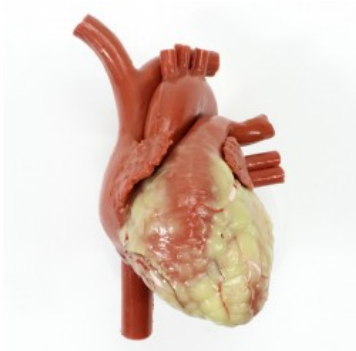


## CABG Heart

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03713



Dimensions are c. 12.7 cm (atria/apex) x 9 cm wide x 7.5 cm (anterior/posterior). Suturable artery segments are embedded in the epicardium of our CABG Hearts to allow repeat practice of coronary vessel anastomosis. Each of these Native Coronary Artery segments may be used a number of times and then replaced, allowing years of training with a single heart. Replacement Native Coronary Vessels and suturable Graft Vessels (representing harvested internal mammary arteries or saphenous veins) are available in a number of different durometers and diameters. It features detailed exterior and interior components consisting of:

- four empty chambers with an interventricular septum,
- trabeculae and papillary muscles
- chambers and atria,
- dilated aorta,
- inferior and superior vena cava,
- pulmonary arteries and veins
- atrial appendages
- rings of the four heart valves.

## Surgical beating heart model for CABG

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM02351



A heart simulator with a very detailed structure with a mechanism that causes the realistic movement of the human heartbeat. Intended for simulation and training of coronary aortic bypass and bypass grafting. The mechanism works like a real muscle and is programmable with different speeds and rhythms. The kit includes a controller, a compressor and a power supply (all of which are necessary for the functioning of a beating heart), as well as sewn and interchangeable coronary artery sites for anastomosis training.

### Dimensions:

- 12,7x9x7,5cm

### Includes:

- Beating heart model CABG
- Beating heart controller
- Compressor

### Replacment part:

- a set of replaceable and sewnable blood vessels of different diameter and hardness

## MICS Mitral CABG Heart

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03714



MICS Mitral CABG Hearts are designed for use in our MICS Thorax Trainer to provide a realistic environment and access for minimally invasive mitral valve repair, annular ring placement, and CABG procedures. Replaceable Left Atria feature options for delicate Prolapsed Mitral Valves with (or without) Chordae and Papillaries, or healthy valves. The left atria attach to the heart magnetically, making for a sleek and firm connection for realistic valve surgeries. Beating Heart versions of MICS hearts are also available.

Three different left atrium options are available for the heart:

- MICS Mitral Left Atrium, Prolapsed Mitral Valve with Chordae and Papillaries
- MICS Mitral Left Atrium, Normal Mitral Valve, no Chordae, no Papillaries
- MICS Mitral Left Atrium, Prolapsed Mitral Valve, no Chordae, no Papillaries

The papillary muscles of the Left Atrium, Prolapsed Mitral Valve with Papillaries and Chordae attach securely to the left ventricle walls, creating tension on the chordae as would be seen in vivo. INCLUDES

- Pericardium with Phrenic Nerve
- MICS Left Atrium with Prolapsed Valve with Chordae and Papillaries
- CABG sites

Suturable, replaceable Native Coronary Artery segments are embedded in the epicardium of CABG Hearts to allow repeat practice of coronary vessel anastomosis. Results may be preserved and presented to mentoring faculty for review and progress assessment. Each of these Native Coronary Artery segments may be used a number of times and then replaced. Replacement Native Coronary Vessels and suturable Graft Vessels (representing a harvested internal mammary arteries or saphenous veins) are available in a number of different durometers and diameters.

## Phantom for maxillofacial surgery

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM02365



A realistic simulator system for training procedures in the field of trauma surgery and orthodontic. It has characteristic anatomical operating points.

Male head with articulated mouth, palate, tongue, oropharynx, dental arch, mouth, muscular structures, nerves, vessels, eye sockets and eyes. Possible specification adjustment - condyle, maxilla, mandible, zygomatic fractures, periorbital and suborbital lesions, as well as other fractures in the face and skull area. It can be used to learn how to use the correct plates, screws and artificial tissues, and for radiographic control.

### Options and spare parts:

- Polytrauma module - Polytrauma face with up to 7 fractures, for surgical correction of fractures or for orthognathic surgery
- Anatomical module - it has no previous fractures, which makes it possible to teach regular techniques of the proposed surgery
- Subcondylar module - skull with jaw fracture and bilateral subcondylar fracture
- Zygomatic module - Skull with a bilateral zygomatic fracture; frontal sinus fracture with mucosa; paravertebral fracture of the right jaw and left subcondylar fracture
- base for the phantom

### Dimensions and Weight:

- 15,5 x 23,0 x 24,0 cm | 6.10 x 9.06 x 9.45 inches
- 3.03 kg

## Surgical Female Pelvic Trainer (SFPT) Mk 2

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03659



The Surgical Female Pelvic Trainer (SFPT) is a simulator for training in a wide range of laparoscopic gynecological surgical techniques and procedures. The uterus component can be easily removed and replaced after use.

### SKILLS GAINED

- Salpingectomy
- Salpingostomy
- Myomectomy
- Cystectomy
- Hysterectomy
- Oophorectomy
- Dissection down to and location of ureters
- Insertion and use of uterine manipulator
- Working with various gynecology instruments
- Identification of anatomical landmarks

### OVERVIEW

- Provides practice and role playing for gynecological perioperative teams
- Includes a realistic vaginal canal and cervix for inspection, in which a uterine manipulator can be used
- Realistic bleeding when arteries are cut

### REALISM

- Insufflation of abdomen is represented

### VERSATILITY

- Compatible for use with harmonic scalpels

### CLEANING

- Drain all fluid from the product when not in use
- Clean lumbar puncture trainer with a damp cloth, using warm water and mild detergent
- Allow trainer to completely dry before storing

### SAFETY

- This product is latex free

### ANATOMY

- Uterus



- Vagina
- Cervix
- External Introitus
- Bladder
- Fallopian Tube
- Ovaries
- Broad Ligament
- Ureters
- Uterine Artery
- Ovarian Artery
- Pouch of Douglas
- Dunns Pouch
- Bowel and Sigmoid
- Ovarian Cyst
- Ectopic Pregnancy
- Fibroid
- Uterosacral Ligament
- Cardinal Ligament
- Abdominal Skin with realistic pressure needed to insert cannula
- Pelvic Floor with sympathetic features

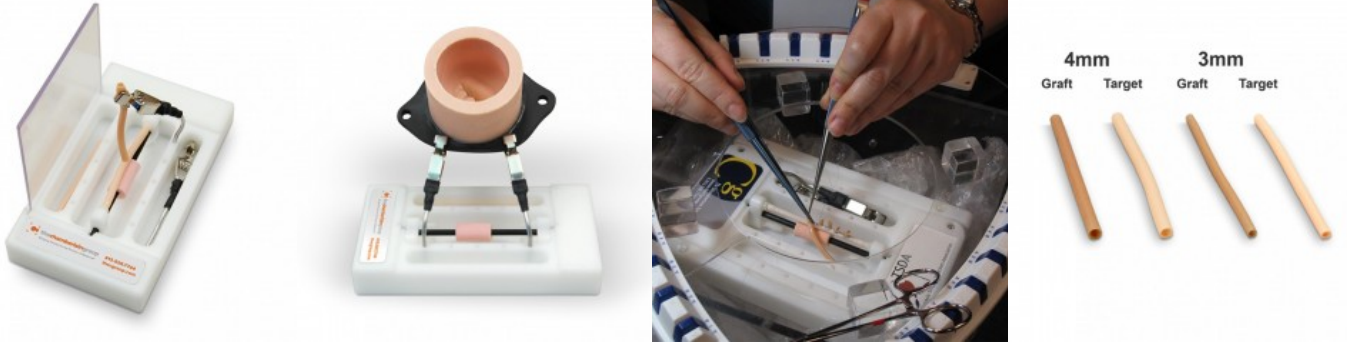
#### CONTAINS

- SFPT Mk 2 Uterus
- SFPT Abdominal Skin Pad
- Concentrated Venous Blood - Starter Pack
- SFPT Mk 2 Abdomen
- SFPT Mock Blood Kit (includes reservoir and pump)
- Blunt dispensing needle and syringe
- Bed securing strap
- SFPT Mk 2 Perineum
- SFPT Mk 2 Bowel

## Pocket Vessel Anastomosis Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03721



The Pocket Vessel Anastomosis Trainer provides surgical learners with a platform for deliberate practice of basic cardiothoracic and vascular operative skills in a safe, repeatable environment. When not in use, this compact Trainer will fit in a lab coat pocket and can be used outside of the simulated lab environment. Replaceable graft and target vessels allow for multiple anastomoses. The clear cover can be used to create a more challenging distance or angle from the anastomosis or repair site to perfect needle and needle holder angles, as well as suture placement.

The Pocket Vessel Anastomosis Trainer may be configured for valve repair practice by the additional purchase of our Mitral Valve Prolapse Trainer. Trainer includes one of each of the following:

- 4mm Target Vessel
- 4mm Graft Vessel
- 3mm Target Vessel
- 3mm Graft Vessel



## Compact Abdominal Surgery Trainer AST

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03729



Our versatile general surgery trainer, reconfigured in a more compact size, for use with laparoscopy and robotic systems, and for open procedures. Replaceable, suture- and staple-compatible gastrointestinal organs include: Stomach, Small Bowel with Rooted Mesentery, Colon and Mesocolon. Practice a variety of procedures or concentrate on a single procedure and avoid the expense and inconvenience of biological tissue. This portable workhorse permits years of use with a single trainer — the lifelike organs and skins may be replaced as needed.

Accommodates the following procedures:

- Open and Laparoscopic Hemicolectomies
- Open and Laparoscopic Lower Anterior Resection
- Open and Laparoscopic Appendectomy
- Gastric Banding
- Sleeve Gastrectomy
- Open and Laparoscopic Roux-en-Y Gastric Bypass
- Open and Laparoscopic Ventral Hernia Repair

The Compact Abdominal Surgery Trainer represents a male patient below 50th percentile.\* Trainer offers life-like mimetic tissue, patent digestive tract, oral or rectal access, interchangeable covers, and replaceable organs and skins. Surrounding anatomy included for anatomical reference: liver, gall bladder, spleen, anterior pelvic bone, urinary bladder, prostate, ureters, and pelvic floor muscles. \*Also available with female pelvic anatomy (female patient of 50th percentile). **INCLUDES**

- Trainer base with permanent organs, muscles, and pelvis
- Stomach
- Duodenum
- Small Bowel with Rooted Mesentery
- Colon with Mesocolon
- Compact AST Laparoscopic Cover
- Compact AST Advanced Laparoscopic/Hernia Skin



## Vaginal Cuff

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03736

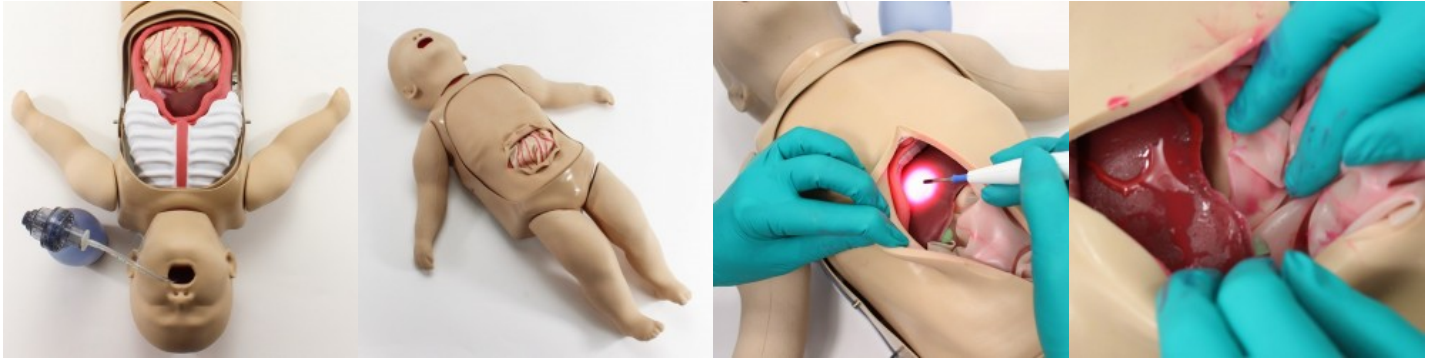


For vaginal cuff closure training using open, laparoscopic, or robotic technique, this mimetic tissue cylinder offers lifelike tactile qualities for suturing practice. It may be used for repeated training; simply cut a fresh edge once a training session is complete. Length is approximately 150 mm (c. 5.9 "), lumen diameter is c. 36 mm (c. 1.4 ") and wall thickness c. 5 mm (0.2 "). Appropriate for use with our GYN Trainer.

## Pediatric phantom for general surgery

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM02334



The professional pediatric phantom designed for general surgery training in high fidelity conditions (unlike other manikins which only simulate basic physiology, this simulator "moves the surgical instruments"), allowing the surgical teams to perform important steps in order to optimize performance. safety and performance for children.

### Specification:

- a full-size pediatric phantom (torso + limbs) adjusted to the shape and size of an average infant
- a chest with ventilated lungs
- trachea adapted to intubation,
- esophagus replaceable
- replaceable IVC
- bleeding liver with gallbladder and electrocoagulation effect has built-in sensors that respond to electrocoagulation simulation with visual and auditory signals.
- replaceable stomach with a greater omentum
- small intestine with rooted mesentery,
- colon the insides can be filled with a fluid that imitates intestinal juice
- there are separate blood flows through the liver and IVC (inferior vena cava) and diffuse surgical bleeding
- abdominal bleeding sites from IVC are obscured by the small intestine and colon.
- electrocoagulation simulation kit 2
- interchangeable 2 skins for cutting
- quick reference guide that provides tips on how to prepare a simulation session.
- protective case

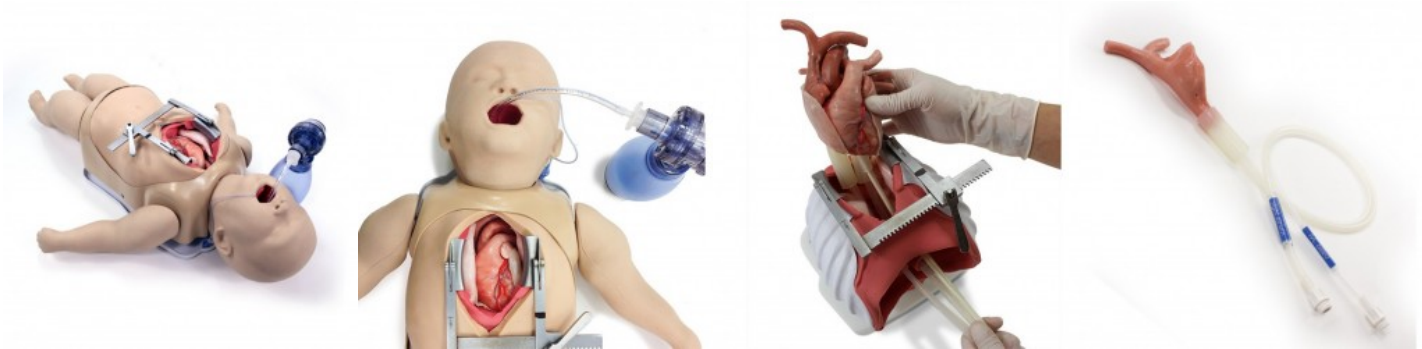
### Spare parts and options:

- small intestine
- stomach with omentum
- large intestine / colon
- skin adapted to cuts
- Succus Entericus
- General Surgery Module

## Surgical pediatric simulator with a cardio-thoracic module

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM02333



A professional, full-size phantom (torso + limbs) adjusted in shape and size to an average size of a 14-month-old baby designed for high fidelity pediatric cardiac and general surgery training (unlike other mannequins that simulate only basic physiology, this simulator "moves the surgical instruments"), enabling important steps to be performed by operational teams to optimize children's performance, safety and outcomes. It is a platform for simulating the challenge of achieving hemostasis during an emergency return to the operating room. With the purchase of the simulator, a quick start guide is included, which provides tips on how to prepare a simulation session.

### Specification:

- full-size phantom (torso + limbs) adjusted in shape and size to an average size of a 14-month-old baby
- realistic beating heart: with right and left ventricles, pericardium and a replaceable system in the form of the right atrium and aorta adapted to cannulation. It Can be powered and synchronized with the patient monitor output for increased realism - there is a sutured IVC, bleeding site in the right atrium
- realistic ventilated lungs and breathing,
- bleeding function realistic,
- soft to the touch limbs
- an ambulatory pulse felt on the radial arteries
- head, trachea and lungs adapted for intubation
- the set includes 2 dedicated skins adapted to cutting
- retractable sternum
- heartbeat controller with pulse - 4 pre-programmed heart rates: 60, 90, 120 or 160 beats per minute, and also control the strength of the pulse from weak to strong. '
- protective case for transport
- quick reference guide that provides tips on how to prepare a simulation session.

### Spare parts:

- right atrium of the heart with the possibility of clamping, cannulating, suturing. Contains hidden bleeding sites.
- aorta with the possibility of clamping, cannulating
- suturing removable leather suitable for cutting

## Belly Case

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03733



Belly Case provides surgical learners with a platform for deliberate practice of open gastrointestinal operative skills in a safe, repeatable environment. It consists of a compact abdomen including the pertinent adult anatomy of a midline incision and an alternate abdominal wall with dual ostomy sites without the bulk or expense of a full abdomen. Users not only have the experience of suturing with our realistic mimetic Tactility Bowel, but of doing so within the constraints of the abdomen.

Belly Case includes:

- Suitcase Abdomen
- Midline Incision Bib with Abdominal Incision (7" x 5")
- Ostomy Bib with dual Ostomy Perforations
- Positionable Arm
- Bowel and Small Vessel Anastomosis Stand with Patency Assessment Capability
- Syringe for Patency Assessment
- Vessel Stabilizing Clip
- Carrying Case

When practicing bowel and vessel anastomoses the anatomy may be filled with fluid or air via a mating luer lock on the supporting stand to test for "hemostasis." Suturing may be preserved and presented to mentoring faculty for review and progress assessment. Designed specifically to address the hands-on needs of the general surgery resident training open surgery anastomosis and ostomy suturing in the abdominal cavity. Belly Case may also be used with our Target and Graft Vessels for small vessel anastomosis.

## Heart Case

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03716



Heart Case provides surgical learners with a platform for deliberate practice of basic cardiac operative skills in a safe, repeatable environment. Heart Case is a compact thorax including the pertinent adult anatomy of a full sternotomy opening (approx. 5" x 7") without the bulk or expense of a full thorax.

Designed specifically to address the hands-on needs of the cardiothoracic resident, the platform is intended for training:

- Coronary Artery Bypass Grafting, both Proximal and Distal Anastomoses
- Aortic Valve Implantation
- Aortic Cannulation
- End-to-Side Anastomosis on small vessels
- Mitral Valve Procedures

The positionable arm and mating plates enable the use of many of our cardiothoracic trainers within the anatomical context of a sternotomy. Rapid interchange is then possible from user to user and procedure to procedure. For aortic and vessel anastomoses the anatomy may be filled with fluid or air via a mating luer lock on the supporting stand to test for "hemostasis." Suturing may be preserved and presented to mentoring faculty for review and progress assessment. HEART CASE includes:

- Suitcase Thorax with Full Sternotomy
- Positionable Arm
- Heart Cradle to accept CABG Heart
- Vessel Anastomosis Stand
- Vessel Stabilizing Clip
- Mitral Valve Mating Plate
- Aortic Root Mating Plate
- Aortic Cannulation & Proximal Anastomosis Stand
- Carrying Case

### SUGGESTED FOR USE WITH HEART CASE TRAINER

- New Mitral Valve Prolapse, delicate prolapsed posterior leaflet for training in incision and suture repair
- Mitral with Atria, for training mitral valve repair
- 4" Aorta, 10cm length suturable aorta for cannulation and proximal anastomosis
- Aortic Root anatomically accurate for valve implantation training
- CABG Heart, patent
- CABG Beating Heart
- Native Coronary Artery segments for CABG sites, 10 pack



- Mini-Sternotomy Bib
- 3mm or 4mm Target and Graft Vessels
- Portable Light

## Simulator for pediatric neuroendoscopic surgery

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03888



Pediatric Neuroendoscopy Simulator (NEB) is part of the Pediatric Baby Simulator (PBS) system which was developed to offer realism in pediatric neuroendoscopy procedures. Its surgical unit is a replaceable and customizable head, with face and hydrocephalic skull, containing in its interior dilated cerebral ventricles. A catheter controls the outflow of the air, while another allows the filling by liquid injection using a syringe and saline solution, until the dilation of the skull is perceptible.

In this model, it's necessary to perform a craniotomy, allowing the insertion of a neuroendoscope, optionally, in the left or right lateral ventricle. Internal pathologies can be offered in a customized way, allowing the physician in training to identify structures such as: lateral ventricles, third ventricle, fourth ventricle, striated artery of the thalamus, septal vein, dilated Monro orifice, pineal, chiasm, Sylvius aqueduct, mammillary bodies, tuber cinereum, interpeduncular fossa and basilar artery, among other structures. The NEB simulator provides surgical access to tumors such as colloid cysts gliomas, cysticerci and meningeomas, among others. It is also possible to perform cauterization of the choroid plexus, removal of tumors and ventriculostomy. Bleeding is present in the approach to tumors.



## Simulator sinus and skull base endoscopic surgery

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03876



The SIMONT(SOT) simulator allows endoscopic sinus surgery from a simple SOT ostium opening up to the access of the skull base.

The SIMONT simulator with the anatomy of the face sinuses, turbinates, nasal septum, vessels, including sella turcica with adenoma, among other structures. Specific pathologies such as cysts, tumors, and tissues similar to inflammatory processes are inserted on the model to make the intervention even more realistic, allowing therapeutic behaviors from the simplest flap up to the opening of the sella turcica and removal of the pituitary adenoma. Several surgeries can be performed on SIMONT, such as: • Turbinectomies, removal of the uncinate process; • Enlargement of the maxillary ostium; • Drainage of maxillary cysts; • Removal of the ethmoidal bull; • Periorbital approach by the lamina papyracea; • Removal of agger nasi and frontal opening; • Abscess drainage; • Identification and dissection of the artery and the sphenopalatine orifice; • Training in several models of septal flap; • Identification and expansion of the sphenoid ostium for allow entry into the sphenoid; • Removal of the intersfenoidal septum; • Opening of the sella turcica; • Removal of pituitary adenoma and craniopharyngioma. Components and spare parts:

- Acrylic base
- Surgical unit holder
- Anatomic Model surgical unit: For studies and anatomical dissection
- Sinus Pathologies surgical unit :Dissection of sinus pathologies
- Sinus Pathologies + Skull Base, surgical unit :Endoscopic access to the skull base



## Neuroendoscopy Surgery module

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03755



The SNT simulators allow neuroendoscopic training on the obstructive pathologies of the cerebral ventricles.

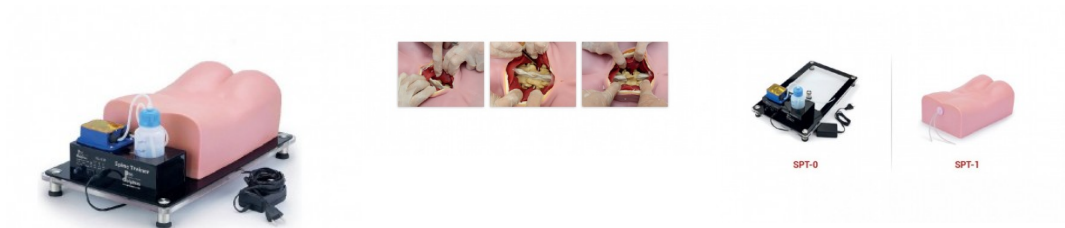
The system (SNT) consists of a fixed support which includes, inside its skull cap, a surgical unit of a brain that allows the introduction of an neuroendoscope. The structure of its base allows elevation and rotation of the head in various positions. The training consists in identifying the lesions and proceed with techniques, allowing the choice of the instruments to be used. The tumors are similar to gliomas, neuropharyngeal tumors, cysticerci, colloid cysts, and many others. The goal is to remove these tumors as well as to perform a ventriculostomy with a fogarty expander catheter. It is also possible to identify important vessels such as the septa artery, thalamus striatum and basilar, among others. A peristaltic pump allows the filling of the ventricles under pressure, simulating a hydrocephalic pathology. The SNT simulator allows bleeding by contact during tumorectomy and ventriculostomy, which makes it even more realistic. Components and spare parts:

- Acrylic bas
- Surgical unit
- Support with face
- Skull cap

## SPINETRAINER FOR OPEN AND ENDOSCOPIC SPINE SURGERY

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03880



The Spine Trainer (SPT) provides posterior access to the spine with surgical realism similar to a real surgery.

The Spine Trainer was developed and designed for training in spinal stenosis and spinal instrumentation with all the equipment of a real surgery. Loss of cerebrospinal fluid and damage to nerve roots are observed during practice, allowing for even more realism in training. It can be used for training in endoscopic or open surgeries of the herniated disc, needle punctures under radiological control, spinal and epidural punctures among many other training options. The surgical unit is composed by the sacral region to the lumbar region (beginning with T12) and has cleavage levels between the skin, subcutaneous cellular tissue, muscle, yellow ligament, discs, vertebrae, dura mater, and the marrow with its nerve roots. The model allows customization of pathologies such as hernias, discal and bone pathologies. It provides sectional endoscopic access in multiple spaces on the left or right. It allows open surgery for vertebral fixation and, among many other techniques, the management of complications such as root lesions, liquoric traumatic fistulas, facet stenosis and medullary canal. Equipment similar to those used in a real surgery are needed for the procedures. Its acrylic base accommodates a peristaltic pump that keeps the spinal cranial fluid circulating. Components and spare parts:

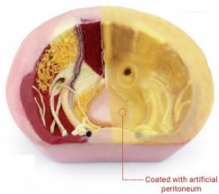
- Acrylic base
- Surgical unit



## **SIMULATOR FOR TRAINING IN SURGICAL PROCEDURES FOR CORRECTION OF INGUINAL HERNIAS**

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03864



Hernio trainer - An innovative training system that can be used for HRT anatomical teaching of the hernial processes or for teaching of hernioplasty by laparoscopy

The Herniotrainer (HRT) is a simulator that has a pelvic shape, in which is possible to perform retroperitoneal dissection and identification of structures related to the correction of inguinal hernias. The HRT offers indirect and direct options. Through this training it is possible to identify bladder, vessels and inguinal structures such as: spermatic canal, cooper ligament, ureter, iliac vessels, genitofemoral nerve, inferior epigastric vessels, ileopubic tract, and muscles. After its use and after removing the peritoneum of the pelvis with hernia correction, the surgical unit made of Neoderma allows reutilization and recycling, making the training more economical. The HRT system can be connected to Pro Delphus NEO-KNOT, enabling the use of graspers, real laparoscopic optics, digital camera with a computer, or even tablets.

## ENDOSCOPIC TEMPOROMANDIBULAR JOINT SURGERY

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03857



The MAX-ATM simulator was designed and developed for training in TMJ arthroscopic interventions. It presents the internal anatomy of the temporomandibular joint of the right side of a face with possibility of customization of pathologies, such as polyps, adhesions, disc detachment, synovitis and many others.

The surgical units are disposable and replaceable, consisting of a male half head with articulated oral cavity. It allows endoscopy of the joint in the standards required by a real surgery. Acrylic base in inclined board format, reusable after the replacement of the surgical unit. Options for Surgical Units MAX-ATM:

- **MAX-1A ANATOMIC:** Designed for arthroscopic access of the temporomandibular joint, allows for anatomical landmark identifications.
- **MAX-1P PATHOLOGIES:** Can be customized with several pathologies such as polyps, disc detachment and displacement, sinovites, joint injuries, adhesions, among others.



## **SIMULATOR FOR BREAST SURGICAL INTERVENTIONS**

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03869



Examinations and surgical procedures in a single simulator, customizable MMT for various pathologies and sizes

The Mastotrainer System was designed to provide multiple opportunities for clinical, surgical or interventional training. It is available in four options of breast shapes and sizes, allowing dozens of customizations. It comes with an acrylic base and a surgical unit positioned in a system of shock absorbers, allowing movement and view in an elevated position. Customization options: • Cysts • Fibroadenomas • Carcinomas • Lymph nodes Possible surgical maneuvers: • De-epidermalization • Identification of surgical cleavage points • Mastopexy • Prosthesis application (infra and supra muscular) • Mastoplasty with sutures • Correction of asymmetry • USG-guided punctures and more.



## **SIMULATOR FOR PEDIATRIC CRANIOSYNOSTOSIS**

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03887



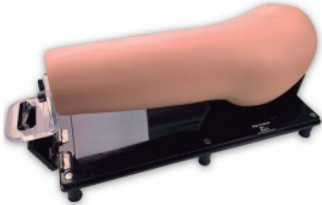
The CEB simulator was designed for realistic training in craniosynostosis surgeries

The scaphocephaly in the model can be corrected by either endoscopic or open procedures, and, when irrigated, it allows bleeding. It is possible to identify the sagittal superior venous sinus in its anatomy, which makes the procedure similar to that of a real surgery. The bony part can be reduced and the use of plates and screws allows the same techniques of surgery in humans. After the procedure is done, the CEB surgical unit (head) can be replaced, and its base (body) is also compatible with the Baby Endoscopic Neuro system (NEB).

## Hip Surgical Simulator (Standard model)

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03756



The Hip Trainer came to meet the needs of surgical education services, allowing the study of the best access and puncture techniques to teaching joint triangulation, treatment of hip stabilization, use of anchors, sutures, fixators and prostheses and so much more. Considering the impossibility of using people or cadavers in the training phase of new surgeons, with Hip Trainer the teaching options are multiple and placed into growing difficulty levels, also allowing open surgery after arthroscopy. The presence of skin, fat, muscles, nerves, vessels and bones enables a complete training with the real anatomy of hip and leg pathologies. Lateral and anterior accesses can be made when implanting prostheses, while the use of real instruments provides the ideal environment for teaching.

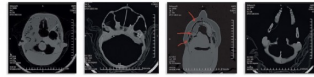
Components/Optional:

- Reusable support
- Surgical Unit

## SIALENDOSCOPY TRAINING

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03858



The MAX-SIALO is one of the system of simulators, developed for training in endoscopic interventions of the salivary ducts.

The surgical units are composed of a half male head with articulated oral cavity, palate, tongue, oropharynx, dental arch, lips, orbital cavity and eyes. It has skin, subcutaneous cellular tissue and muscles. The salivary ducts and their orifices allow the introduction of the sialoendoscope between the various arboriform bifurcations of the ducts. The use of baskets and laser provides a realistic training similar to the ones performed in living beings. It also allows radiographic control.

- Reusable base (MAX-0S): Made of acrylic to support the surgical unit
- Surgical Unit (MAX-1S): Provides internal anatomy of the ducts of the salivary gland with calculus, and training is done through the use of a sialoendoscope.

Components and spare parts:

- Complete simulator
- Acrylic base
- Surgical unit



## **SIMULATOR PEDIATRIC TRAUMATOLOGY AND ORTHOPEDICS - LEG**

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03871



The SGV simulator was developed for the orthopedic training in newborns with Genu Valgum legs. It allows education and training in correction procedures using plaster cast. The surgical unit is limited to the infant leg and it allows multiple and repeated use.

## Thoracic Trauma Simulator (Standard model)

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03752



The exclusive Pro Delphus Thor-T model was designed with all the structures of a right hemithorax to simulate several surgical options, allowing for resections, incisions, reconstructions and much more.

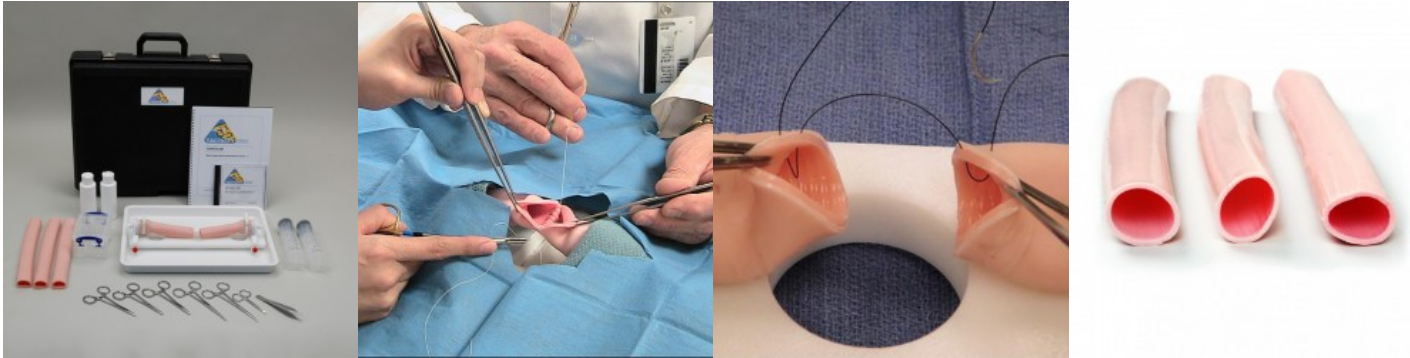
Among some trauma surgeries in this chest simulator, the following are possible: a) Thoracic incisions: anterior, lateral and posterior thoracotomy, all types of incisions for access to VATS and ROBOTIC procedures b) Special incisions such as paravertebral, Chamberlein and subxiphoid access c) All types of chest wall resection and reconstruction including complex surgeries on the clavicle, scapula, sternum and spine d) Thoracic trauma, fixation of the ribs with plates, anterior, lateral, posterior and under the scapula e) Thoracic trauma, rib fixation with VATS, internal systems and / or removal of intrapleural fluid (can be prepared in the laboratory immediately before the surgical procedure). Components / spare parts:

- Acrylic support
- Surgical unit for thoracic trauma, without pathology
- Surgical unit for thoracic trauma, with pathology
- Peristaltic pump with blood support

## Tactility Surgical Learning System

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03732



A complete training system for basic intestinal operative skills. Designed for resident training, the system enables surgical learners to perform basic intestinal operative skills and to identify technical errors in the act of performing surgery. The model, curriculum, and advanced trainer not only lend themselves to the execution of specific skills, but also to the repetition of these skills, or deliberate practice.

### THE COMPLETE TACTILITY SURGICAL LEARNING SYSTEM INCLUDES:

- Anastomosis stand, tray, and patency assessment fixture
- Twelve 10 " long, 1 inch diameter, mimetic bowel tissue segments
- Surgical Instruments: 2 forceps, 3 hemostats, 1 scissors, 1 needle driver, 2 60cc syringes
- Lubricant and simulated succus entericus
- Curriculum booklet, DVD, and laminated pocket guide
- Specimen case and progress tags
- Hard plastic carrying case

Replacement Tactility Bowel segments are available in packs of 6 or packs of 12.



## **Native Coronary Artery (2mm) 10-pack**

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03712



2.0mm ID / 3.96mm OD suturable Vessels with double reinforcement and lower durometer.

Replacement, suturable coronary arteries for coronary artery bypass graft training. To facilitate CABG training with any of our CABG Heart models or our Heart LAD Pod. These Native Coronary Arteries slot into CABG sites on epicardial layer of the heart and are easily replaced.

## Robotic Beating Heart Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03718



This trainer pairs our Thorax with Movable Ribs with our patented beating heart technology to create a realistic environment for off-pump MIS robotic training. The Beating Heart features CABG sites and includes a compressor, controller, and power supply. The Thorax features a closed chest with intercostal spaces and flexible ribs for simulating MIS procedures. Sub-xiphoid port also available. Thorax has durable replaceable skins for left and right chest that will accept instrument ports and trochars. Thorax has right axilla exposed for mitral valve repair access when used with our Mitral Valve Prolapse Trainer or Mitral with Atria. Alternate thoraxes with both axillae exposed and with full sternotomy are also available.

### INCLUDES

- Thorax with Movable Ribs
- 1 Set of Skins for Thorax
- CABG Beating Heart
- Beating Heart Controller
- Compressor

## Uterine Surgery Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03735



A lifelike anatomical simulation for training multiple uterine procedures. This seemingly simple model has great utility for multiple-procedure physician training.

The trainer enables practice of three procedures with one Replacement Uterus/vaginal canal. Myomectomy may be performed for enucleation of the seven myomas on the uterus with two-layer suturable closure. The uterus may then be dissected off the vaginal canal for full hysterectomy. The remaining vaginal canal may then be affixed to mesh and a sacrocolpopexy performed by attaching the sling to the available sacral tissue patch. The uterus/vagina may then be easily replaced for repeating these procedures. Uterus may be held in anteverted or retroverted position. Sacral tissue patch is also replaceable.

## Abdominal Surgery Trainer with Original Organs

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03731



A highly detailed abdominal trainer with great versatility. Designed as a workhorse for general surgery applications, the Abdominal Surgery Trainer (AST) presents staple-compatible organs and tack-compatible skins for both laparoscopic and open procedures.

Since the trainer organs and skins may be replaced individually, the user can concentrate on a particular procedure, or multiple procedures, in the upper or lower abdomen and replace only what is used. Oral and anal access permit device introduction via the mouth and esophagus or the rectum. The landscape of the retroperitoneal organs provides anatomical reference and fully-dimensional surrounding organs include the liver, gall bladder, spleen, anterior bony pelvis, urinary bladder, ureters, and pelvic floor muscles. The trainer is designed to accommodate the following procedures:

- Open and Laparoscopic Hemicolectomies
- Open and Laparoscopic Lower Anterior Resection
- Appendectomy
- Gastric Banding
- Sleeve Gastrectomy
- Open and Laparoscopic Roux-en-Y Gastric Bypass
- Open and Laparoscopic Ventral Hernia Repair

### INCLUDES

- Trainer base with permanent organs, muscles, pelvis
- AST Head and Esophagus
- AST Original Stomach
- AST Duodenum
- AST Original Small Bowel
- AST Original Colon
- AST Laparoscopic Cover
- Advanced Laparoscopic/Hernia Skin for hernia training
- AST Open Surgery Cover

An optional Open Hernia Skin for use on Open Surgery Cover is sold separately.

## VATS Trainer with Mimetic Lung

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03723



Designed for refining thoracoscopic skills, the VATS Trainer with Mimetic Lung is a right hemi-thorax with incisable skin/muscle layer and spreadable ribs. The replaceable lung, derived from patient CT data, includes blunt-dissectible parenchyma and a main bronchus, vein and artery in each of the three lobes for individual dissection and ligation.

Trainer includes:

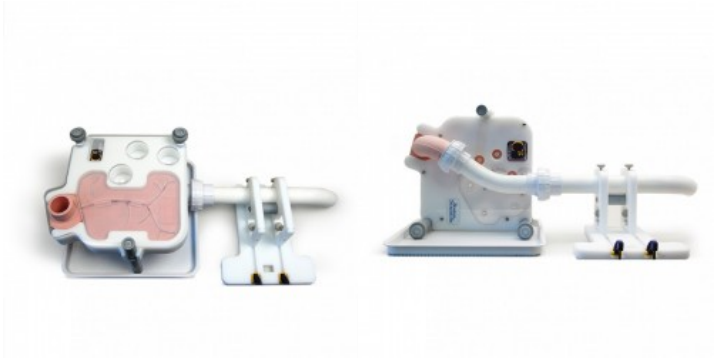
- Rigid hemi-thorax providing a shoulder landmark and access to the skin of the right thorax
- Incisable skin/muscle layer through which the ribs may be palpated for port placement
- Hemi-ribcage with spreadable ribs derived from patient CT dataset
- Two mimetic lungs with staple-compatible artery, vein and bronchus for each of the three lobes. The lung parenchyma may be blunt-dissected to reveal these structures. Vessels are fluid-filled and ooze blood if improperly handled. Available in Full or Collapsed (#8011) versions.
- Trainer base with diaphragm, spine, and fluid drain
- Effluence tray
- Shipping Case



## ERCP Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03728



Moving beyond the simpler platform of our Biliary Endoscopy Trainer, the ERCP Trainer places the biliary anatomy into a broader anatomical context. The trainer can be positioned to simulate a patient in either a lateral or prone position. Access is gained through a long tube that simulates passage of a scope through the esophagus and stomach and into the duodenum.

Two anatomical covers are provided, one clear for direct visualization and one opaque for endoscopic viewing. Anatomy of the papilla, common bile duct, cystic duct, hepatic ducts and pancreatic duct are represented. The trainer has a port for fluid injection to enhance the realism of the training experience. Clamps and straps are provided for trainer stability. A carrying case is provided to house and protect the trainer elements. Replaceable elements include:

- pre- and post-sphincterotomy inserts,
- lumen strictures for stenting
- anomalous tissue sites for biopsy.

## Suitcase Thorax

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03719



A compact full sternotomy trainer with full size anatomy. The Suitcase Thorax retains the pertinent anatomy of our normal heart with pericardium in a full sternotomy while eliminating the bulk of the larger thoracic models. Tethered IVC and left pulmonary veins allow apex to be lifted for posterior heart access. Full sternotomy opening is approximately 5 " x 7 ".

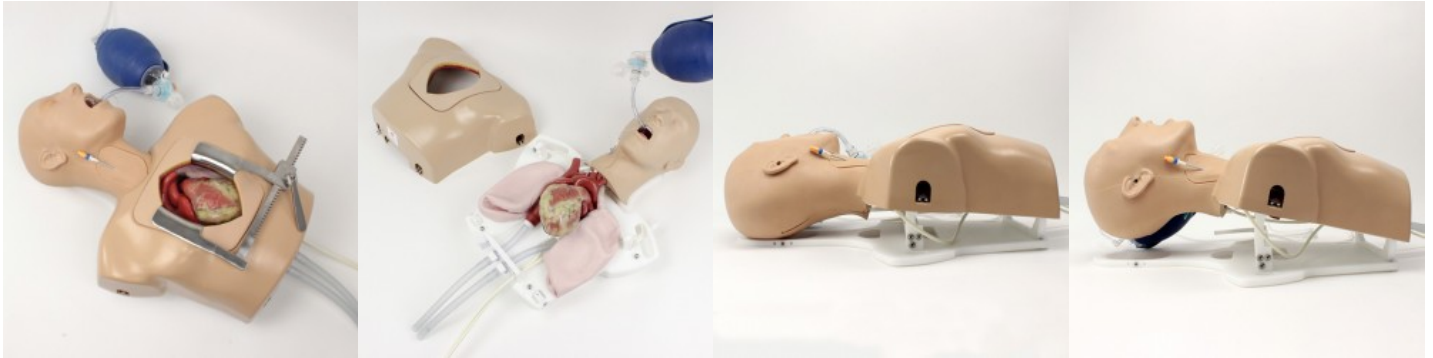
Includes your choice of Patent Heart or CABG Heart. Tethered IVC and left pulmonary veins allow the apex to be lifted for posterior heart access. The full sternotomy opening is approximately 13cm x 18cm.



## Enhanced ECMO/Perfusion Team Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03715



Patient mannequin for emergent CPB with V-V ECMO

Engage your surgeon, residents, and the entire clinical team in immersive ECMO/Cardio Pulmonary Bypass simulation training. Our Enhanced ECMO/Perfusion Team Trainer is the cardiac surgical mannequin your perfusion/CPB simulations have been missing—interfacing with your Calafia or Orpheus™ simulator system and ECMO or Heart/Lung Machine\* to bring the virtual patient off the screen and onto the operating table.

- V-V ECMO Modalities
- Intubation and Pulmonary Ventilation
- Cannula Placement and Suturing
- X-clamp Application and Arterial Line Pressure Management
- Antegrade Cardioplegia Delivery
- Coronary Artery Bypass Grafting

. Our patented technology, accurate anatomy, and mimetic tissue make this the most realistic beating heart simulator on the market—permitting you to perform all surgical aspects of the procedure with convincing realism. The Trainer supports, intubation, pressurized fluid flow, cannula placement, and coronary artery bypass grafting. Heart rate may be controlled remotely or synchronized with the signal from a patient monitor or simulator system. All soft tissue elements are easily replaced for deliberate practice in multiple training sessions. Interchangeable anatomies allow you to choose from high-fidelity or cost conscious options. Lightweight robust construction (a 50% weight saving over our previous model) makes the trainer both portable and durable. INCLUDES

- Chassis: rigid flat back thorax with articulated Intubatable Head
- Replaceable Oral Cavity Insert
- Replaceable Skin for Head
- Replaceable Jugular Access Insert
- Replaceable Jugular Access Skin
- Ventilatable Lungs
- Shoulder Lift System
- Interchangeable Full Sternotomy Bib

ECMO Beating Heart includes:

- Cannulatable & Replaceable Right Atrium
- Cannulatable & Replaceable Aorta
- Replaceable Left Atrium
- Beating Right and Left Ventricles
- CABG sites- Replaceable Native Coronary Arteries



- Shipping Case for ECMO/Perfusion Team Trainer
- Beating Heart Controller
- Air Compressor, please specify mains or line voltage and destination country when placing order.
- Enclosed Compressor US voltage - 110VAC
- Enclosed Compressor International voltage - 220VAC

## Laparoscopic Radical Prostatectomy (LRP) Trainer

Price: 0 EUR (~~0-EUR~~) + shipping cost

Product code: SM03737



Re-anastomosis training for Laparoscopic Radical Prostatectomy surgery. This LRP Trainer has a soft cone simulating the narrow anatomical space of the pelvis with a suturable Urethra and either Half Bladder or Full Bladder. May be used with our Pelvic Trainer Exterior.

## VATS Trainer for Explant Left-Side

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03724



A left-sided hemi-thorax derived from patient CT data. The VATS Trainer for Explant Left-Side is designed to accommodate a porcine heart lung block as the dissectible tissue for lobectomy. It offers all pertinent landmarks for skills development in thoracoscopic lobectomy and lung resection surgeries. The trainer presents a patient in a lateral decubitus position with exposed anterior and posterior thoracic wall. The replaceable, inciseable skin/muscle element supports trocars and is comprised of our renowned mimetic tissue. Ribs may be palpated beneath the soft tissue for procedural port placement. The trainer is equipped with a tray to capture tissue effluence and is easily disassembled for cleaning.

### Trainer INCLUDES:

- Rigid hemi-thorax providing a shoulder landmark and access to the left anterior and posterior thoracic wall
- Inciseable and replaceable skin/muscle element
- Hemi-ribcage with retractable ribs
- Base with diaphragm, spine, and fluid drain
- Effluence tray
- Shipping case

Entire trainer can be disassembled and is washable with soap and water. Effluence Tray lifts out of base for ease in clean up. Replacement Skins available.

## EMS Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03727



Faced with the challenge of providing a means to demonstrate and train a variety of GI endoscopy procedures, The Chamberlain Group developed this highly successful solution. By placing the lumens of the stomach and duodenum, a section of colon, and an esophagus all into one platform and making easily reusable and replaceable tissue elements, we have brought the cumbersome GI anatomy into a portable and affordable format. The EMS Trainer has individual tissue elements that fit securely into the lumen walls without fasteners or other non-anatomical additions. These tissue elements simulate typical pathologies and allow for multiple procedure practice; clipping, biopsy, stenting, and snaring. Each tissue element may simply be popped out and replaced as needed. The EMS Trainer may be configured with its clear shell for direct visualization or with its opaque, detailed, soft tissue pad in place for endoscopic visualization. The accurately dimensioned lumens are texturally detailed. A protective cover accommodates all trainer elements for storage. **INCLUDES**

- Esophageal Varix for Clipping
- Esophageal Tissue Anomaly for Biopsy
- Two Gastric Ulcers for Clipping; Superior, Inferior
- Stomach Tissue Anomaly for Biopsy
- Esophageal Stricture 12mm for Stenting
- Pyloric Stricture for Stenting
- Duodenal Stricture for Stenting
- Colon Polyp for Snaring
- Colon Post-Polypectomy Site for Clipping
- Colon Perforation for Clipping
- Colonic Stricture for Stenting

Shipping Case for EMS Trainer, EMS Esophageal Stricture 7mm, and EMS Colonic Stricture 3.0-3.5 mm ID sold separately.

## Robotic Training Kit

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03734



Our Robotic Trainer is a complete system for introducing practitioners to the basic skills required for robotic or other MIS surgery. The base with turntable places the individual training pods in correct orientation to the scope and instruments every time. The collapsible, angled top is supplied with a vinyl window for port placement. Individual pods each provide a different skill proficiency drill.

### INCLUDES

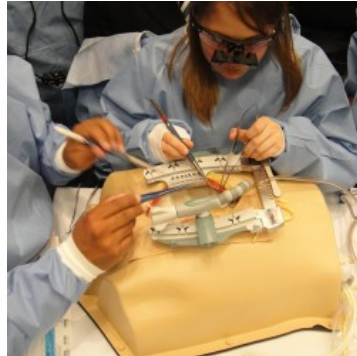
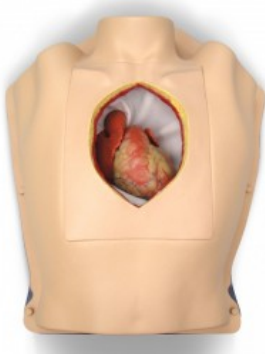
- Trainer Box
- Turntable
- Sea Spikes Pod
- Fish Hook Pod
- Velcro Pod
- 2 Oval Hex Pods
- Slant Pod
- 2 Vinyl Windows



## Beating Heart in Thorax

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03717



Provides a thorough off-pump training experience. Coupling our patented beating heart technology with a thorax completes the anatomical environment for off-pump training. Choose from our Beating Heart, CABG Beating Heart or Ischemic (Enlarged) Beating Heart. Thorax with Full Sternotomy accepts a variety of our heart models for procedure simulation. Thorax cover has a soft, full sternotomy bib with interior chest wall and is rigid enough to support a retractor. Model includes a pericardial well with pericardium.

### TRAINER INCLUDES

- Thorax with Full Sternotomy and Pericardial Well
- Beating Heart
- Beating Heart Controller
- Compressor

The Thorax may be configured with hemi-sternotomy, thoracotomy, robotic ports, or all three, for teaching alternate approaches.



## Thoracotomy Trainer with Swivel Arm

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03720



A cost-effective solution for thoracotomy access training. This straightforward cruciform stand with replaceable soft tissue insert may be used with a soft-tissue retractor (not included) to provide thoracotomy-sized access for cardiothoracic procedures. The swivel arm provides flexibility in anatomical placement within the small Thoracotomy aperture.

The Thoracotomy Trainer with Swivel Arm may be used with any of our heart models including the CABG Heart or Beating Heart. In addition, this trainer can be used with our Mitral Valve Prolapse Trainers, our Mitral with Atria, and also our Aortic Root.

## Catheter Insertion Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03725



For catheterization training. A realistic skin and fatty tissue pad covers distinct channels within the model simulating arterial structures. These may be used repeatedly to demonstrate and train catheter insertion.

The Catheter Insertion Skin may be used extensively before replacement is necessary.

## Advanced Abdominal Surgery Trainer - AST

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03730



Highly detailed abdomen with great versatility and vascularized organs. Designed as a yet-more-realistic workhorse for general surgery applications, the Advanced Abdominal Surgery Trainer presents staple-compatible organs and tack-compatible skins for both laparoscopic and open procedures. Similar to our AST with Original Organs, the Advanced AST organs are more anatomically shaped and have raised mesenteric structures.\*

The position of the retroperitoneal organs provides anatomical reference. Fully-dimensional surrounding organs include the liver, gall bladder, spleen, anterior bony pelvis, urinary bladder, ureters, and pelvic floor muscles. Since the trainer organs and skins may be replaced individually, the user can concentrate on a particular procedure or multiple procedures, in the upper or lower abdomen, and replace only what is used. Oral and anal access are possible for device introduction through the mouth and esophagus and the rectum. The Advanced Abdominal Surgery Trainer is designed to accommodate the following procedures:

- Open and Laparoscopic Hemicolectomies
- Open and Laparoscopic Lower Anterior Resection
- Appendectomy
- Gastric Banding
- Sleeve Gastrectomy
- Open and Laparoscopic Roux-en-Y Gastric Bypass
- Open and Laparoscopic Ventral Hernia Repair

### INCLUDES

- Trainer base with permanent organs, muscles, pelvis
- AST Head and Esophagus
- Advanced AST Stomach
- Advanced AST Small Bowel with Rooted Mesentery
- Duodenum
- Advanced AST Colon with Mesocolon
- AST Laparoscopic Cover
- Advanced Laparoscopic/Hernia Skin for hernia training
- AST Open Surgery Cover
- An optional Open Hernia Skin is available for use on Open Surgery Cover.



## Suturable Wound Closure Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03726



A realistic suturing experience for wound closure practice. An adjustable tension mechanism in the trainer puts upward pressure on the wound for a more realistic response. Replaceable mimetic tissue Inserts offer two suturable layers of tissue simulating cutaneous and subcutaneous skin. Overall dimensions of trainer are 9.75" x 4.75" x 2.25" with a suturing area of 8.5" x 3.5".

Although not developed for use with dermal adhesive, some adhesives may bond to the material.

## Trochar-Trainer

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM02977



### Advantages:

- This simple new concept provides a useful means to demonstrate a trochar being inserted through the abdominal wall
- The skin pad will accept most trochars from a Verres type needle to a 12 mm trochar.
- The skin tissue has considerable elasticity and has been designed to simulate the resistance experienced on body entry.

### Additional information:

- The transparent box allows for full visual access. Without trochar.



## Splitter Kit for Beating Heart Controller

**Price inquiry:** +48 605999769, [kontakt@openmedis.pl](mailto:kontakt@openmedis.pl)

Product code: SM03722



This accessory to permits two Beating Hearts (one with Ancillary) to be powered by a single source of compressed air.

### INCLUDES

- Splitter Box
- Air Line Splitter
- Solenoid Module
- Beating Heart Controller Signal Line - 16ft
- Dual Heart Lines for Beating Heart Controller without Pulse