# 2015 Product Catalog

WHERE HUMAN REALISM MATTERS IMSH Edition





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### A message from Christopher Toly

CHIEF EXECUTIVE OFFICER

Dear Valued Customer.

Simulab has been described as a practical engineering and manufacturing company—with a bit of mad scientist thrown in for good measure. We are truly passionate about human simulation. Our goal over the past 20 years has always been to create flexible, portable, affordable, and clinically relevant substitutes for both animal and human subjects used in medical training. But we have never been satisfied with "good enough."

### **PUSHING THE BOUNDS OF REALISM**

Simulab is constantly pushing the bounds of human realism. We will not be satisfied until we have created a human mimic so perfect that participants will feel immersed—truly and completely—in each and every procedure.

Each day we get a little closer.

We now make tissue that looks, feels, cuts, sutures, bleeds, ultrasounds, and is conductive like human tissue. We have incorporated incredibly realistic tissue planes, landmarks and ultrasound anatomy that allow students to dispense with the typical simulator-to-human translation that is often necessary with other task trainers.

Yet while we are constantly improving our products, we never leave our customers behind. We innovate without planned obsolescence. We strive to always support and upgrade every generation of our product line.

#### **REALISM WITH AN ROI**

Simulab also supports the growing needs facing the medical education community—especially in efforts to improve patient safety. Our products are being tested and proven in clinical settings to improve patient safety through skill assessment, continuing education and the implementation of best practices hospital-wide. We are committed to creating products and scenarios that help prevent adverse events throughout the hospital. In a time when errors can be so costly, we have our eye on ensuring that patient safety training can be cost effective through affordable solutions.

We are proud of producing the most widely-used surgical trainers in the world, and are looking forward to pushing the industry toward the most immersive medical training possible.

Christopher Toly CEO / CTO

Sincerely.



Realistic Look

# **Experience Our Passion for Human Realism**

Realistic Feel

Realistic Cutting

We are never satisifed with "good enough."

For over 20 years, Simulab has been INNOVATING.

Our goal is true human realism in simulation.

Realistic Suturing

ı

Realistic **Bleeding** 

Realistic Ultrasound Guidance

Realistic Anatomical Structure

Realistic Nerve Conductivity



Realistic Monitoring

**Why?** Because we are committed to providing a total blood-pounding, immersive, scientifically accurate, and clinicially relevant experience for every participant.

Our products look, feel and respond like HUMAN.

And we are always improving. We listen to our customers, to industry societies, and to leading educators. Our engineers take this feedback and invent products that push the bounds of current simulation. But with a mind for economy.

We provide practical, affordable REALISM.

But even more, we are committed to patient safety. We are passionate in our belief that realistic simulation is key to providing training that will reduce Never Events and improve patient safety throughout the medical community. Our products have been proven effective in academic and clinical settings.

True Human Realism

Call Today

for the Simulab experience.





Add realism to your simulations with our new Virtual Patient Monitor. Instructors are able to create a variety of clinical events during a simulation to heighten drama and create a high-stakes environment.

The easy-to-use instructor window controls a student view monitor. Instructors can change any of the standard vitals over a desired trend time or even create custom indicators, depending on the simulation.

The instructor view runs on a standard PC and the student view can be displayed on an attached monitor.

### **Features and Benefit**

- Easy-to-use controls
- > Standard and customizable vitals
- Create on-the-fly scenarios
- > Select from preset arrhythmias and conditions
- > Set trend time for new settings to take effect
- > Student view available on instructor screen
- > Running log available for debriefing
- > Alarms can sound or be muted
- > Runs on any standard PC

#### PART #VPM-10

NOTE: PC not included.







# TraumaMan® System



**Trauma**Man is the most widely used surgical simulator in the world. This anatomically correct human body form allows students to practice several advanced surgical procedures.

### **SYSTEM FEATURES**

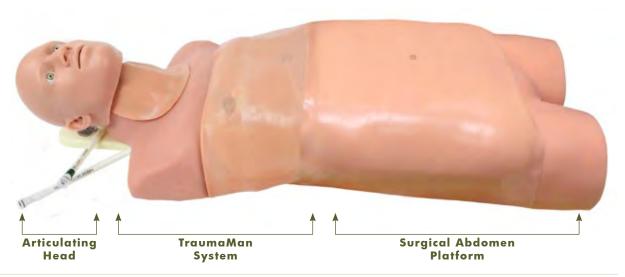
- Anatomically correct simulator with all the pertinent landmarks for each procedure
- > Each student gets a first cut experience
- Allows the instructor to train in the ABC order or just teach a single procedure, as needed
- ➤ Easy set up in any setting including training rooms, hotel meeting rooms, or in the field

### **EXTENDABLE SYSTEM**

TraumaMan is an extendable surgical platform that allows instructors and students to explore a wide variety of procedures under realistic settings as well as to build communication and trauma team experience. Use the TraumaMan base alone, or add one of numerous extensions including:

- Surgical Abdomen with the Catastrophic Event Team Training module
- FAST ultrasound diagnostic module
- Articulating Head for simulating an intubated patient and increasing procedural realism

### PART #TM-3180





### TRAUMAMAN TORSO PROCEDURES

TraumaMan allows you to practice a wide variety of procedures including:



**Chest Tube Insertion** 



Cricothyroidotomy



**Needle Decompression** 



**Tracheostomy** 



Diagnostic Peritoneal Lavage



**Pericardiocentesis** 

Simulation-based education allows learners to obtain mastery of specific skills using evidence-based methods. Training and assessment are focused on the learner without the possibility of patient harm.

### Jeffrey H. Barsuk, MD, MS

Associate Professor of Medicine Northwestern University Feinberg School of Medicine

### **Trauma**Man

The most widely used surgical trainer in the world today

Used to train more than 35,000 clinicians annually

Evaluated and approved by leading medical societies



# Catastrophic Event Team Training



The TraumaMan Surgical Abdomen Platform offers an excellent solution for the growing need for team training. The flexible abdominal surgical site will accommodate an array of surgical scenario options to practice catastrophic event team training. This flexibility enables full surgical teams to work on improving not only technical, task-related skills, but also communication and teamwork.

#### SKILL DEVELOPMENT

- Diagnosis/treatment of an aortic or renal artery injury, or a lacerated kidney
- Preparation for a catastrophic surgical event
- Building confidence and reliability in an individual role within a team framework

### **MODULE FEATURES**

- Anatomically correct human abdominal cavity
- Adjustable blood flow to the operative site
- Includes large, replaceable abdominal tissue that can be reused for multiple scenarios
- > Allows full trauma teams to work together
- Includes multiple catastrophic event scenarios to increase team training opportunities

### **SCENARIOS INCLUDED**

- Nicked Aorta Procedure
- Nicked Renal Artery Procedure
- Lacerated Kidney Procedure

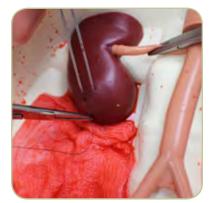
SURGICAL ABDOMEN WITH CATASTROPHIC EVENT TEAM
TRAINING MODULE PACKAGE — PART #SACEP-10



**Nicked Aorta** 



Nicked Renal Artery



**Lacerated Kidney** 



### FAST Module for TraumaMan



The FAST Module is a diagnostic ultrasound training system that allows students to learn the basics of a FAST (Focused Assessment with Sonography for Trauma) Exam without the need for expensive equipment and live patients.

### SKILL DEVELOPMENT

- Learning the landmarks on the body that are used for identification of window locations for the exam
- Reading and understanding normal and abnormal views. F.A.S.T. includes five patient image and video libraries for each window (two normal and three abnormal)

### **FEATURES AND BENEFITS**

- Body form skin is embedded with targets in four different exam windows for procedure realism.
- A flexible training platform and image library allow for a variety of scenarios to meet a variety of educational needs.
- > Student mode provides students the opportunity to diagnose a patient for evaluating competency.
- Mentor view provides an explanation of the key teaching elements in the image to easily support and enhance educational activities.

#### PART #TMF-20



Easily Expands Your TraumaMan



Any PC can simulate an ultrasound machine



Provides Real Patient Images and Videos



# **Trauma**Child™ System



TraumaChild is a high fidelity, soft tissue pediatric simulator designed to train advanced trauma surgical skills. This simulated five year old breathes, bleeds, and has easily replaceable tissues giving each student a first cut experience.

#### TRAUMACHILD PROCEDURES

TraumaChild allows you to practice a wide variety of procedures including:

- Chest Tube Insertion
- Cricothyroidotomy
- Needle Decompression
- Diagnostic Peritoneal Lavage
- Pericardiocentesis

### **FEATURES AND BENEFITS**

- Realistic, anatomically correct five year old body form with articulating head
- Replaceable tissues bleed when cut, enhancing realism and obscuring student's vision
- 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

PART #TCPP-11



Internal Ventilator Provides
Airway Response



Articulating Head Provides
Procedural Realism



Easy-to-Replace Tissues
Allow First Cut Experience





**CentraLine**Man<sup>™</sup> System



**CentraLine**Man is the premier Central Venous Catheterization training solution. With both external and internal landmarks, users can practice CVC placement in three access sites: Internal Jugular, Subclavian, and Supraclavicular. This trainer allows users to train using real-time ultrasound guidance during the catheter placement procedure, providing an unsurpassed realistic image.

### NOW WITH ARTICULATING HEAD

- ▶ Head can be rotated or tilted back
- Increased procedural difficulty
- Additional landmarks of the jaw and ear
- > Realistic soft tissue head and eyes

### **FEATURES AND BENEFITS**

- Offers lowest cost per student
- Exceptional ultrasound imaging with all popularly used ultrasound systems
- > Complete all of the steps for the full procedure
- ▶ Replaceable tissues withstand hundreds of needle sticks and dozens of catheterizations
- Anatomically correct torso with landmarks
- Arterial/venous blood provide instant results
- Self-contained tissues come pre-filled with fluid
- Arterial pulse and proper landmarks are present to help avoid catheter placement errors
- Venous pressure regulator allows for vein compression or low pressure simulation to enhance procedure realism.



Ultrasound Guided with Appropriate Landmarks



Self-sealing, Durable Tissue for Many Uses



Full Central Venous Catheterization





#### **CENTRALINEMAN SYSTEMS**

**CentraLine**Man with Articulating Head PART #: CLM-41

CentralineMan without Articulating Head PART #: CLM-40

#### **ACCESSORIES**

CentraLineMan Replaceable Tissue PART #: CLMT-40

Non-sterile Guidewires - 25 Pack PART #: NSG-10

#### SAVE ON TRAINING PACKAGES

### **CentraLine**Man Package with Articulating Head PART #: CLTP-21

- CentraLineMan Trainer with Articulating Head
- > One extra replaceable tissue
- 25 non-sterile guidewires

### CentralineMan Package without Articulating Head PART #: CLTP-40

- > CentraLineMan Trainer without Articulating Head
- One extra replaceable tissue
- > 25 non-sterile guidewires

### Vascular Access Package with Articulating Head PART #: CVC-31

- > CentraLineMan Trainer with Articulating Head
- > FemoraLineMan Trainer
- > Extra replaceable tissue for each

### Vascular Access Package without Articulating Head PART #: CVC-30

- > **CentraLine**Man Trainer without Articulating Head
- > FemoraLineMan Trainer
- > Extra replaceable tissue for each

# **FemoraLine**Man<sup>™</sup> System



**FemoraLine**Man offers training for central venous or arterial access using the femoral route. Like CentraLineMan, this trainer's unique tissue properties allow medical professionals to train using real-time ultrasound guidance during catheter placement procedure. The replaceable tissues are also highly durable for repeated use.

#### FEATURES AND BENEFITS

- > Anatomically correct pelvis with landmarks.
- > Durable replaceable tissues for multiple uses
- Tissues are self-contained and come pre-filled with red (arterial) and blue (venous) fluid
- Vessel length allows for full catheterization
- Arterial hand pump that creates a realistic arterial pulse, which can be palpated or identified with ultrasound

FemoraLineMan System
PART #: FLM-50

**FemoraLine**Man Replaceable Tissue **PART #: FLMT-50** 

Non-sterile Guidewires - 25 Pack PART #: NSG-10



# VascularAccessChild™ System



**VascularAccess**Child offers an effective ultrasound-guided solution for central venous access on a simulated five year old child. Practice catheter placement using the internal jugular, subclavian, supraclavicular, and femoral access techniques.

### **FEATURES AND BENEFITS:**

- Anatomically correct, soft tissue five year old with internal and external landmarks
- > Arterial and venous blood to show instant results
- > Self sealing veins and skin for multiple practices
- > Natural tissue resistance and flashback of blood
- > Replaceable tissue sets allow for multiple uses
- Adjustable venous pressure to simulate complications

**VascularAccess**Child

PART #: VAC-20

VascularAccessChild Replaceable Neck Tissue
PART #: VACN-20

VascularAccessChild Replaceable Femoral Tissue
PART #: VACF-20

Pediatric Non-sterile Guidewires - 25 Pack PART #: NSGP-10

VascularAccessChild Training Package
PART #: VCTP-20

- VascularAccessChild Trainer
- > One extra each (femoral/neck) replaceable tissues
- > 25 non-sterile guidewires



**Palpate Arterial Pulse** 



Self-sealing, Durable Tissue for Many Uses



Full Central Venous Catheterization





### ISBS Nerve Block Trainer with SmarTissue™



The Interscalene/Supraclavicular **Block Trainer** with SmarTissue™ is the only brachial plexus nerve block trainer that offers clinically relevant anatomical ultrasound imaging.

The trainer consists of a body form and replaceable tissue, each embedded with patent-pending SmarTissue technology, allowing the system to communicate with any PC to offer visual and audible needle-to-nerve proximity warnings.

### **LANDMARKS**

- > Sternocleidomastoid Muscle
- Clavicle
- Interscalene groove
- > Pulse of carotid artery

#### **ULTRASOUND ANATOMY**

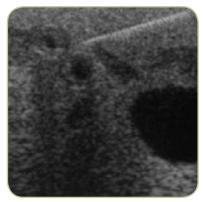
- Sternocleidomastoid, anterior and middle scalene muscles
- Brachial plexus
- > Internal jugular vein and carotid artery

### FEATURES AND BENEFITS

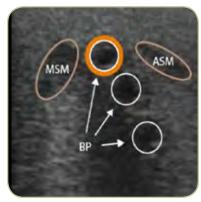
- > Ultrasound guidance for accurate needle insertion.
- Anatomically correct torso with landmarks for enhanced realism.
- Distinct, realistic "pop" when the needle enters into the neural sheath.
- > Software shows orange when in contact and red when penetrating the nerve. Optional proximity alarm also sounds for additional training cues.
- > Articulating head increases realism.



Anatomically Correct Landmarks



**Ultrasound Compatible** 



Needle-to-Nerve Verification



### ISBS Nerve Block Trainer Systems and Training Packages

ISBS **Block Trainer with SmarTissue** comes in a variety of packaging options to suit your needs.

### **ISBS Nerve Block** Trainer with **SmarTissue** and Articulatina Head

### PART #: ISBS-21

- > SmarTissue Upper Body Form
- Articulating Head
- > One Replaceable SmarTissue
- > SmarTissue Software
- > Sample 25G Pajunk Needle
- > Universal Needle Adaptor
- Hand Pump
- Carrying Case
- User's Guide

### **ISBS Nerve Block** Trainer with **SmarTissue** without Articulating Head

PART #: ISBS-20

PC and ultrasound machine not included.

#### **ACCESSORIES**

### ISBS Replaceable SmarTissue PART #: ISBST-20

### Articulating Head PART #: AH-10

### SAVE ON TRAINING PACKAGES

### **ISBS Nerve Block** Trainer with **SmarTissue** and Articulating Head Package

### PART #: ISSTP-21

- > SmarTissue Upper Body Form
- > Articulating Head
- Two Replaceable SmarTissues
- > SmarTissue Software
- > Sample 25G Pajunk Needle
- > Universal Needle Adaptor
- > Hand Pump
- Carrying Case
- User's Guide
- > Venipunture Pad with Nerves (4" x 8" x 1")

### **ISBS Nerve Block** Trainer with **SmarTissue** without Articulating Head Package

PART #: ISSTP-20

### Femoral Nerve Block Trainer with SmarTissue<sup>TM</sup>



The Femoral Nerve Block Trainer with SmarTissue™ is the only trainer that offers clinically relevant anatomical ultrasound imaging.

#### **LANDMARKS**

- > Inguinal crease and ligament
- Anterior superior iliac spine
- Pubic tubercle
- Pulse of femoral artery

### **ULTRASOUND ANATOMY**

- > Femoral nerve, artery and vein
- Fascia lata and iliaca
- Iliopsoas muscle
- Inguinal ligament

### **FEATURES**

- > Ultrasound guidance during needle insertion.
- > Anatomically correct lower torso with landmarks.
- Distinct, realistic "pop" when the needle passes through the fascia layers.
- > SmarTissue software show orange when in contact and red when penetrating the nerve.

Femoral Nerve Block Trainer with SmarTissue
PART #: FNBS-10

Femoral Nerve Block Trainer with SmarTissue Package

PART #: FNBTP-10

### Replaceable SmarTissue



# **Sono**Man<sup>™</sup> System



An affordable platform for teaching students how to read diagnostic ultrasound imaging. The system includes a soft tissue body form with internal and external landmarks and a simulated probe. The torso has 258 unique probe locations providing a normal image for each window. The Student Mode provides a testing tool where images are presented randomly and students must identify the presence of pathology.

PART #: SNM-21 (PURCHASE MUST INCLUDE ONE MODULE.)

### SYSTEM MODULES



FAST Module PART #: SNMF-21



Renal Module
PART #: SNMR-21



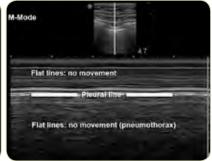
AAA Module PART #: SNMA-21



Gallbladder Module
PART #: SNMG-21



Echo Module PART #: SNME-21



eFAST Module
PART #: SNMEF-21



# **Sono**Mom<sup>™</sup> System



This ultrasound trainer provides an affordable platform for teaching emergency room students how to read obstetric ultrasound imaging from two different exam sites. SonoMom's soft tissue body form includes internal and external landmarks and two simulated probes for abdominal and endocavity scans. The torso simulates a pregnant patient from six weeks to 40 weeks gestational age and has 147 unique probe locations. The 1st Trimester Exam Module includes two additional non-pregnant normal patients and 13 pregnant patients with normal and abnormal findings.

PART #: SMM-10 (PURCHASE MUST INCLUDE TRIMESTER MODULE.)

1st Trimester Module PART #: SMMF-10

PC NOT INCLUDED.





### **Arthrocentesis** Trainer



The **Arthrocentesis** Trainer is an anatomically correct, ultrasound compatible trainer that represents an extended left leg and includes the patella, patella ligament, tibia, fibula, femur, synovial sac, and synovial fluid.

### FEATURES AND BENEFITS

- Ultrasound-compatible, replaceable tissue is refillable and durable for multiple uses.
- > Left leg trainer showing tibia and fibula bones
- > Fluid can be left clear or colored
- > Ability to milk the suprapatellar pouch
- > Ability to increase or decrease size of effusion
- > Palpable anatomy and realistic needle response

### SKILL DEVELOPMENT

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

### Arthrocentesis Trainer PART #: ARC-10

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

### Arthrocentesis Training Package PART #: ARTP-10

- > Arthrocentesis Trainer (ARC-10)
- > Extra Arthrocentesis Replaceable Tissue (THMT-20)

### Arthrocentesis Replaceable Tissue PART #: ARCT-10



**Ultrasound Compatible Tissue** 



Medial and Lateral Approaches



Add Color to Fluid



# **LumbarPuncture**Baby



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

### **FEATURES AND BENEFITS**

- Articulating vertebrae creates realism when flexing the infant moving the interspinous process from a neutral to open position
- ▶ L3-L4, L4-L5 and L5-S1 insertion sites
- Accurate insertion gives positive response and collection of simulated cerebrospinal fluid (CSF)
- > Simulated epidural venous plexus vein and bony spinous process provides feedback for improper needle placement

#### **LANDMARKS**

- Umbilicus
- Gluteal fold
- Iliac crest
- ▶ L3 L5 Vertebrae

### **LumbarPuncture**Baby Trainer PART #: LPB-20

- LumbarPunctureBaby Body Form
- > Replaceable Tissue
- Hospital Bracelet
- Simulated Arterial Blood
- > Two IV Bags with IV Pole
- Luer Lock Syringe
- Red Concentrate
- Carrying Case



**Articulating Spine** 



Collect Simulated Cerebrospinal Fluid



Includes Epidural Venous Plexus



## Lumbar Puncture/Epidural Trainer



The Lumbar Puncture/Epidural Trainer can be positioned in an upright sitting or a lateral decubitus position. The lumbar puncture procedure allows the user to penetrate the subarachnoid space and CSF is present when the stylet is removed. The epidural procedure allows the user to enter the epidural space and insert an epidural catheter.

### **LANDMARKS**

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

### SKILL DEVELOPMENT

- Use ultrasound to identify landmarks
- > Perform a lumbar puncture
- > Insert an epidural catheter

#### **FEATURES**

- > Anatomically correct with landmarks
- > Re-fillable tissue for repeated procedures
- Durable and replaceable tissue

### INTERCHANGEABLE TISSUES

- Normal Adult Tissue
- Obese Adult Tissue
- Geriatric Adult Tissue
- Geriatric Obese Adult Tissue



**Ultrasound Compatible Tissue** 



Spinal Fluid Can Be Collected



Self-sealing, Durable
Tissue



### Lumbar Puncture / Epidural System and Training Packages

### Normal Adult LPE Trainer PART #: LPE-10

- 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-10

### Geriatric Obese LPE Adult Trainer PART #: LPGO-10

### Obese Adult LPE Trainer PART #: LPO-10

#### **ACCESSORIES**

### Normal Adult Replaceable Tissue PART #: LPEN-10

### Geriatric Adult Replaceable Tissue PART #: LPEG-10

### Geriatric Obese Adult Replaceable Tissue PART #: LPEGO-10

### **Obese Adult Replaceable Tissue**

PART #: LPEO-10

### SAVE ON TRAINING PACKAGES

### Normal Adult LPE Training Package PART #: LPNP-10

- Lumbar Puncture/Epidural Trainer with Normal Tissue (LPE-10)
- Additional Normal Tissue (LPEN-10)
- > Two IV Bags with IV Pole (IVB-20)
- Luer Lock Syringe
- > Fill Line
- > Red Concentrate

### Geriatric Adult Training Package PART #: LPGP-10

### Geriatric Obese Adult Training Package PART #: LPGOP-10

### Obese Adult Training Package PART #: LPOP-10



### Lumbar Puncture/Epidural Deluxe Training Package

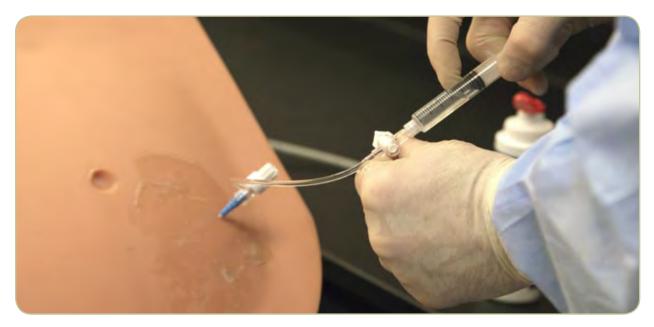
#### PART #: DLPTP-10

- Lumbar Puncture/Epidural Trainer with Normal Tissue (LPE-10)
- > Two IV Bags with IV Pole (IVB-20)
- Luer Lock Syringe
- ▶ Fill Line
- Red Concentrate
- > Obese Tissue (LPEO-10)
- Geriatric Tissue (LPEG-10)
- Geriatric Obese Tissue (LPEGO-10)





### Paracentesis Trainer



The **Paracentesis** Trainer promotes procedural accuracy. The anatomically correct model supports ultrasound and provides for catheter entry in either of the recommended areas: the midline below the umbilicus or medial, 4 to 5 cm above the anterior superior iliac spine.

### FEATURES AND BENEFITS

- > Ultrasound compatible with replaceable tissue
- 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 ultrasound or anatomic landmarks
- Drain fluid from the peritoneal cavity
- > Use midline or medial procedure entry point

### Paracentesis Trainer PART #: PAC-10

- Paracentesis Base
- > Replaceable Tissue

### Paracentesis Training Package PART #: PATP-10

- Paracentesis Base
- > Two Replaceable Tissues

### Paracentesis Replaceable Tissue PART #: PACT-10



Ultrasound Compatible Tissue



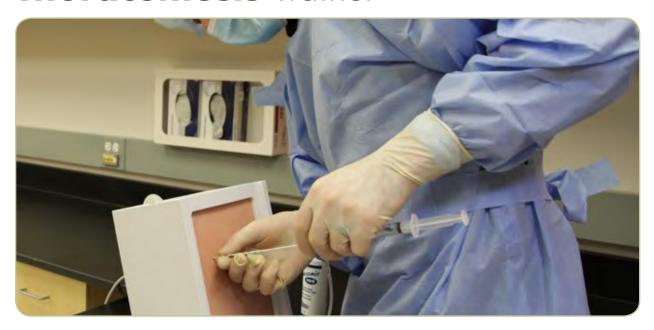
**Realistic Internal Anatomy** 



Anatomically Correct Landmarks



### Thoracentesis Trainer



The **Thoracentesis** Trainer provides realistic practice for ultrasound-guided thoracentesis. A positive fluid flow offers feedback when pleural effusions are accurately accessed.

### **FEATURES AND BENEFITS**

- Anatomically correct landmarks; scapula, rib and spinal process, diaphram and lung
- Durable tissue for multiple procedures
- Simulated lung that can be seen as an echogenic structure under ultrasound
- > Replaceable lung has hand pump for inflation.
- Open top allows students to visualize catheter depth when inserted into the pleural cavity
- ➤ Only thoracentesis trainer that responds to the Safe-T-Centesis™ Catheter insertion

### SKILL DEVELOPMENT

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

### Ultrasound Thoracentesis Trainer PART #: THM-20

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

### Ultrasound Thoracentesis Training Package PART #: THMP-10

- Ultrasound Thoracentesis Trainer (THM-20)
- > Extra Thoracentesis Tissue (THMT-20)

### Ultrasound Thoracentesis Replaceable Tissue

PART #: THMT-20



**Ultrasound Compatible Tissue** 



Extremely Durable Tissue for Repeated Use



Open Top Allows Catheter
Depth Visualization



# Venipuncture Pads



Our ultrasound-compatible Venipuncture Pads are perfect for practicing venipuncture, nerve identification, or peripheral catheterization on varying sized veins filled with red fluid. The three veins in the pads are slightly visible through the skin surface on one side and more obscured by a thicker tissue layer on the other side.

### FEATURES AND BENEFITS

- > Three different sized veins in a two-sided pad
- Vessel depth ranges from 3 mm to 20 mm
- Durable, self-sealing tissue that, when viewed under ultrasound, does not show needle tracks
- Refill veins for multiple uses
- > Tissue holder creates natural limb curvature

### **VENIPUNCTURE PADS**

Venipuncture Pad  $(4'' \times 4'' \times 1'')$ PART #: VPP-10

Large Venipuncture Pad  $(4'' \times 8'' \times 1'')$  PART #: VPP-80

Deep Vessel Venipuncture Pad  $(4'' \times 8'' \times 2'')$  PART #: VPP-82

Venipuncture Pad with Nerves  $(4'' \times 8'' \times 1'')$  PART #: VPN-80

Deep Vessel Venipuncture Pad with Nerves PART #: VPN-82

Venipuncture Tissue Holder PART #: VTH-10

#### SKILL DEVELOPMENT

- Obtaining intravenous access
- Withdrawing fluids
- Using ultrasound guidance
- > Interacting with a patient during the procedure

### TRAINING PACKAGES

### Large Venipuncture Pad Package PART #: VTP-80

- Large Venipuncture Pad
- > Red Concentrate and Luer Lock Syringe
- Simulated IV Bag
- > Table Top IV Pole

### Deep Vessel Venipuncture Pad Package PART #: VTP-82

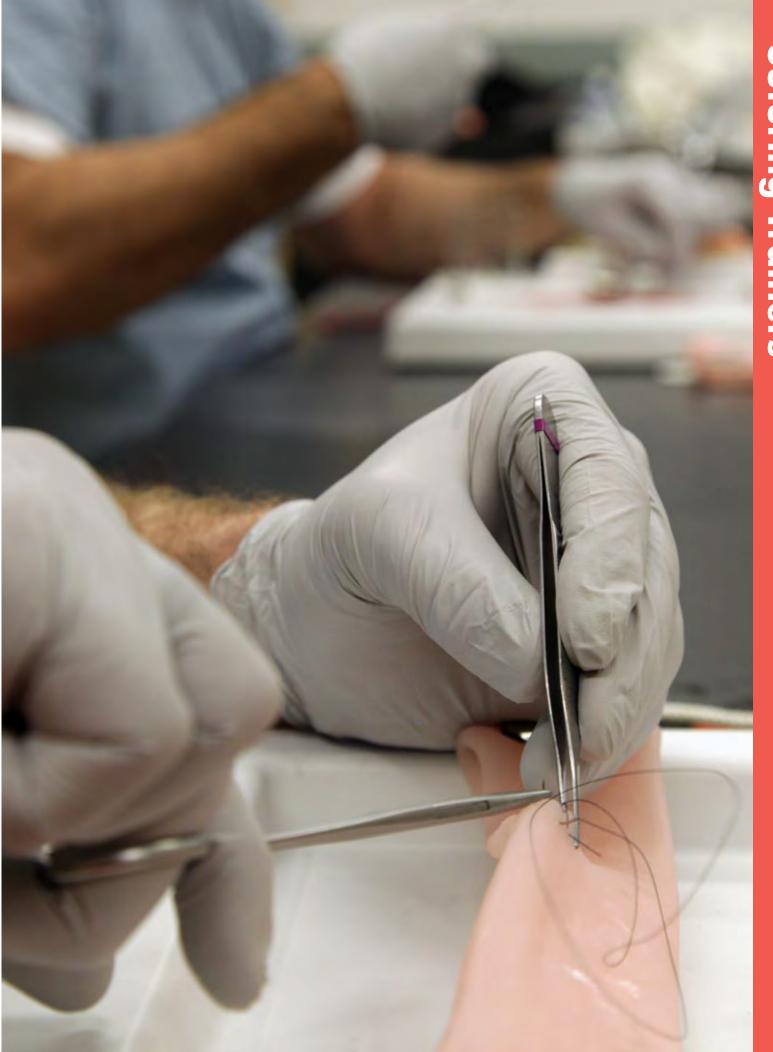
- Deep Vessel Venipuncture Pad
- > Red Concentrate and Luer Lock Syringe
- Simulated IV Bag
- > Table Top IV Pole

### Venipuncture Pad with Nerves Package PART #: VTNP-10

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

### Deluxe Venipuncture Pad Package PART #: VTP-10

- Venipuncture Tissue Holder
- Large Venipuncture Pad
- Syringe for easy refilling
- > Red concentrate
- Two Simulated IV Bags
- > Table Top IV Pole





# Basic Open Surgical Skills Trainers



### **ABOUT BOSS TRAINERS**

BOSS (Basic Open Surgical Skill) Trainers provide the perfect platform for surgical skill development. These trainers provide an easy-to-clean base for synthetic or cadaveric task modules. The ergonomic design creates a realistic tool for improving skills

### **VIDEO GUIDED SKILL TRAINING**

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.

#### **FEATURES AND BENEFITS**

- Durable multi-use platform can be used with any combination of materials
- Ergonomic design ensures correct hand positioning
- Portable platform perfect for simulation lab or home use
- Provides a variety of tissue materials on which to practice basic surgical tasks

### SKILL DEVELOPMENT

- Basic and advanced suturing skills
- > Suturing on a skin surface
- Subcuticular suturing
- Deep wound closure
- Administering injections
- 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-layerd Intestine
- Subcuticulare Suturing Pad
- Sebaceous Cyst Pad
- Lipoma Pad
- > Standard and Complex Tissue Pads
- > Injectable and Subcutaneous Injection Pads



# **BOSS Starter** Package



Practice basic and advanced suturing techniques with the **BOSS Starter Package**. This complete suturing training kit includes an easy-to-use platform, five different tissue models, an instrument kit and an tutorial DVD for independent learning.

### **BOSS STARTER PACKAGE**

- PART #: BSP-20

  → BOSS Suturing Trainer (BOSS-20)
- Student Tissue Pack (BTP-10)
  - Subcuticular suturing pad
  - Complex tissue pad
  - Large intestine
  - > Tissue suture pad
  - > Injectable tissue pad
  - Suturing Instrument Kit (SIK-10)
    - Scalpel, Straight Hemostats, Forceps, Scissors, and Sutures
- Tutorial DVD
- Self Assessment Metrics

### BOSS STARTER Volume Package PART #: BVP-20

- > Ten (10) BSP-20 Starter Packages
- > Two (2) BTP-10 Student Tissue Packages

### **DELUXE BOSS STARTER PACKAGE** PART #: DBSP-20

PAKI #: DB3P-20

> Contains all of BSP-20 plus Adjustable Tissue Tray

### **DELUXE BOSS STARTER Volume Package** PART #: DBVP-20

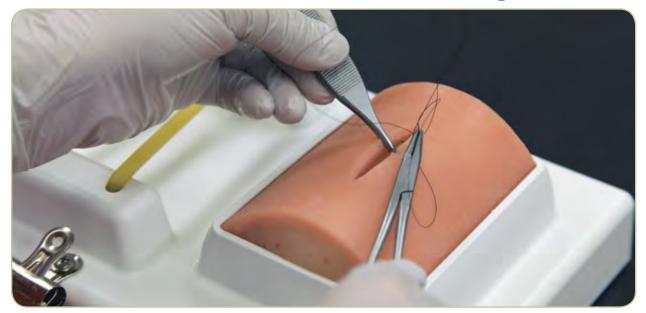
- > Ten (10) DBSP-20 Starter Packages
- > Two (2) BTP-10 Student Tissue Packages



Product Catalog



# **BOSS Technical Skills** Package



Practice basic and advanced suturing techniques with the **Deluxe BOSS Starter Package**. This complete suturing training kit includes an easy-to-use platform, five different tissue models, an instrument kit and an instructional DVD for independent learning as well as an adjustable tissue tray that allows users to adjust the pressure on the suturing site to vary the size of the open wound.

### BOSS TECHNICAL SKILLS PACKAGE

### PART #: BTSP-10

- ▶ BOSS Suturing Trainer (BOSS-20)
- > Student Tissue Pack (BTP-10)
  - Subcuticular suturing pad
  - > Complex tissue pad
  - Large intestine
  - > Tissue suture pad
  - > Injectable tissue pad
- > Suturing Instrument Kit (SIK-10)
  - Scalpel, Straight Hemostats,Forceps, Scissors, and Sutures
- Tutorial DVD and Self Assessment
- Surgical Knot Tying Board (KTB-10)
- Peg Transfer Board (PTB-10)
- Foam Vessel 15 Pack (SFO-10)

### BOSS TECHNICAL SKILLLS Volume Package PART #: BTVP-10

- > Ten (10) BTSP-10 Technical Skills Packages
- > Two (2) BTP-10 Student Tissue Packages





## **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

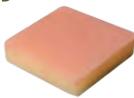
The Student Suturing Kit includes a Tissue Suture Pad, a Subcuticular Suturing Model, a Complex Tissue Model, a Suturing Instrument Kit and an Instructional DVD.



### **COMPLEX TISSUE PAD**

#### PART #: TSC-10

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



### STANDARD TISSUE PAD

#### **PART #: TSM-10**

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



### **SEBACEOUS CYST PAD**

#### PART #: SRP-10

Practice the removal of a cyst. The  $4'' \times 4''$  pad has two cysts that are positioned just below the skin layer and are filled with simulated pus for practice marking, incising, cyst removal, and suturing.





### LIPOMA PAD

### PART #: LRP-10

Ideal for practicing the surgical removal of a lipoma. The pad has two lipomas located within the fat layer and allows the user to make a small incision into the skin, remove the lipoma and suture the tissue closed.





### 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. The tissue is self-sealing and can be emptied of fluid for repeated use.



### INJECTABLE TISSUE PAD

### PART #: ITM-20

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





# **Lap**Trainer<sup>™</sup> with **Simu**Vision<sup>®</sup>

The **Lap**Trainer™ with **Simu**Vision® is a simulated laparoscope that—combined with your PC—creates unsurpassed graphics. SimuVision® technology integrates into our trainer to create an affordable and portable platform for building surgical skills.

PART #: LTS-40
LAPTOP AND INSTRUMENTS NOT INCLUDED.

### **FEATURES AND BENEFITS**

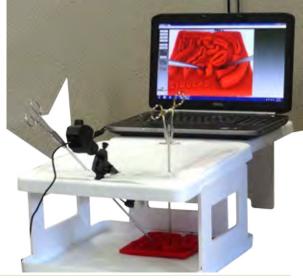
- Portable and affordable
- > Similar look and feel of an actual laparoscope
- Boom mounted, fully adjustable 1080p high definition camera with auto focus
- > Sets up in less than five minutes on any PC
- Records and stores video files
- > FLS and APDS compatible

### **SKILL DEVELOPMENT**

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

### **SKILL SET MODULES**

Laparoscopic Skill Set Modules are also available for the LapTrainer to 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.



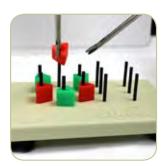
Order at www.simulab.com or call (206) 297-1260



### **LAPTRAINER SKILL SET 1**

#### **PART # SS1-10**

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



#### **Peg Transfer Task**

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



**Key Turning Task** 

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



**Tissue Suturing Task** 

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 immobilizating tissue skills.

### **LAPTRAINER SKILL SET 2**

#### **PART # SS2-10**

Includes Bean Drop, Checkerboard, Block Move, Running String and Suture Foam tasks.



**Bean Drop Task** 

Grasp beans and move them15cm to place them in a 1-cm hole at the top of an elevated cup.



**Checkerboard Task** 

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



**Block Move Task** 

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



# LapTrainer with Skill Set 1 Package PART #: LTS4-SS1

- LapTrainer
- Carrying Case
- Vinyl Top
- SimuVision Camera
- Camera Protector
- LapTrainer Base
- SimuVision Set-up Disc
- Multi-Purpose Clips (4-Pack) (MPC-10
   Key and Rope Trainer
- (Includes Key and Rope)
  (KRT-10)
- Peg Transfer Board (w/ Triangles) (PTB-10)
- Tissue Suture Pads (2) (TSP-10)
- Large Intestine (LGI-10)
- > Skill Set Container



**Running String Task** 

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



**Suture Foam Task** 

Suture two foam squares together using a Grasper and Endostitch.



### **Other Trainers**





### BOSS OB/GYN STARTER PACKAGE PART #: BGSP-20

Basic Open Surgical Skills (BOSS) is a flexible platform for basic surgical skill development. It provides an easy to use platform for synthetic or cadaveric task modules and its ergonomic design creates a realistic tool for improving skills. This package focuses on OB/GYN techniques.

### FOREIGN BODY TRAINER

### PART #: FBT-10

This trainer contains various foreign bodies that allow users to practice using ultrasound to identify items including a nail, a wood splinter, a needle, a glass shard, a bullet, two BBs, and

### **HERNIA TRAINER**

#### **PART #: HTM-30**

The anatomically correct
Hernia trainer allows for the
practice of open surgical
mesh placement among
other practices. The model
is designed for ventral,
direct and indirect mesh placement.



### **LAPAROTOMY TRAINER**

#### PART #: LPM-10

The laparotomy model simulates a partial abdomen and includes skin, subcutaneous fat, fascia, preperitoneal fat, and peritoneum. The base is



water tight and can be filled with fluid.

### LAPAROTOMY TRAINING PACKAGE

#### PART #: LPTP-10

- Laparotomy Model (LPM-10)
- An Extra Replaceable Tissue (LPMT-10)



metal fragments.



### **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.

### PERINEAL REPAIR TRAINER

PART #: PRT-20

This soft tissue model includes skin, muscle, the rectal sphincter and rectal mucosa. It is ideal for training 1st through 4th degree perineal tears, including midline, mediolateral, and lateral incisions. This trainer has very realistic tissue properties for training 4th degree repair with a retractable sphincter and rectal mucosa. The replaceable tissue allows for multiple cuts and suturing.

### PERINEAL REPAIR TRAINING PACKAGE

PART #: PRTP-20

- > Perineal Repair Trainer
- > One additional Replaceable tissue



### **TORSO TRAINER**

PART #: ST-10

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



### **About Simulab**



Since 1994, Simulab has been committed to providing medical simulators and task trainers to the medical education community.

By collaborating with leading educators worldwide, leveraging 20 years of experience, and bringing a specialized knowledge of materials and manufacturing processes to the medical industry, Simulab has become the market leader in the development of realistic and affordable solutions for a wide array of educational needs.

With 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. The system was originally designed for use in the Advanced Trauma Life Support (ATLS) training program and is now used worldwide. Since its release, TraumaMan has also become widely used in military courses, EMS training and other trauma surgery simulations.

In addition to TraumaMan, Simulab also offers a complete line of task trainers that offer medical training programs realistic, durable and affordable tools for highly effective training. This includes central line trainers like CentraLineMan and VascularAccessChild, partial task trainers like the Lumbar Puncture Trainer, the Paracentesis Model, an array of laparoscopic trainers, and various tools to improve suturing and knot tying skills.

Simulab is located in Seattle, Washington, USA, just minutes from the highly acclaimed University of Washington School of Medicine. Simulab has 12 United States and two European patents granted, and seven patents pending for medical simulation technology, synthetic anatomy, and videoendoscopic training technology.





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### www.**simulab**.com

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7,665,995; 8,162,668; 7,857,626; 8,323,029; 6,780,016; 7,850,454; 7,594,815; 8,007,281; 8,556,635; 0870292; S065-0009US