LPTP-10
▶ Laparotomy Model (LPM-10)
▶ An Extra Replaceable Tissue (LPMT-10)



Laparotomy Replaceable Tissue

PART #: LPMT-10

Large Intestine

PART #: LGI-10



USED TO SIMULATE ANASTOMOSIS



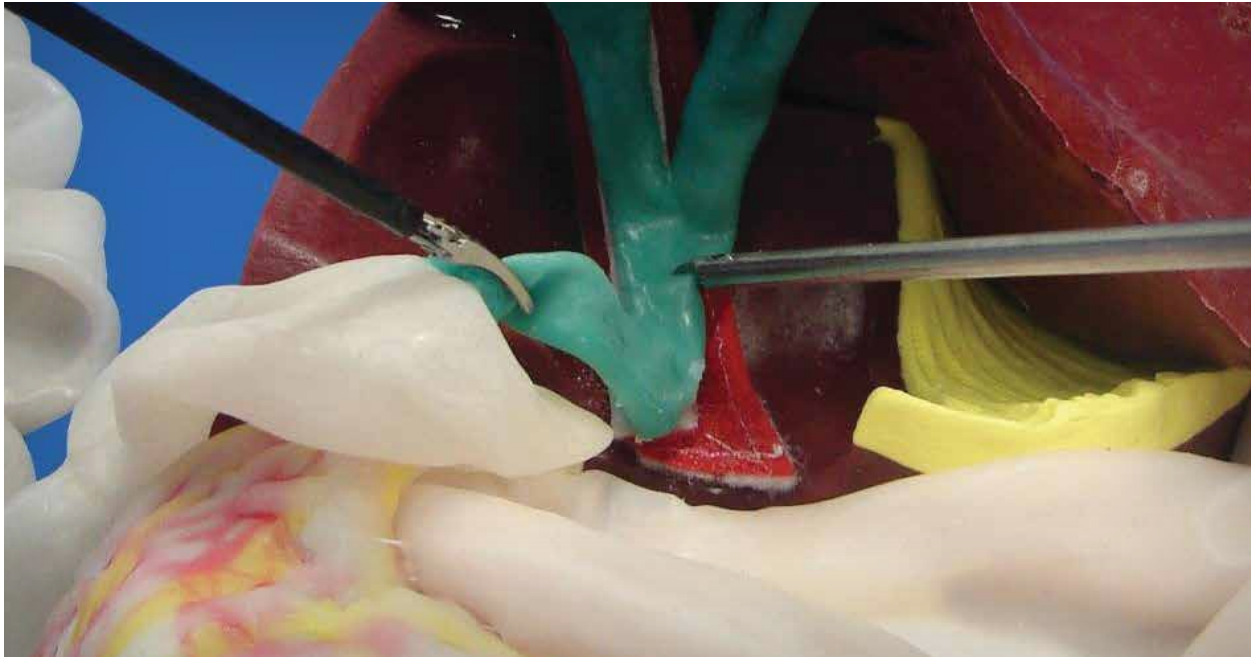
ALLIGATOR CLIPS FOR SECURING INTERNAL STRUCTURE



TISSUE LAYER



Laparoscopic Trainers



Complete Digestive Tract

PART #: SDT-10

Complete soft tissue digestive track (15 feet) which can be used with the Surgical Abdomen Training Platform, Nissen Fundoplication Model (LNF-10), any abdominal trainer or separately.



Laparoscopic Nissen Fundoplication Model

PART #: LNF-10

This procedural trainer is designed to fit inside any of Simulab's abdominal trainers for laparoscopic or open procedural training.



Surgical Abdomen Instrument Kit

PART #: SAIK-10

This kit includes the instruments necessary for surgical procedures in the abdominal region.



Laparoscopic Cholecystectomy Model

PART #: LC-10

This procedural training module is designed for the dissection and removal of the gall bladder.



Common Bile Duct Exploration Model

PART #: LCD-10

This anatomically correct model is perfect for practicing laparoscopic transcystic common bile duct exploration.







LapTrainer™ with SimuVision®



▶ RECORDS AND STORES VIDEO FILES

The **LapTrainer** with **SimuVision®** includes a highly portable, innovative laparoscopic video trainer. SimuVision® technology integrates into the trainer to create an affordable and portable platform for building laparoscopic surgical skills.

Laparoscopic Skill Set Modules, available for the LapTrainer help students prepare for ACS/APDS Surgical Skills Curriculum for Residents, as well as for the FLS Curriculum. These skill sets build basic hand-eye coordination as well as sufficiency in tool handling and precision in various surgical techniques.

FEATURES

- ▶ Portable and affordable
- ▶ Similar look and feel of an actual laparoscope
- ▶ Boom mounted, fully adjustable 1080p high definition camera with auto focus
- ▶ Sets up in less than five minutes on any PC
- ▶ Records and stores video files
- ▶ FLS and APDS compatible

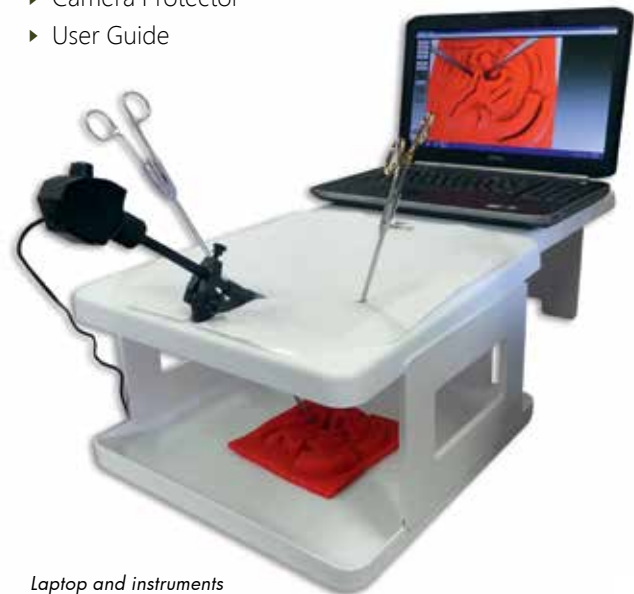
SKILL DEVELOPMENT

- ▶ Develop laparoscopic surgical skills and dexterity
- ▶ Improve eye-hand coordination
- ▶ Practice transferring, dissection and suturing

LapTrainer™ with SimuVision®

PART #: LTS-40

- ▶ LapTrainer
- ▶ Carrying Case
- ▶ Vinyl Top
- ▶ SimuVision Camera and Software
- ▶ Camera Protector
- ▶ User Guide



Laptop and instruments not included



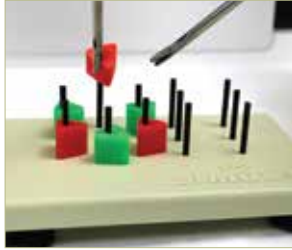
Laparoscopic Skill Set Modules

Laparoscopic Skill Set Modules are available for the LapTrainer to help students prepare for FLS Curriculum and ACS/APDS Surgical Skills Curriculum for Residents. These skill sets build basic hand-eye coordination as well as proficiency in tool handling and precision in various surgical techniques.

Laparoscopic Student Skill Set

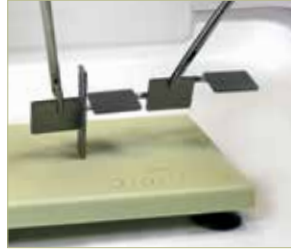
PART # SS1-10

Includes Peg Transfer Board, Key and Rope Trainer, Tissue Suture Pad, and Simulated Intestine skill task trainers.



PEG TRANSFER

Lift each disk, transfer it between hands, and place it on correct peg. Develops eye-hand coordination and ambidexterity.



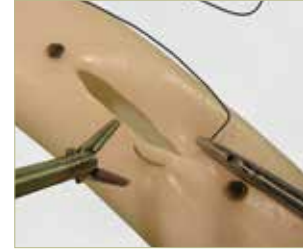
KEY AND ROPE

Turn key or thread a rope through slot. Develops 3D to 2D orientation skills, ambidexterity, and unnatural wrist rotations.



TISSUE SUTURING

Practice suturing and knot tying in a wide variety of wounds. Develops skills required for needle transferring and placement of a suture.



SIMULATED INTESTINE

Suture a soft tissue model (Simulated Intestine included) held in place using suction clips. Develops advanced suturing and immobilizing tissue skills.

APDS Basic Laparoscopic Skill Set

PART # SS2-10

Includes Bean Drop, Checkerboard, Block Move, Running String and Suture Foam skill task trainers.



BEAN DROP

Grasp beans and move them 15cm to place them in a 1-cm hole at the top of an elevated cup.



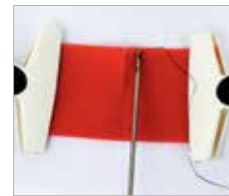
CHECKERBOARD

Arrange sixteen letters and numbers in the correct squares on the template.



BLOCK MOVE

Lift blocks using a curved needle fixed to a grasper. Move blocks 15cm and place in designated space.



SUTURE FOAM

Suture two foam squares together using a Grasper and Endostitch.



RUNNING STRING

Grasp a string only at the colored sections marked at 12-cm intervals. Skill mimics running bowel.

PACKAGE SAVINGS

LapTrainer w/ Laparoscopic Student Skill Set Package

PART #: LTS4-SS1

- ▶ LapTrainer™ with SimuVision®
- ▶ Key and Rope Trainer
- ▶ Peg Transfer Board (w/ Triangles)
- ▶ Tissue Suture Pads (2)
- ▶ Large Intestine
- ▶ Multi-Purpose Clips (4)
- ▶ Skill Set Container

LapTrainer w/APDS Basic Laparoscopic Skill Set Package

PART #: LTS4-SS2

- ▶ LapTrainer™ with SimuVision®
- ▶ Bean Drop Task
- ▶ Checkerboard Task
- ▶ Block Move Task
- ▶ Running String Task
- ▶ Suture Foam Task
- ▶ 2 Large Multi-Purpose Clips
- ▶ Skill Set Task Templates
- ▶ Skill Set Container

LapTrainer w/Skill Set Training Package

PART #: LTSTP-40

- ▶ LapTrainer™ with SimuVision®
- ▶ Laparoscopic Student Skill Set
- ▶ APDS Basic Laparoscopic Skill Set



Paracentesis Trainer



Our realistic, yet durable **Paracentesis** Trainer allows users to gain procedural accuracy as they practice performing paracentesis with or without an ultrasound. Positioned to simulate a patient sitting up at a 45 degree angle with a distended abdomen, its realistic internal anatomy includes the pubis symphysis and iliac crest.

FEATURES

- ▶ Ultrasound compatible with replaceable tissue
- ▶ Additional anatomy includes superficial epigastric vessels, partial liver and partial spleen, rectus abdominal muscles, and mesentery intestines
- ▶ Anatomical landmarks include the umbilicus, pubis symphysis, and anterior superior iliac spine
- ▶ Remove up to one liter of intraperitoneal fluid

SKILL DEVELOPMENT

- ▶ Use an ultrasound probe to minimize risks and learn to:
 - ▶ locate pocket of ascites
 - ▶ gauge the distance from skin to fluid, and avoid bowel
- ▶ Look for blood vessels beneath the skin using a vascular probe
- ▶ Drain fluid from the peritoneal cavity

Paracentesis Trainer

PART #: PAC-20

- ▶ Paracentesis Base
- ▶ Replaceable Tissue

Paracentesis Training Package

PART #: PATP-20

- ▶ Paracentesis Base
- ▶ Two Replaceable Tissues

Paracentesis Replaceable Tissue

PART #: PACT-20



ULTRASOUND COMPATIBLE TISSUE



REALISTIC INTERNAL ANATOMY



ANATOMICALLY CORRECT LANDMARKS



Thoracentesis Trainer



The Ultrasound **Thoracentesis** Trainer simulates the left side of the torso with anatomical landmarks including the scapula, ribs, diaphragm, pleural cavity and lung. The simulated lung can be seen as an echogenic structure with an inflation mechanism to adjust the size of the pleural effusion. A positive fluid flow then offers users feedback when pleural effusions are accurately accessed.

FEATURES

- ▶ Anatomically correct with proper landmarks
- ▶ Model base designed for multiple uses with replaceable tissue
- ▶ Self-sealing for multiple procedures
- ▶ Simulated lung can be seen as an echogenic structure with an inflation mechanism to adjust the size of the pleural effusion

SKILL DEVELOPMENT

- ▶ Removal of fluid from the pleural cavity
- ▶ Understanding pleural effusions
- ▶ Using ultrasound to identify fluid location

Ultrasound Thoracentesis Trainer

PART #: THM-30

- ▶ Ultrasound Thoracentesis Base
- ▶ Replaceable Thoracentesis Tissue and Replaceable Lung

Ultrasound Thoracentesis Training Package

PART #: THMP-30

- ▶ Ultrasound Thoracentesis Trainer (THM-30)
- ▶ Extra Thoracentesis Tissue (THMT-30)

Ultrasound Thoracentesis Replaceable Tissue

PART #: THMT-30



ULTRASOUND COMPATIBLE TISSUE



EXTREMELY DURABLE TISSUE FOR REPEATED USE



OPEN TOP ALLOWS CATHETER DEPTH VISUALIZATION



Arthrocentesis Trainer



Practice diagnosing and managing the presence of knee effusion with this anatomically correct **Arthrocentesis** Model. The trainer represents an extended left leg with ultrasound compatible areas, including: the patella, patella ligament, tibia, fibula, femur, synovial sac, and synovial fluid. Synovial fluid can be aspirated from a joint cavity using the medial or lateral approach. And insertion sites include suprapatellar and parapatellar.

FEATURES

- ▶ Ultrasound-compatible, replaceable tissue is refillable and durable for multiple uses
- ▶ Realistic, tactile feedback
- ▶ Bony contact sensation when needle hits patella or femur
- ▶ Fluid can be left clear or colored
- ▶ Ability to milk the suprapatellar pouch
- ▶ Ability to increase or decrease size of effusion

SKILL DEVELOPMENT

- ▶ Medial and lateral approaches
- ▶ Suprapatellar and parapatellar insertion sites
- ▶ Palpating significant anatomic landmarks

Arthrocentesis Trainer

PART #: ARC-20

- ▶ Arthrocentesis Base
- ▶ Arthrocentesis Replaceable Tissue
- ▶ Luer Lock Syringe

Arthrocentesis Training Package

PART #: ARTP-20

- ▶ Arthrocentesis Trainer (ARC-20)
- ▶ Extra Arthrocentesis Replaceable Tissue (ARCT-20)

Arthrocentesis Replaceable Tissue

PART #: ARCT-20



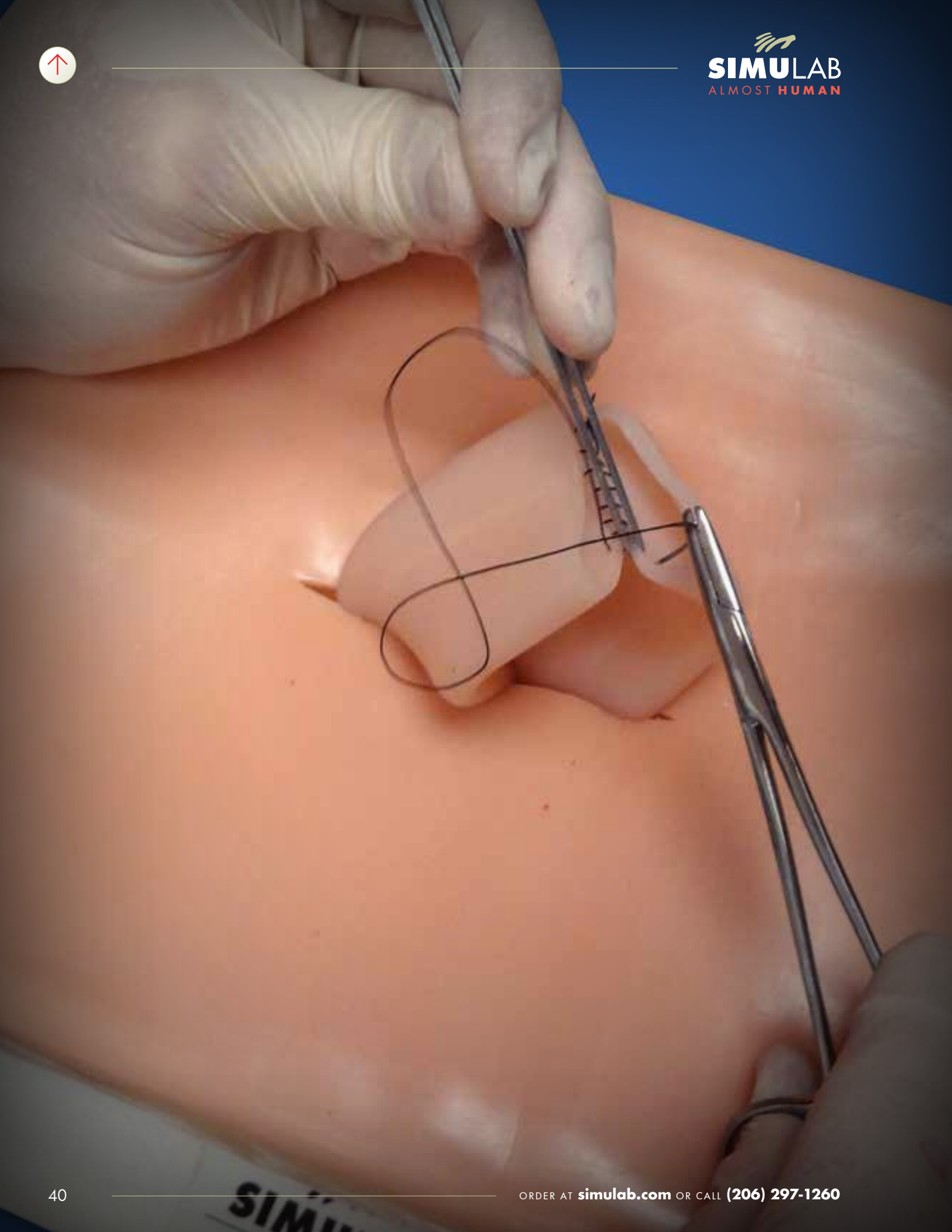
ULTRASOUND COMPATIBLE TISSUE



MEDIAL AND LATERAL APPROACHES



ADD COLOR TO FLUID





Basic Open Surgical Skills (BOSS) Trainers



ABOUT BOSS TRAINERS

Basic Open Surgical Skills (BOSS) is a flexible platform for developing basic to advanced suturing skills. The platform combines tasks to develop instrument handling, suturing, injection, and knot tying techniques. It provides an easy to clean platform for synthetic or cadaveric task modules and its ergonomic design creates a realistic tool for improving skills. BOSS can be purchased at a discount in a variety of Package Options or as a Volume Package to create a 10-Student Surgical Skills Lab.

FEATURES

- ▶ Durable multi-use platform can be used with any combination of materials
- ▶ Ergonomic design ensures correct hand positioning
- ▶ Small, portable platform perfect for simulation lab or home use

FREE

Suturing Skill Training Video

Each BOSS System comes with a suturing and knot tying curriculum DVD developed by **University of Washington educators**.

It guides the student through a series of suturing and knot-tying training exercises that prepares them for testing. Also included is an **Assessment Metrics Sheet** to help students test themselves against clinical standards.

SKILL DEVELOPMENT

- ▶ Basic to advanced suturing
- ▶ Suturing on a skin surface
- ▶ Subcuticular suturing
- ▶ Knot tying under tension
- ▶ Knot tying at depth
- ▶ Administering injections
- ▶ Instrument handling
- ▶ Wound closure techniques
- ▶ Bowel anastomosis

BOSS TRAINING PACKAGES

- ▶ BOSS Starter Package (BSP-20)
- ▶ Deluxe BOSS Starter Package (DBSP-20)
- ▶ BOSS Technical Skills Package (BTSP-10)
- ▶ BOSS OB/GYN Package (BGSP-20)

ACCESSORIES AND TISSUES

- ▶ Adjustable Tissue Tray
- ▶ Student Tissue Pack
- ▶ Suturing Instrument Kit
- ▶ Tissue Suture Pad
- ▶ Single-layer and Double-layered Intestine
- ▶ Subcuticular Suturing Pad
- ▶ Sebaceous Cyst Pad
- ▶ Lipoma Pad
- ▶ Standard and Complex Tissue Pads
- ▶ Injectable and Subcutaneous Injection Pads



Suturing Tissues

Student Tissue Package

PART #: BTP-10

Ideal for use with BOSS and includes a variety of tissues for basic suturing practice including a Subcuticular Suturing Pad, Complex Tissue Pad, Simulated Large Intestine, Tissue Suture Pad and an Injectable Tissue Pad.



Student Suturing Kit

PART #: STK-10

The Student Suturing Kit includes a Tissue Suture Pad, a Subcuticular Suturing Model, a Complex Tissue Model, a Suturing Instrument Kit, an Instructional DVD and a Self Assessment Metrics Sheet.



Tissue Suture Pad

PART #: TSP-20

Practice suturing skills with lifelike tissue structure molded in various shapes and sizes.



Directional Tissue Suture Pad

PART #: DSP-10

Work on needle-entry skills from all directions with our life-like tissue structure molded in two tissue plane variations.



Tissue Suture Pad Package

PART #: TSPP-10

Our best-selling Tissue Suture Pad lets you work with different tissue planes and depths; and the Directional Tissue Pad allows for needle practice in all directions.



Standard Tissue Pad

PART #: TSM-10

Tissue layers include skin and subcutaneous fat. It is excellent for incising and suturing.



Complex Tissue Pad

PART #: TSC-10

Tissue layers include skin, subcutaneous fat, fascia and pre-peritoneal fat. It is an excellent simulation for multi-layer dissecting and suturing.



Subcuticular Suturing Pad

PART #: SCS-10

Contains skin and subcutaneous fat. This pad is excellent for practicing subcuticular suturing.



Subcutaneous Injection Pad

PART #: SIP-10

The pad has multiple layers to represent skin, fat, and muscle to practice tissue injection techniques.



Injectable Tissue Pad

PART #: ITM-30

The Injectable Tissue Pad contains realistic skin and absorbent foam. It is an excellent simulation for practicing injections.



Adjustable Tissue Tray

PART #: ATT-10

The Adjustable Tissue Tray is compatible with BOSS. Its ergonomic design promotes proper hand placement for suturing practice.



Contoured Tissue Tray

PART #: CTT-10

Any of Simulab's tissue models can be inserted into the Contoured Tension Tray to simulate the natural curve of an arm or leg, and when it's cut it will simulate an open wound, increasing the suturing difficulty.





Perineal Repair Trainer



The **Perineal Repair** Trainer is the only soft tissue model for anatomical and procedural training of first to fourth degree perineal tears. The trainer includes vaginal and anal canals, rectovaginal fascia, skin and muscle layers, a retractable rectal sphincter and rectal mucosa; and allows for midline, mediolateral, and lateral incisions.

The replaceable tissue allows for multiple cuts and realistic suturing of the vaginal mucosa, muscle and subcutaneous layers. The tray overlays the tissue providing tension that enhances the simulation and creates a bony anatomical landmark simulating the ischial spine that allows the user to perform a pudendal block. The internal distension rod provides more realistic access to deeper tissues during 3rd and 4th degree repairs.

FEATURES

- ▶ Midline, mediolateral and lateral incisions
- ▶ Replaceable tissue allows for multiple incision site and suturing
- ▶ Most realistic tissue properties for 4th degree repair – retractable sphincter and rectal mucosa



INCLUDES ALL CLINICALLY RELEVANT LANDMARKS



PRACTICE 1ST THROUGH 4TH DEGREE REPAIRS

Perineal Repair Trainer

PART #: PRT-20

- ▶ Perineal Repair Base with Tension Rod
- ▶ Perineal Repair Replacement Tissue (PRTT-20)

Perineal Repair Training Package

PART #: PRTP-20

- ▶ Perineal Repair Trainer (PRT-20)
- ▶ Extra Perineal Replaceable Tissue (PRTT-20)

Perineal Repair Replaceable Tissue

PART #: PRTT-20



SonoMan™ Diagnostic Ultrasound Training System



SonoMan is an affordable diagnostic ultrasound training platform designed for physicians who need to become proficient in the use of trauma, emergency/bedside ultrasound in evaluating critically ill patients.

The system includes a body form embedded with 258 image locations, a simulated ultrasound probe

and up to six software modules. Instructors can pre-program pathologies, allowing users to assess, locate, and diagnose while visualizing the complete thoracic and abdominal region. As the simulated probe scans the body form, real ultrasound images are displayed on the monitor.

PART #: SNM-21
(Purchase must include one module.)

SYSTEM MODULES

(All images have Mentor Mode turned on.)



FAST Module
PART #: SNMF-21



AAA Module
PART #: SNMA-21



Echo Module
PART #: SNME-21



Renal Module
PART #: SNMR-21



Gallbladder Module
PART #: SNMG-21



eFAST Module
PART #: SNMEF-21



Other Surgical Trainers

Pop-up Trainer with Scope Holder

PART #: SPT-30

A portable box trainer with soft covers. The top can be positioned in various heights and angles. Can be used with any combination of the five spacers provided to obtain the desired height or angle.



Pop-up Trainer without Scope Holder

PART #: SPT-20

The above Pop-up Trainer (SPT-30) without a scope holder.

Torso Trainer

PART #: ST-10

This upper abdominal model provides a realistic laparoscopic experience by concealing the procedure from direct view.



Foreign Body Trainer

PART #: FBT-10

The ultrasound compatible foreign body trainer is used to practice identification of the most common objects embedded in our realistic simulated tissue. Its unique curved contour shape is similar to various human body surfaces offering a similar scanning environment. Foreign body objects include a nail, wood splinter, needle, glass shard, bullet, two BBs, and metal fragments.



Heart Model

PART #: HRT-10

Realistic heart model with accurate size and weight that can be sutured. Complete with chambers for fluid flow.



Hernia Trainer

PART #: HTM-30

The Hernia Trainer is an anatomically correct body form that allows clinicians to practice essential hands-on skills and techniques for each stage of direct (abdominal wall) or indirect (inguinal canal) surgical mesh placement. The trainer includes realistic anatomic structures and has three designated areas for mesh patch placement and fixation; and can be reused for repeated training.



Breast Probe Model

PART #: BPM-30

The ultrasound compatible breast model provides cost effective training for clinicians in the psychomotor skills associated with breast ultrasound guided recognition and fine needle biopsy.



Sebaceous Cyst Pad

PART #: SRP-10

Practice the removal of a cyst. The 4" x 4" pad has two cysts for removal practice.



Lipoma Pad

PART #: LRP-10

Ideal for practicing the surgical removal of a lipoma. The pad has two lipomas.



Simulated IV Bag Package

PART #: IVB-10 (CHILD)

PART #: IVB-20 (ADULT)

Allows the user to control the drip rate at the procedure site as desired for consistent outcomes with each procedure performed.





Simulab is committed to replicating human anatomy and turning it into realistic, easy-to-use training tools that help save lives. We design, build and manufacture medical simulators and procedural trainers for the medical education community throughout the world, including for our esteemed government and custom solutions customers.

By collaborating closely with leading educators, leveraging our 24 years of experience and constantly pushing the bounds of realistic tissue discovery, Simulab has become the market leader for realistic and affordable solutions for a vast array of educational needs.

With in-house research and development efforts focused on anatomical realism and product innovation, Simulab has contributed significant advances to the field of simulation. The TraumaMan System is the world's most widely used surgical simulator. Originally designed for use in the Advanced Trauma Life Support (ATLS) training program, it is evolving for the ATLS 10th Edition and now used to train over 40,000 learners per year around the world.



Simulab proudly serves those who have served in the United States Army, Navy, Air Force, Marines and Coast Guard as well as the Veterans Health Administration, National Institutes of Health, and other government agencies. For ease of use for all of our government customers we maintain both GSA and ECAT Contracts. TraumaMan and The Surgical Abdomen surgical training systems are mainstays of combat medicine training courses, and you will find Simulab Training solutions throughout VHA and DoD Hospitals around the world. Unique amongst most simulation companies, Simulab is fully compliant with the Buy American Act. All Simulab products are made in the United States.

Simulab builds custom solutions for medical device, pharmaceutical, and diagnostics manufacturers. Simulab can highlight the unique aspects of your product in the most convincing, durable and affordable way. Whether your needs are for clinical education or effectively demonstrating your unique clinical product Simulab can create a custom solution for you. After 24 years of experience collaborating with industry leaders to deliver soft-tissue technology, synthetic anatomy, tissue/procedural models and laparoscopic training technology, Simulab is well positioned to respond to your custom requests quickly and cost effectively.

Located in Seattle, Washington just minutes from the highly acclaimed University of Washington School of Medicine, Simulab has numerous United States and European patents granted for medical simulation technology, synthetic anatomy, and video endoscopic training technology. All of our products are completely latex-free.

ALMOST HUMAN

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