







Table of **Contents**

EMERGENCY RESPONSE | TRAUMA

- 6 TraumaMan®
- 8 AirwayMan[™]
- 10 PacerMan®
- 12 SonoSkin®
- 13 Bleeding Control Leg Trainer
- 14 Intraosseous (IO) Insertion Pad Venous Cutdown

VASCULAR ACCESS | REGIONAL ANESTHESIA

- 16 CentraLineMan®
- 18 ArteriaLine & ABG Trainer
- 20 PICCLineMan™
- 22 FemoraLineMan™
- 23 Lumbar Epidural Trainer
- 24 Regional Anesthesia Trainer
- 25 Regional Anesthesia Femoral Trainer
- 26 Venipuncture Pads

PEDIATRICS

- 28 TraumaChild®
- 30 VascularAccessChild™
- 32 LumbarPunctureBaby™

BASIC TO ADVANCED SURGICAL TRAINERS

- 34 Surgical Abdomen Training System
- 36 Laparoscopic Trainers
- 37 Laparotomy Trainer
- 38 Basic Open Surgical Skills (BOSS) Trainer
- **39** Suturing Tissues
- 40 LapTrainer with SimuVision®
- 41 Laparoscopic Skill Set Modules
- 42 Perineal Repair Trainer

CRITICAL CARE

- 44 Lumbar Puncture Trainer
- 45 Paracentesis Trainer
- 46 Thoracentesis Trainer
- 47 Arthrocentesis Trainer

SIMUGEAR

- 48 Instrument Kits Guide Wires
- 49 Fluids
 - IV Poles and Bags Hand Pump (Red Bulb) Venous Pressure Regulator Skin Conditioning Powder
- 50 Batteries Trays



A message from Christopher Toly CHIEF EXECUTIVE OFFICER

Twenty-five years ago, we set out to leverage our knowledge of innovative elastomers and create superior alternatives to the use of cadavers and animals in medical education. Our mission was to develop trainers that were more realistic than current methods, less expensive, easier to use, could be brought directly into the classrooms and expedite the transfer of skills.



Since the beginning, our team at Simulab has created many

"first for medical education" training tools, from our groundbreaking nerve block trainers to the introduction of the TraumaMan System, which is still to this day the most widely used surgical trainer in the world.

We strive to listen carefully to our customers and bring forward solutions that are the perfect balance of fidelity, ease of use, durability, and price. Over the years the medical simulation community had shared with us that they were seeking a more realistic arterial line and blood gas monitoring trainer than was currently available in the market. To provide highly effective training, they were looking for better landmark palpation, an ultrasound-compatible tissue and a reasonable cost per student. It was a tall order, but in 2018 through extensive research and development, we released our ArteriaLine & ABG Trainer that delivers the solution to these requests.

In 2018, the ATLS training community introduced their 10th Edition training program. This was a significant change for our customers, and we made a promise to meet their evolving ATLS needs and reduce the impact to them. This challenge allowed us to show our commitment to always providing an upgrade path for our products to keep up with the changing needs of educational programming. Through this commitment, we released the TraumaMan System v5. This newly updated TraumaMan is loaded with improvements and product updates to meet the needs of the new course programming.

We were proud to provide these system upgrades and enhancements free of charge to our customers under our TraumaMan Maintenance Program.

At Simulab we are thrilled to be kicking off 2019 with the release of one of the most exciting products in our history, the new AirwayMan. For years our customers have requested a realistic airway trainer that allows for oral, nasal and surgical airway, and incorporates our soft tissue technology. We met this challenge and in addition developed AirwayMan to be more durable and easier to use than the existing trainers on the market. We look forward to an opportunity to showing you AirwayMan soon, so that you can experience it for yourself.

Every year at Simulab we strive towards developing products that deliver an "Almost Human" training experience and to partnering with our customers to provide updated solutions in the evolving field of medical simulation. We are pleased to be celebrating our 25th anniversary this year and look forward to continuing that mission. If you haven't already, we invite you to see our new products and feel the Simulab difference.

Sincerely,

Christopher Toly CEO/CTO



New Products for 2019

SIMULAB'S CONTINUED INNOVATION INCLUDES NEW PRODUCTS FOR 2019







TraumaMan® System

ADVANCED EMERGENCY LIFE SUPPORT

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 training worldwide and meets the requirements for the ATLS 10th Edition.

Year after year, through collaboration with medical educators, TraumaMan continues to evolve with upgrades, technology, and new procedural modules. The new 5th version (v5) system upgrades are available free of charge to our TraumaMan Maintenance Program customers.

PRODUCT HIGHLIGHTS

- » Become immersed in procedural realism from the first incision with TraumaMan's bleeding, multilayered tissues, breathing responses and palpable anatomically correct landmarks
- » Quiet new internal ventilator, designed to power procedurally relevant air responses
- » Mobile neck module seamlessly moves between skill stations for surgical airway management
- » Versatile system with multiple add-on extensions: Articulating Head, Surgical Abdomen and FAST exam
- » Tissue and System variations with pricing programs available to support your unique educational needs

SKILLS

- » Surgical cricothyroidotomy and tracheostomy training
- » Bilateral thoracostomy chest tube placement allows for trueto-life pleural resistance and tissues that are now easier to replace between students
- » Learners can recognize correct positioning, perform surgical incision, blunt dissection through the chest wall, perforation of pleura and finger sweep, along with the ability to suture and secure chest tube during Chest Tube Insertion
- » Management of pleural effusion
- » New mechanically pressurized bilateral needle decompression for tension pneumothorax at 2nd, 4th, and 5th intercostal spaces
- » Perform pericardiocentesis to detect and aspirate pericardial effusion or cardiac tamponade
- » Incise through layers of skin, fat, fascia, abdominal muscle and peritoneum to evaluate an intraperitoneal hemorrhage with DPL training module
- » Optional Diagnostic Peritoneal Lavage and FAST Exam





NEW MOBILE SIMUCRIC SURGICAL AIRWAY TRAINER



NEW QUIET INTEGRATED VENTILATOR

BATTERY POWERED FOR TETHERLESS TRAINING



Training Packages



0

0

TraumaMan is a flexible platform with many training packages to suit your needs. Contact Simulab or visit our website to learn more.







CHEST TUBE INSERTIO (Thoracostomy)





DIAGNOSTIC PERITONEAL LAVAGE



AirwayMan[™] COMPLETE AIRWAY MANAGEMENT

Meet **AirwayMan**[™], he's going to change the way you think about and use airway trainers. Simulab has combined their expertise in soft tissue technology, their focus on durable yet replaceable components, along with ease of use and cost-effective solutions to revolutionize this market. Every part of AirwayMan is carefully engineered to recreate the familiar movements, textures and delicate nuances of human anatomy. AirwayMan includes the same cricothyroid structures found in TraumaMan—the most widely used cricothyroidotomy trainer in the world.

PRODUCT HIGHLIGHTS

VERSATILITY

- » Low cost replaceable soft airway
- » Easy set up with soft tissue replacement system
- » Integrated cricothyroidotomy
- » Multi-layered, wrap-around replaceable neck skin with unsurpassed realism

FEATURES

- » Movement, weight, and landmarks closely mimic human anatomy
- » Soft palate anatomy allows visual identification during intubation
- » Palpable landmarks and life-like tissue to incise
- » Visible confirmation when successful intubation is achieved

SKILLS

- » Learn complete airway management from nasal and oral intubation—to needle and surgical cricothyroidotomy
- » Visually confirm key landmarks: functioning epiglottis, vallecula and vocal cords
- » Practice patient positioning and access strength needed for each procedure.
- Practice proper technique for laryngoscope insertion and confirm intubation with auscultation and simulated chest excursion
- » Detect intubation errors including Right Mainstem Intubation



















Change the way you think about airway training

- » Realistic, durable, affordable and easy to use trainer
- » Replaceable teeth, soft airway, neck and facial skin tissue
- » Cricothyroid structures and neck tissue utilize proven technology from the TraumaMan System
- » Movement and weight of the trainer mimic human anatomy for an immersive experience



PacerMan® System

EMERGENT TRANSVENOUS CARDIAC PACING



Meet **PacerMan**[®] and get ready for training high-risk 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 entirely self-contained and battery powered for easy-to-use mobile simulation.

PacerMan System PART #: PM-1033

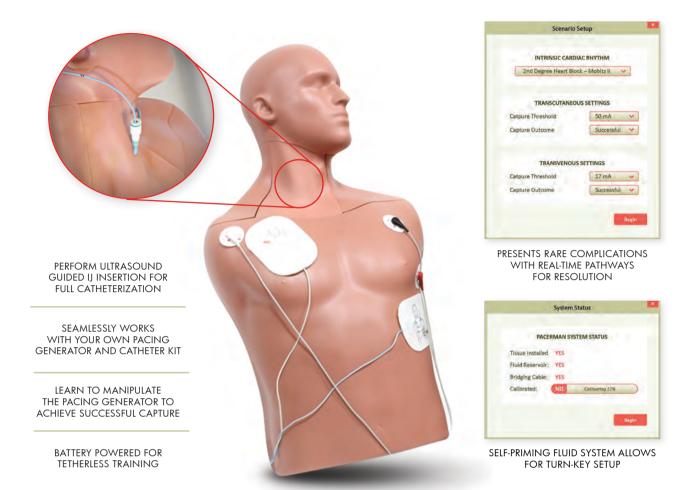
NOTE: PacerMan comes with SimuSensor software. An optional Laptop can also be purchased.



ASSESS REAL TIME CARDIAC MONITOR CHANGES

SKILLS

- » Learn to perform ultrasound-guided internal jugular insertion and full catheterization
- » Seamlessly works with your pacing generator and pacing kit for realistic training
- » Learn to manipulate the pacing generator to achieve successful capture
- Presents rare complications with real-time pathways for resolutions
- » Assess real-time cardiac monitor changes



PRODUCT HIGHLIGHTS

Includes a self-priming fluid system for easy setup and system management. Easy to use for scenario driven training with two procedural pathways for learners:

TRANSVENOUS PACING MODULE

- » Customize patient vitals to display: Heart Rate, Oxygen Saturation, Arterial Blood Pressure, and Non-Invasive Blood Pressure
- » Seamlessly works with any brand of 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
- » Define outcomes such as wire 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

RIGHT HEART CATHETERIZATION MODULE

- » Diagnose conditions such as pulmonary hypertension and decompensated heart failure
- » Visualize anatomical placement of the catheter through real-time anatomical renderings
- » Measure pulmonary wedge pressures
- » Ultrasound-guided insertion and full catheterization at the Internal Jugular Vein
- » Pulmonary artery catheter insertion and inflation of the balloon in the vessels

Analyze pressure waveforms as the catheter moves through the channels.





SonoSkin[®] Ultrasound diagnostic wearable for fast & efast exam



SonoSkin[®] is a wearable training platform that provides diagnostic ultrasound imagery 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 real 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.

PRODUCT HIGHLIGHTS

- » Software that allows any Windows based PC to simulate an ultrasound machine
- » Simulated ultrasound probe that plugs into a PC's USB port
- » Wearable skin with embedded targets for each of the viewing windows based on the computer module selected
- » Transverse and longitudinal viewing options
- » Rare pathology not commonly seen when training on real patients is available

SKILLS

- » 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



SonoSkin with FAST & eFAST Training Package PART #: SSTP-20



ANY PC CAN SIMULATE AN ULTRASOUND MACHINE



BRINGS STANDARDIZED PATIENTS INTO THE SCENARIO



ACTUAL PATIENT IMAGES AND VIDEO

Bleeding Control Leg Trainer

PACKABLE WOUND TRAINER

Simulab's **Bleeding Control Leg Trainer** is a simple, cost-effective, easy to use packable wound trainer that offers simulated hemostatic wounds. The trainer presents a durable outer skin layer for repetitively executing critical patient treatment such as wound packing, compression and tourniquet application with any off the shelf device. Can be used anywhere, anytime for a variety of wound packing events.



PRODUCT HIGHLIGHTS

- » Realistic and durable leg anatomy and skin
- » Two different wound beds available: a laceration or stab wound and a large caliber gunshot wound (GSW) with both entrance and exit points
- » The GSW contains a bony landmark that allows instruction to "pack to the bone"
- » Realistic and durable skin for multiple student uses

SKILLS

- » Wound packing
- » Use of hemostatic gauzes
- » Compression
- » Tourniquet application

Bleeding Control Leg Trainer **PART #: BCLT-10** Simulated Blood Pool (2-Pack) **PART #: SBP-10**

*Tourniquet not included.



Intraosseous (IO) Insertion Pad

NEEDLE INSERTION TRAINING

The Intraosseous (IO) Insertion Pad provides

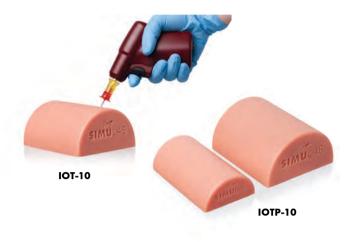
an opportunity to repeatedly run-through critical IO insertion training techniques outside of emergency cases. Practice pushing the needle tip through the skin until it rests against the bone, and gently drill into the bone until the hub is close to the skin. This cost-effective pad is large enough for repeated use and includes soft tissue and cancellous bone.

PRODUCT HIGHLIGHTS

- » Cost-effective model includes soft tissue and cancellous bone
- » Large stable surface for repeated use
- » Realistic, tactile feedback
- » Choose from Pediatric, Adult or combination package

SKILLS

- » Learn to insert the needle at varying angles
- » Practice appropriate pressure application and drilling techniques



Intraosseous (IO) Insertion Pad **PART #: IOT-10** Intraosseous (IO) Pediatric Insertion Pad **PART #: IOPT-10** Intraosseous (IO) Training Package **PART #: IOTP-10**

Venous Cutdown Ankle

SAPHENOUS VEIN CUTDOWN AND CANNULATION

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. The realistic, bleeding replaceable tissues allow for two students to learn through a first-cut experience.

PRODUCT HIGHLIGHTS

- » Ankle base with all relevant procedural landmarks
- » Multi-layered tissues with epidermis and subdermal layers for surgical cutdown



PERFORM SURGICAL CUTDOWN AND CANNULATION

SKILLS

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



IV Ankle Cutdown **PART #: TM-IVB** IV Ankle Cutdown Tissue Pack (2 Student) **PART #: TM-IV**





CentraLineMan®

MOST WIDELY USED CVC TRAINER WORLDWIDE

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

PRODUCT HIGHLIGHTS

- » Complete procedure at both the Internal Jugular, Supraclavicular 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 of any trainer on the market, in needle sticks and full catheterizations
- » Arterial/venous fluid provides immediate feedback and simulates complications

ULTRASOUND GUIDED WITH APPROPRIATE

LANDMARKS

 Portability allows learners to practice in settings of actual patient care



SELF-SEALING, DURABLE TISSUE FOR MULTIPLE CANNULATIONS



FULL CENTRAL VENOUS CATHETERIZATION

SKILLS

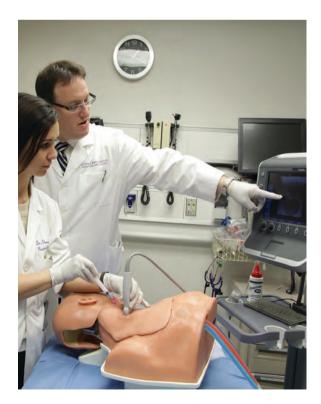
- » Full central venous catheterization using ultrasound guided or blind/landmark insertion approaches at the subclavian, supraclavicular, and internal jugular access sites
- » Place patient in the proper position per access site standards
- » Identify and select the appropriate access site based on patient anatomical variations
- Palpate external landmarks to identify vessel » location
- » Identify unsuccessful vessel access by fluid feedback representing arterial puncture

LANDMARKS & ANATOMY

Clinically relevant landmarks and anatomy that are palpable and visible under ultrasound including:

PALPABLE LANDMARKS

- » Upper torso and neck
- » Trachea
- Sternocleidomastoid muscle
- » Lateral border of the first rib
- » Sternal/clavicular heads
- ULTRASOUNDABLE
- » Internal Jugular Vein
- » Brachiocephalic Vein
- » Subclavian Vein
- » Clavicle
- » Sternal notch
- » Manubrium
- » Carotid Artery
- » Subclavian Artery





CentraLineMan®

- COMPONENTS INCLUDE
- 1 CentraLineMan Body Form
- 1 Replaceable Tissue
- 1 Simulated Arterial/Venous Blood
- 1 Articulating Head (optional)

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

CentraLineMan System with Articulating Head PART #: CLM-51



CentraLineMan® Replaceable **Tissues**

NORMAL TISSUE

Practice complete blind/landmark or ultrasound-guided central venous catheter insertion skills. PART #: CLMT-50

OBESE TISSUE

Practice on patients with thicker tissue layers, minimal landmarks, and deeper vessels. PART #: CLMOT-50

ADVANCED TISSUE

Practice the advanced skills necessary during emergent situations – inserting a line on a patient with an anatomical anomaly. PART #: CLMAT-50

Non-Sterile Guidewires (25 Pack) PART #: NSG-10



Training Packages

CentraLineMan is a flexible platform with many training packages to suit your needs. Contact Simulab or visit our website to learn more.



Ultrasound ArteriaLine & ABG Trainer

RADIAL ARTERY CANNULATION AND ARTERIAL BLOOD GAS SAMPLING

Simulab's **Ultrasound ArteriaLine and ABG Trainer** allows educators to train ultrasound guided radial artery catheterization and perform ABG sampling. This trainer brings medical simulation to new levels with variable pulse strength and rate, a two-part system consisting of a replaceable artery and tissue to provide crisp ultrasound imaging and durability for multiple uses before changing out either part. The system is self-priming, offers palpable landmarks, and arterial pressure that fills an ABG sampling syringe.

PRODUCT HIGHLIGHTS

- » Artery is palpable at wrist and descends as it travels towards the elbow
- » 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 low cost per student vessel replacement
- » Self-priming artery with adjustable pulse rate and pulse strength
- » Realistic resistance of tissue and artery wall during injection
- » Distinct pop of the artery wall during insertion

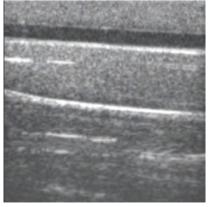
SKILLS

- » Master ultrasound guided or blind palpation technique for vascular access of the radial artery
- » Practice placing needles and passing the guidewire while performing full catheterization
- » Learn to safely maintain an arterial line
- » Practice arterial blood gas sampling

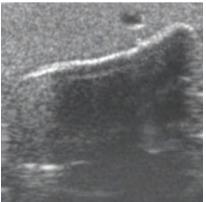




FULL CATHETERIZATION WITH ULTRASOUND GUIDANCE



LONGITUDINAL OR TRANSVERSE ULTRASOUND VIEW



REALISTIC ULTRASOUND IMAGING OF RADIAL ARTERY





Ultrasound ArteriaLine & ABG Trainer

COMPONENTS INCLUDE

- 1 Ultrasound ArteriaLine & ABG Trainer
- 1 Replaceable Tissue
- 1 10-Pack of Replaceable Arteries
- 1 Simulated Arterial Blood

Ultrasound ArteriaLine & ABG Trainer **PART #: ALT-10**

Ultrasound ArteriaLine & ABG Trainer Replaceable Components

Ultrasound ArteriaLine Replaceable Tissue **PART #: ALTT-10**

ArteriaLine Replaceable Arteries (10-Pack) **PART #: ALTA-10**

SHARP ULTRASOUND IMAGING

Strength

401

Drain

Power

VARIABLE PULSE STRENGTH AND RATE

PALPABLE LANDMARKS

ARTERIAL PRESSURE THAT FILLS AN ABG SAMPLING SYRINGE

BATTERY POWERED FOR TETHERLESS TRAINING



Training Packages

Contact Simulab to learn more about our ArteriaLine Trainer packages and maintenance programs.



PICCLineMan[™]

PERIPHERAL INSERTION, CATHETERIZATION AND CARE

PICCLineMan™ allows healthcare professionals to train using real-time ultrasound guidance during Peripheral Inserted Central Catheter (PICC) insertion. This PICC 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.

PRODUCT HIGHLIGHTS

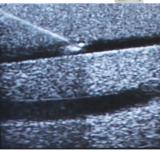
- » Anatomically correct human torso and partial right arm at a 90 degree extension with landmarks
- » Differentiates arterial and venous blood through pulsations
- » Flashback of blue simulated blood upon successful venous access and red simulated blood upon arterial access
- » Median Nerve is visible under ultrasound and adds realism in brachial vein access
- » Self-sealing veins and skin for multiple cannulations
- » Replaceable tissue variations allow for progressive skill development of diverse patient populations
- » Optional articulating head (AH-10) enhances realism

SKILLS

- » Complete PICC line procedure including guidewire insertion, dilation, and full cannulation
- » Peripherally Inserted Catheterization using Basilic, Brachial, or Cephalic Veins
- Normal, Obese, and Geriatric tissue options allow assessing patient variance in vessel depth and sizing
- » Using ultrasound guidance during catheter placement
- » Palpable anatomic landmarks clinically relevant for measuring catheter length
- » Multiple X-Rays provided digitally to support student's pathway in predicting optimum SVC tip position



FULL CENTRAL VENOUS CATHETERIZATION



SHARP ULTRASOUND IMAGING

LANDMARKS & ANATOMY

ULTRASOUND ANATOMY

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

PICCLineMan[™] COMPONENTS INCLUDE

- 1 PICCLineMan Body Form
- 1 Replaceable Tissue
- 1 Simulated Arterial/Venous Blood
- 1 Pulse Bulb/Venous Pressure Regulator
- 1 Articulating Head (optional)

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

PICCLineMan System with Articulating Head **PART #: PLM-11**

PICCLineMan[™] Replaceable Tissues

NORMAL TISSUE Practice isolation and needle insertion on all three access sites using ultrasound guidance

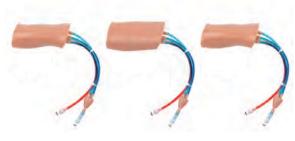
PART #: PLMT-10 OBESE TISSUE

Practice on patients with thicker tissue layers and deeper vessels. **PART #: PLMOT-10**

GERIATRIC TISSUE

Practice on patients with aged skin and smaller, superficial vessels. PART #: PLMGT-50

Non-Sterile Guidewires PICC Line (25 Pack) **PART #: NSG-20**



Training Packages

Contact Simulab or visit our website to learn more about our PICCLineMan package savings.



PLMOT-10

PLMGT-50





FemoraLineMan[™]

VENOUS AND ARTERIAL INSERTION AND FULL CATHETERIZATION



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

PRODUCT HIGHLIGHTS

- » Anatomically correct pelvis with identifiable landmarks, including anterior superior iliac spine, pubic tubercle, and inguinal ligament
- » 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
- » Arterial hand pump for a realistic arterial pulse

FemoraLineMan PART #: FLM-50

FemoraLineMan Replaceable Tissue **PART #: FLMT-50** Non-Sterile Guidewires (25-Pack) **PART #: NSG-10**

Training Packages

Learn more about our FemoraLineMan package savings by visiting our website.

SKILLS

- » Develop psychomotor skills required for obtaining visualization during cannulation
- » Visualize arterial pulse and venous compression
- » Identify the anatomical location of target vessel
- » Visualize needle cannulation, threading guidewire, and catheter placement
- Practice femoral arterial puncture, catheter insertion or blind/landmark techniques



Lumbar Epidural Trainer

ULTRASOUND GUIDED EPIDURAL INSERTION AND FULL CATHETERIZATION



Safely master critical techniques for spinal epidural insertion and catheterization with Simulab's easy-to-use, ultrasound-guided **Lumbar 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. The trainer is available with three varieties of lifelike, ultrasound compatible replaceable tissues that mirror significant anatomical differences found in obese, geriatric, and normal patient populations. Every tissue allows users to experience variances in disc thickness and soft tissue depth on top of the vertebrae.

PRODUCT HIGHLIGHTS

- » Replaceable tissue variations allow for progressive skill development of diverse patient populations
- » Highly durable replaceable tissue for repeated procedures
- » Most realistic tactile feedback on the market

SKILLS

- » Use ultrasound and palpation to identify landmarks
- » Practice spinal and epidural injections from insertion to full catheterization
- Experience the presence and absence of resistance, and tapping the plunger until loss of resistance is present
- » Ability to measure and insert the catheter to the appropriate depth; remove the needle and secure
- » Practice the procedure in the left lateral decubitus or sitting position



Lumbar Epidural Trainer COMPONENTS INCLUDE

- 1 Lumbar Epidural Trainer
- 1 Normal Adult Replaceable Tissue
- 2 IV Bags with IV Pole (IVB-20)
- 1 Luer Lock Syringe
- 1 Fill Line
- 1 Red Concentrate

Lumbar Epidural Trainer **PART #: LE-30**



Lumbar Epidural Trainer Replaceable Tissues

NORMAL ADULT REPLACEABLE TISSUE PART #: LENT-30

GERIATRIC ADULT REPLACEABLE TISSUE PART #: LEGT-30

OBESE ADULT REPLACEABLE TISSUE PART #: LEOT-30



Regional Anesthesia Trainer

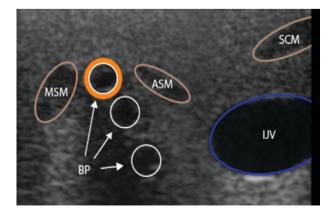
REALISTIC ANATOMY WITH REAL-TIME SYSTEM FEEDBACK



The **Regional Anesthesia Trainer with SmarTissue**[™] is the only nerve block training solution that provides a feedback mechanism to gain procedural accuracy and enhance the training experience during interscalene and supraclavicular nerve block skill development. The trainer allows ultrasound practice with visualization of clinically relevant brachial plexus anatomy and needle tip to ensure proper manipulation, placement and proximity to the nerves. The trainer is embedded with SmarTissue technology enabling it to connect with any PC to provide needle-to-nerve visuals and alarm feedback for of proper in technique.

PRODUCT HIGHLIGHTS

- » Ultrasound guidance for accurate needle insertion
- » Anatomically correct torso with landmarks for enhanced realism
- » Distinct, realistic "pop" if needle tip enters 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



SKILLS

- » Psychomotor skills associated with targeting the nerves of the brachial plexus
- » Needle insertion using Interscalene and/or Supraclavicular approaches
- » Visualize needle tip positioning, proximity and placement verification
- » Recognition of nerve bundles, arteries, and veins

Regional Anesthesia Trainer with SmarTissue w/o Articulating Head **PART #: ISBS-30**

Regional Anesthesia Trainer with SmarTissue with Articulating Head **PART #: ISBS-31**

Regional Anesthesia with SmarTissue/ Vascular Access Training Package includes ISBS-30 with CentraLineMan Replaceable Tissue (CLMT-50) and Articulating Head PART #: RAVAI-31

Regional Anesthesia Femoral Trainer

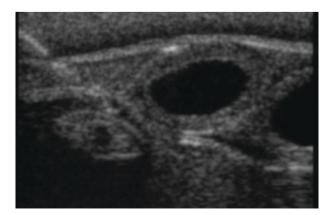
SMARTISSUE PROVIDES VISUAL AND AUDIO PROCEDURAL VERIFICATION



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. The system includes 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 improper technique.

PRODUCT HIGHLIGHTS

- » Ultrasound compatible for guidance during needle insertion
- » Anatomically correct lower torso with landmarks for placing femoral blocks
- » Distinct realistic "pop" is visualized and palpated when the needle passes through the fascia layers
- » Software shows amber when in contact and red when penetrating the nerve



SKILLS

- » Psychomotor skills associated with targeting femoral nerves for regional anesthesia nerve blocks
- » Needle insertion using femoral approach
- » Can be injected with simulated anesthesia, which is naturally expelled for repeated use
- » Transducer and needle manipulation and movement
- » Visualize needle tip positioning, proximity and placement verification
- » Recognition of nerves, arteries, veins and fascia layer anatomy

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

Regional Anesthesia/Vascular Access Femoral Training Package, includes FNBS-10 and FemoraLineMan Replaceable Tissue (FLMT-50) PART #: RAVAF-10



Venipuncture Pads

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

PRODUCT HIGHLIGHTS

- » Ultrasound compatible
- » Three different sized veins in a two-sided pad
- » Durable, self-sealing tissue
- » Easily refill veins for multiple uses

SKILLS

- » Obtaining intravenous access
- » Withdrawing fluids
- » Inserting a catheter into a peripheral vein
- » Using ultrasound guidance





Large Venipuncture Pad (4"x8"x1") **PART #: LVP-10** Deep Vessel Venipuncture Pad (4"x8"x2") **PART #: DVP-10**

Venipuncture Tissue Holder PART #: VTH-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.

PRODUCT HIGHLIGHTS

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

SKILLS

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



Large Venipuncture Pad with Nerves (4"x8"x1")
PART #: LVNP-10

Deep Vessel Venipuncture Pad with Nerves (4"x8"x2") **PART #: DVP-10**

Venipuncture Tissue Holder PART #: VTH-10



Vessel Depth

Standard Pad is 7.65 mm on the shallow side and 17.75 mm on the deep side.

Deep Vessel Pad ranges from 17.75 - 20.3 mm on the shallow side and 22.85 - 25.4 mm on the deep side.





TraumaChild[®] System

ADVANCED PEDIATRIC EMERGENCY LIFE SUPPORT



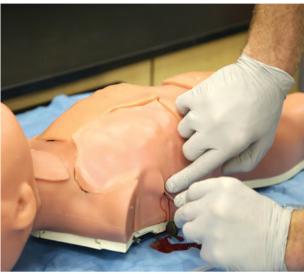
TraumaChild[®], our high-fidelity soft tissue simulator was created in the likeness of TraumaMan, the world's most widely used surgical simulator. Simulab leveraged 25 years of global experience, customer feedback, and manufacturing advancements to bring TraumaChild to life. This simulated five-year-old breathes, bleeds and includes tissues that are easily replaceable—giving each student a first cut experience in a safe, simulated learning environment. It is designed to teach advanced trauma surgical skills for Pediatric Advanced Life Support (PALS).

PRODUCT HIGHLIGHTS

- » Realistic, anatomically correct five-year-old body form with articulating head
- » Flexible design so instructors can train in the ABC order or teach a single procedure
- » Quickly sets up in any facility from a training room, to a hotel or out in the field.
- » 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











SKILLS

- » Surgical Cricothyroidotomy
- » Percutaneous Tracheostomy
- » Needle Decompression
- » Pericardiocentesis
- » Chest Tube Insertion
- » Diagnostic Peritoneal Lavage

Training Packages



TraumaChild System PART #: TC-2180 TraumaChild Abdominal Tissue Pack PART #: TC-AB TraumaChild Chest Tissue Pack PART #: TC-CH TraumaChild Neck Tissue Pack PART #: TC-NK

Learn more about our TraumaChild package savings by visiting our website.

ORDER AT simulab.com OR CALL (206) 297-1260



VascularAccess Child™

THE ONLY PROCEDURAL TRAINER FOR PEDIATRIC CENTRAL LINE INSERTION



VascularAccessChild[™] is the only high-fidelity soft tissue simulator designed to train pediatric central line placement. The trainer offers an effective ultrasound-guided solution for central venous access on a simulated five-year-old child that includes three access sites, replaceable tissues, and ultrasound compatibility during catheter placement.

PRODUCT HIGHLIGHTS

- » Anatomically correct, ultrasound compatible, with all relevant landmarks and vascular anatomy needed for catheter insertion
- » Exceptional ultrasound imaging
- » Two colors of simulated blood differentiate arterial and venous vessels and provide immediate feedback of unsuccessful cannulation

SKILLS

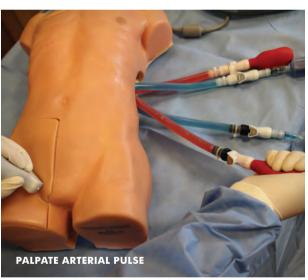
- » Practice full central venous catheterization using ultrasound-guided or blind/landmark insertion approaches at the internal jugular, subclavian, and femoral access sites
- » Develop psychomotor skills required for obtaining visualization during cannulation on pediatric patients
- » Visualize arterial pulse and venous compression
- » Visualize needle cannulation, guidewire threading, and catheter placement

















Training Packages Learn more about our VascularAccessChild package savings by visiting our website.



VascularAccessChild PART #: VAC-30

VascularAccessChild Replaceable Neck Tissue PART #: VACN-30

VascularAccessChild Replaceable Femoral Tissue PART #: VACF-30

Pediatric Non-Sterile Guidewires (25 Pack) PART #: NSGP-10



LumbarPunctureBaby[™]

REALISTIC ARTICULATING TWO-WEEK-OLD INFANT



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. The anatomically correct body form includes an iliac crest and umbilicus. The replaceable tissue has L3 – L5 vertebrae with a sacrum and the gluteal fold. The tissue also includes spinal cord filled with simulated CSF and the epidural venous plexus filled with simulated blood.

PRODUCT HIGHLIGHTS

- » Anatomically correct two-week-old infant with flexible body form, ultrasound compatible
- » Visible and palpable landmarks include umbilicus, gluteal fold, iliac crest and vertebrae
- » The simulator can be positioned and flexed in the lateral decubitus or sitting position



LumbarPunctureBaby Trainer **PART #: LPB-40** LumbarPunctureBaby Replaceable Tissue **PART #: LPBT-40**

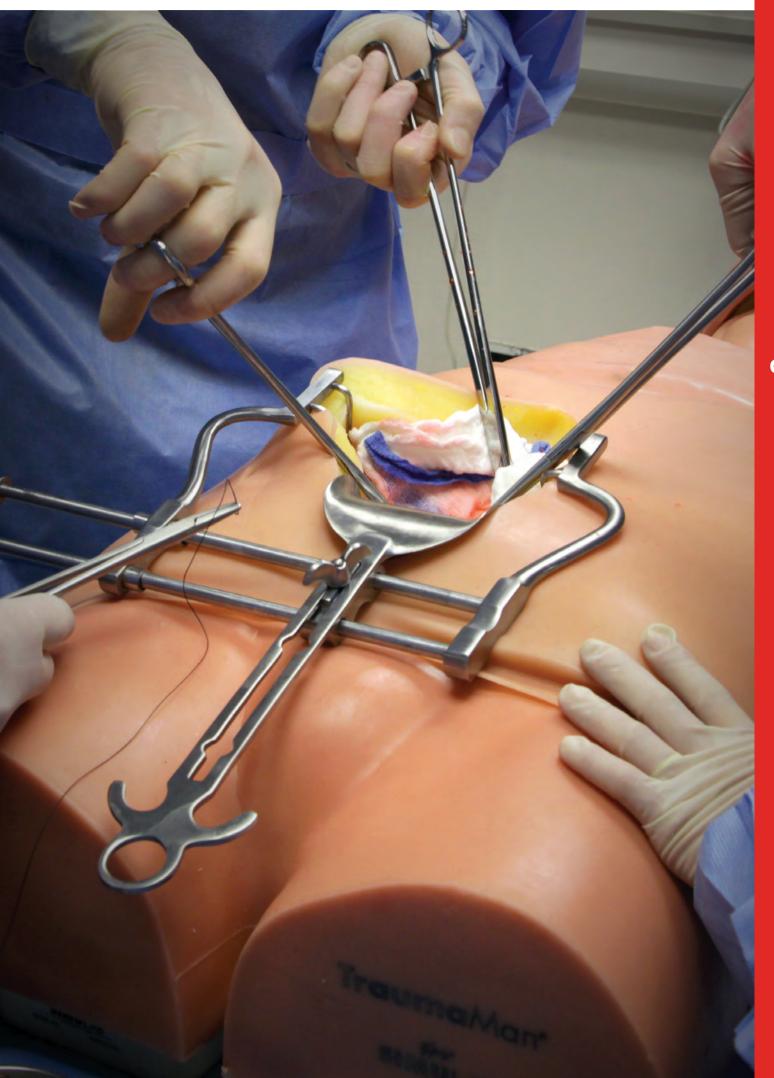
SKILLS

- Flexible body form provides realism when flexing the infant - simulating moving the interspinous process from a neutral to open position
- » Accurate needle placement for positive response and collection of simulated cerebrospinal fluid
- » Simulated epidural venous plexus and bony spinous process provides the user with feedback for improper needle placement
- » Insertion sites include L3-L4 and L4-L5



SIMULATED ARTICULATING SPINE COLLECT SIMULATED CEREBROSPINAL FLUID INCLUDES EPIDURAL VENOUS PLEXUS WITH BLOOD RESPONSE

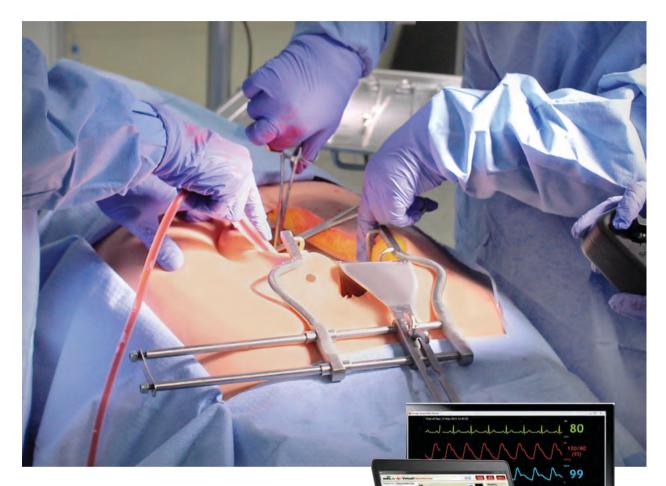
Basic to Advanced Surgical Trainers





Surgical Abdomen Training System

ADVANCED TRAINING - COMBINE WITH 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, critical communication and teamwork during trauma scenarios. Simulab's Surgical Abdomen offers the opportunity to diagnose and treat renal or aortic injury, the management of emergency surgery, preparation for a catastrophic surgical event. It also builds reliability and confidence in an individual role within a team framework.

NEW

The system is powered by Simulab's **improved blood circulation system** so students can assess and control blood loss with suction and easy-to-use remote control. System can be battery operated for tetherless training. VIRTUAL PATIENT MONITOR



MANAGE 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

SKILLS

- » Interact and communicate through emergency protocols within a large team scenario
- » Diagnose and treat aortic or renal artery injuries, or a lacerated kidney
- » Manage blood flow
- » Locate wound site, manage and repair the bleeding organ

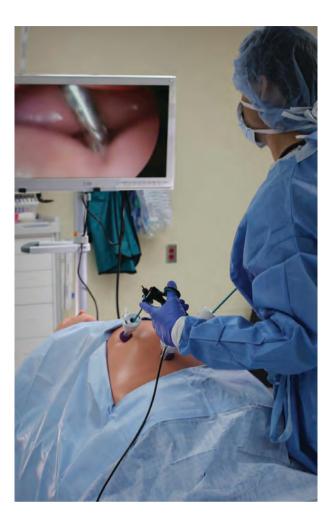
Choose the **Surgical Abdomen** For TraumaMan or our Universal, Stand-Alone Platform

TRAUMAMAN SURGICAL ABDOMEN

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

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 the CentraLineMan System, our Regional Anesthesia Nerve Block simulator, or any upper body simulator.



SCENARIO OPTIONS



CHOLECYSTECTOMY



NICKED RENAL ARTERY



NICKED AORTA



LACERATED KIDNEY

TraumaMan® Surgical Abdomen Training System **PART #: SATP-1130**

Universal Surgical Abdomen Training System **PART #: SATP-1230**



Laparoscopic Trainers

BUILD BASIC TO ADVANCED SURGICAL SKILLS & PROCEDURAL KNOWLEDGE



Complete Digestive Tract **PART #: SDT-10**

Complete soft tissue digestive tract (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



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

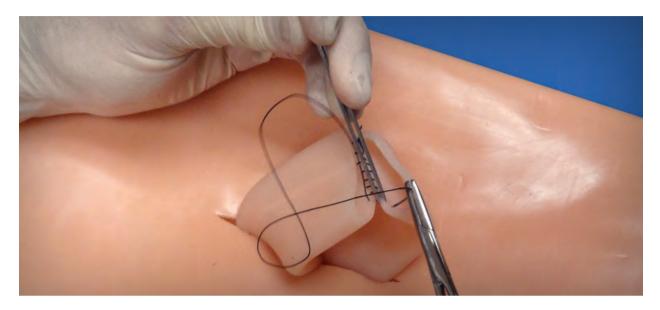


Flexible Training

Simulab's laparascopic models are compatible with the Surgical Abdomen System and can also be used separately to build your own training scenario.

Laparotomy Trainer

SURGICAL INCISING, EXPLORATION, AND SUTURING



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

PRODUCT HIGHLIGHTS

- » Lifelike tissue with includes skin, subcutaneous fat, fascia, preperitoneal fat, and peritoneum.
- » Simulator base designed for multiple uses with replaceable tissue and can be used for a variety of procedures
- » The base is watertight and can be filled with fluid
- » It also includes two clips for securing internal tissue structures like a simulated intestine.

SKILLS

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

Laparotomy Trainer PART #: LPM-10 Laparotomy Replaceable Tissue PART #: LPMT-10 Large Intestine PART #: LGI-10



USED TO SIMULATE ANASTOMOSIS



ALLIGATOR CLIPS FOR SECURING INTERNAL STRUCTURE

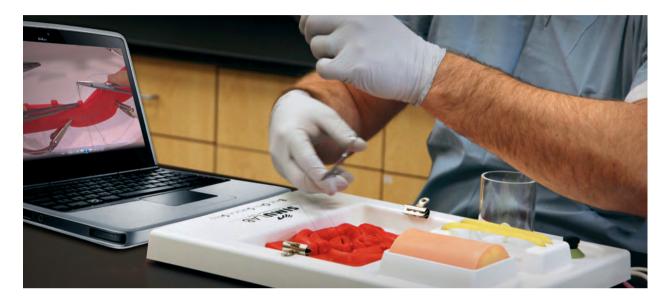


TISSUE LAYER



Basic Open Surgical Skills (BOSS)

FLEXIBLE PLATFORM FOR BASIC TO ADVANCED SUTURING



Basic Open Surgical Skills (BOSS) is a flexible platform for developing basic to advanced suturing skills and techniques. 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. The 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 build a 10-Student Surgical Skills Lab.

PRODUCT HIGHLIGHTS

- » 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

SKILLS

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

SUTURING SKILL TRAINING VIDEO

INCLUDED

Each BOSS System comes with a suturing and knot tying curriculum 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.



Training Packages

Simulab offers many training packages for the Basic Open Surgical Skills (BOSS) Trainer that offer value and can be built to suit your program needs. Contact us or visit our website to learn more.

Suturing Tissues

FLEXIBLE PLATFORM FOR BASIC TO ADVANCED SUTURING

Tissue Suture Pad **PART #: TSP-10**

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



Directional 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



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 video and a Self Assessment Metrics Sheet



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 preperitoneal fat. It is an excellent simulation for multilayer 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





🗽 SimuGear

Additional accessories for enhanced suturing training available on our SimuGear page.



LapTrainer with SimuVision®

SIMULATED LAPAROSCOPIC VIDEO TRAINER FOR APDS AND FLS SURGICAL SKILLS



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 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.

PRODUCT HIGHLIGHTS

- » Portable and affordable
- » Similar look and feel of an actual laparoscope
- » Boom mounted, fully adjustable 1080p high definition camera with autofocus
- $\,\,{}_{\!\scriptscriptstyle >}\,$ Set up in less than five minutes on any PC
- » Record and store video files
- » FLS and APDS compatible

SKILLS

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



LapTrainer with SimuVision **PART #: LTS-40**



not included

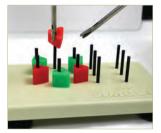
Laparoscopic Skill Set Modules

SIMULATED LAPAROSCOPIC VIDEO TRAINER FOR APDS AND FLS SURGICAL SKILLS

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.



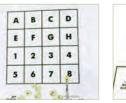
SIMULATED INTESTINE Suture a soft tissue model (Simulated Intestine included) held in place using suction clips. Develops advanced suturing and tissue skills.

APDS BASIC LAPAROSCOPIC SKILL SET Part # SS2-10

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



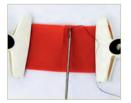
BEAN DROP Grasp beans and move them 15cm to place them in a 1-cm hole at the top of an elevated cup.



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.



Training Packages

Learn more about our Laparoscopic Skill Set Training Modules and package savings by contacting Simulab or visiting our website.



Perineal Repair Trainer

ANATOMICAL AND PROCEDURAL TRAINING OF 1ST TO 4TH DEGREE PERINEAL REPAIR



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.

PRODUCT HIGHLIGHTS

- » The replaceable tissue allows for multiple cuts and realistic suturing of the vaginal mucosa, muscle and subcutaneous layers
- » The tray overlays the tissue providding 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

SKILLS

- » 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

Transverse Perineal Muscles Rectal Muscles External Anal Sphincter



INCLUDES ALL CLINICALLY PR RELEVANT LANDMARKS

PRACTICE 1ST THROUGH 4TH DEGREE REPAIRS



Perineal Repair Trainer PART #: PRT-20 Perineal Repair Replaceable Tissue PART #: PRTT-20





Lumbar Puncture Trainer

UNSURPASSED VALUE WITH CLINICALLY RELEVANT ANATOMY



Safely master critical techniques for lumbar puncture insertion with Simulab's easy-to-use, ultrasound-guided **Lumbar Puncture 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, and epidural space; with a fluid-filled compartment for simulated cerebrospinal fluid. The trainer is available with three varieties of lifelike, ultrasound compatible replaceable tissues that mirror significant anatomical differences found in obese, geriatric, and normal patient populations. Every tissue allows users to experience variances in disc thickness and soft tissue depth on top of the vertebrae.

PRODUCT HIGHLIGHTS

- » Self-healing replaceable tissue is highly durable for repeated procedures
- » Replaceable tissue variations allow for progressive skill development of diverse patient populations
- » Durable and replaceable tissue
- » Most realistic tactile feedback on the market

SKILLS

- » Use ultrasound or palpation to identify key landmarks
- » Experience lifelike needle resistance, including pops when needle transverses ligamentum flavum and dura
- » Allows students to collect CSF
- Practice the procedure in the left lateral decubitus or sitting position





Lumbar Puncture Trainer

- 1 Lumbar Puncture Trainer
- 1 Normal Adult Replaceable Tissue
- 2 IV Bags with IV Pole (IVB-20)
- 1 Luer Lock Syringe
- 1 Fill Line
- 1 Red Concentrate

Lumbar Puncture Trainer **PART #: LP-30**



Lumbar Puncture Trainer Replaceable Tissues

NORMAL ADULT REPLACEABLE TISSUE PART #: LPNT-30

GERIATRIC ADULT REPLACEABLE TISSUE PART #: LPGT-30

OBESE ADULT REPLACEABLE TISSUE PART #: LPOT-30

Ultrasound Paracentesis Trainer

DIAGNOSTIC AND THERAPEUTIC ABDOMINAL PARACENTESIS



Our realistic, yet durable **Ultrasound Paracentesis Trainer** allows users to gain procedural accuracy as they practice performing paracentesis with or without ultrasound. Positioned to simulate a patient sitting up at a 45-degree angle with a distended abdomen the realistic internal anatomy includes the pubis symphysis and iliac crest. Perform a diagnostic procedure with a small amount of fluid removed or shift to a therapeutic approach to mimic the removal of more fluid to reduce intra-abdominal pressure and relieve other associated symptoms.

PRODUCT HIGHLIGHTS

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

SKILLS

- » Drain fluid from the peritoneal cavity
- » 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



Paracentesis Trainer PART #: PAC-20 Paracentesis Replaceable Tissue PART #: PACT-20



ULTRASOUND COMPATIBLE TISSUE





ANATOMICALLY CORRECT LANDMARKS



Ultrasound Thoracentesis Trainer

ADJUSTABLE SIZE OF PLEURA EFFUSION



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 visualized as an echogenic structure with an inflation mechanism to adjust the size of the pleural effusion. Positive fluid flow offers users feedback when pleural effusions are accurately accessed.

PRODUCT HIGHLIGHTS

- » Using ultrasound to identify fluid location
- » Anatomically correct with proper landmarks
- » Model base designed for multiple uses with replaceable tissue
- » Self-sealing for multiple procedures
- » Simulated lung can be visualized as an echogenic structure with an inflation mechanism to adjust the size of the pleural effusion

SKILLS

- » Removal of fluid from the pleural cavity
- » Understanding pleural effusions



Ultrasound Thoracentesis Trainer **PART #: THM-30** Ultrasound Thoracentesis Replaceable Tissue **PART #: THMT-30**



ULTRASOUND COMPATIBLE TISSUE



EXTREMELY DURABLE TISSUE FOR REPEATED USE



OPEN TOP ALLOWS CATHETER DEPTH VISUALIZATION

Ultrasound Arthrocentesis Trainer

JOINT ASPIRATION AND INJECTION



Practice diagnosis and management of knee effusion with Simulab's **Ultrasound Arthrocentesis Trainer**. This anatomically correct trainer represents an extended left leg with ultrasound compatible areas, including the patella, patellar ligament, tibia, fibula, femur, synovial sac, and synovial fluid. Synovial fluid can be aspirated from a joint cavity using the medial or lateral approach. The insertion sites include suprapatellar and parapatellar.

PRODUCT HIGHLIGHTS

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

SKILLS

- » Medial and lateral approach
- » Suprapatellar and parapatellar insertion sites
- » Palpating significant anatomic landmarks



Ultrasound Arthrocentesis Trainer **PART #: ARC-20** Ultrasound Arthrocentesis Replaceable Trainer **PART #: ARCT-20**



ULTRASOUND COMPATIBLE TISSUE



MEDIAL AND LATERAL APPROACHES



ADD COLOR TO FLUID

SimuGear

SIMULAB ACCESSORIES TO ENHANCE YOUR TRAINING

TraumaMan Instrument Kit **PART #: TIK-10**

This kit is complete with all necessary instruments for all TraumaMan procedures. It includes needles, syringes, clamps, forceps, retractors, needle holders, hemostats, scalpels, sutures, needle catheters, guidewires, an endotracheal tube, and more.

Surgical Abdomen Instrument Kit **PART #: SAIK-10**

This kit includes the instruments for use with the Surgical Abdomen. It includes a Balfour Abdominal Retractor, clamps, forceps, needle holders and more.

Suturing Instrument Kit **PART #: SIK-10**

This kit is for suturing training and includes a scalpel, hemostat, forceps, scissors and sutures.

TraumaChild System Add-On Instrument Kit **PART #: TAK-10**

When added to the TraumaMan Instrument Kit (TIK-10) the user will have the necessary instruments for all TraumaChild procedures.

Non-Sterile Guidewires (25 Pack) **PART #: NSG-10**

Pediatric Non-Sterile Guidewires (25 Pack) **PART #: NSGP-10**

Non-Sterile Guidewires PICC Line (25 Pack) **PART #: NSG-20**









ALMOST HUMAN

Simulated Venous Blood **PART #: MV-16**

Simulated venous blood, 16-ounces for use with our vascular access and regional anesthesia trainers.



Simulated IV Bag Package - Adult **PART #: IVB-20**

Simulated IV Bag Package - Pediatric **PART #: IVB-10**





Simulated arterial blood, 16-ounces for use with our vascular access and regional anesthesia trainers.

Red Concentrate for Simulated Fluids **PART #: TMP-1017**

For use in TraumaMan and TraumaChild tissues only.



Replaceable IV Bags -Adult (2 Pack) **PART #: IVB-22**

Replaceable IV Bags -Pediatric (2 Pack) **PART #: IVB-12**





Hand Pump (Red Bulb) PART #: CLP-1008

This pulsatile Hand Pump comes prefilled with red fluid to create a simulated pulse visible under ultrasound and provides a strong landmark when palpated. Compatible with our vascular access and regional anesthesia trainers.





Red Concentrate for Arterial Blood **PART #: MAC-4**

SimuSensor Venous Fluid Concentrate **PART #: SSV-16**

Simulated Venous fluid for use with the PacerMan System.



Venous Pressure Regulator PART #: CLP-1001

This syringe which comes prefilled with blue venous fluid can be used to adjust the system's blood pressure on our vascular access and regional anesthesia trainers.



The skin conditioning powder gives the skin on our simulators a more realistic feel.

Skin Conditioning Powder

PART #: TMP-1018





System Battery Pack (2.6 Amps) PART #: PMP-1009

For a more realistic and immersive experience, let your next training be unterhered. This Battery Pack is compatible with our PacerMan System. ArteriaLine Trainers, and our Surgical Abdomen Training System.



Patient Positioning Tray PART #: PPT-10

Adjustable Tissue Tray

The Adjustable Tissue Tray

alone Surgical Skills Tray or is

compatible with our BOSS Basic Open Surgical Skills Trainer. The ergonomic design promoted proper hand placement during

may be used as a stand-

PART #: ATT-10

Compatible with both the CentraLineMan System and the Regional Anesthesia Trainer and offers users the opportunity to practice the complete central line insertion and nerve block administration procedures from start to finish. Place the simulator in a 15° Trendelenberg position



or 15° semi-lateral position for enhanced realism.

System Battery Pack (5.2 Amps) PART #: TMS-1023

For a more realistic and immersive experience, let your next training be untethered. This Battery Pack is compatible with our TraumaMan System.



System Battery Charger PART #: TMS-1024

Charge your System Battery Pack with this Battery Charger. The charger provides a notification light that turns green when fully charged and is compatible with the PMP-1009 Battery Pack and the TMS-1023 Battery Pack.

Contoured Tissue Tray PART #: CTT-10

Any of our tissue models can be inserted into the Contoured Tension Tray to simulate the natural curve of an arm or leg, increasing the suturing difficulty.





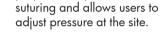
Venipuncture Tissue Holder PART #: VTH-10

Our Tissue Holder features natural arm and leg curvature so the pads can be worn by any standardized patient or patient simulator.



Contact us today to learn more about how Simulab can provide your program with the best in medical simulation.

(206) 297-1260 | info@simulab.com www.**simulab**.com



25 YEARS OF INNOVATION

Simulab is committed to replicating human anatomy and building realistic, easy-to-use training tools for medical education. We develop, design 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 25 years of experience and continually pushing the bounds of realistic tissue discovery, Simulab has become the market leader in 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 has evolved for the ATLS 10th Edition and is 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 our government customers, we maintain both GSA and ECAT Contracts. TraumaMan and the Surgical Abdomen 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. Since 1994 Simulab has been 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 Simulab products are entirely latex-free.





13001 48th Avenue South Seattle, WA 98168 | USA

- т (206) 297-1260 (866) 400-1260
- **F** (253) 681-7667
- ∎ info@simulab.com

simulab.com