

## **MEDICAL EDUCATION**

00,

Visit us at 3bscientific.com

Medical Simulation · Anatomy · Clinical Skills Training · Interactive Medical Education · Life Support · Health Education · Medical Charts · ORTHObones

## MEDICAL SIMULATION



## Dear valued customer,

Almost 7 decades ago Paul Binhold, the founder of today's 3B Scientific, embarked on his journey into medical education and revolutionized the educational landscape by developing the first lightweight, nonbreakable, plastic human skeleton. Since then our high quality, non-toxic and durable products, our high level of customer service and best value product proposition has made us a trusted leader in the global healthcare education sector with representation in more than 100 countries.

We at 3B Scientific are proud of our strong history in the development, production and marketing of anatomical models and medical simulators that are serving educators in tens of thousands of high schools, universities, medical schools and many other educational institutions globally.

Through our leadership in anatomical models and deep global

customer relationships we have gained significant insight into the growing place of medical simulation in healthcare education. The products presented in this catalog represent 3B Scientific's commitment to meeting your needs for medical education products in both anatomical models and our growing range of mid fidelity simulators with a special focus in obstetrics and gynecology. We will further continue to expand our presence in the market of medical simulation by leveraging our deep knowledge of human anatomy and broad understanding of caregivers' requirements of education and training.

With the growing need for healthcare workers globally and the need to train them effectively, we remain focused and committed to develop our expanding range of products especially in medical simulation where your need for high quality, durable and reliable products continues to grow.

We will do it the "3B way" with high quality products and great customer service and a little fun along the way.

With this in mind, I hope you enjoy discovering our new products and innovations in this catalog.

Sincerely,

I whit a Muny

Todd A. Murray CEO



Copyright @ 2018 3B Scientific GmbH, Hamburg. The unauthorized reproduction and publication of the catalogue material is prohibited.









## STRATEGIC PARTNERSHIP







Anatomically accurate. Realistic blood and fluids. Easy to operate.



A complete labor and delivery training suite



Real, hands-in-the-body simulation



3B Scientific and Operative Experience (OEI) see the market for simulation products in a similar way. We believe medical educators will increasingly demand more realism and durability in our products. As such, we decided to team up to share ideas and distribution capabilities to expand our mutual business.

The effort to build the collaboration has been spearheaded by Lou Oberndorf, founder of METI and chairman of both 3B Scientific and OEI. You can expect continued innovation and collaboration from both companies as we focus on the needs of medical education around the globe.



Lou Oberndorf, Chairman

2000 institutions worldwide. Prior to that, he served as Vice President of Marketing and Senior Vice President of Business Development for Loral Corporation. In 2011, he endowed the Lou Oberndorf Lecture on Innovation in Healthcare Simulation at the International Meeting for Simulation in Healthcare (IMSH) and 2015, he received the Pioneer in Healthcare Simulation award from the Society in Healthcare Simulation (SSH).

About Lou Oberndorf

Mr. Oberndorf brings

more than 18 years of

experience in medical

technology leadership.

Education Technologies

company to deliver high-

fidelity patient simulation

to healthcare education,

now present in more than

He founded Medical

Inc. (METI), the first

## About Operative Experience

Operative Experience makes the world's only hands-in-the-body patient simulators for obstetrics, trauma, and surgical training, characterized by high anatomic fidelity and life-like tissue that can be incised, sutured and retracted using standard surgical instruments. OEI recently released the world's first fully integrated suite for labor and delivery and a hyper-realistic trauma simulator for tactical casualty care.

## History

Over a long career as a trauma surgeon, Dr. Robert Buckman has run a busy trauma center, been deployed as a combat trauma surgeon, conducted extensive trauma research, and received more than a dozen U.S. patents. These experiences and his interest in surgical education led to a decade long investigation to discover materials that would react surgically like human tissue and could be incised, retracted and sutured. Following years of prototype development and testing, collaboration with materials expert Jeffrey Ellis led to the creation of the world's first physical simulators upon which major surgical hands-inthe-body operations could be performed using standard surgical instruments. A series of SBIR grants from the U.S. Army Medical Research and Material Command capitalized the company and enabled Operative Experience Inc. to advance its product development.



OEI simulators are fully operable



Realistic and challenging training scenarios in any simulated battlefield or active shooter environment



OEI provides learners with a highadrenaline, real-world training experience



## CONTENT

## 

## MEDICAL SIMULATION

Tactical Casualty Care Simulator	12
Advanced Trauma Life Support	16
Rescue	20
Moulage & Wound Simulation	22
Basic Life Support	24
Advanced Life Support	40
Airway Management, Adult	52
Airway Management, Child	56
Patient Communication Simulator	58
Patient Care	60
Wound Care & Bandaging	70
Epidural & Spinal Injection	72
I.V. Injection	74
I.M. Injection	77
Venipuncture	80
Bloodpressure	81
Central Venous Catheterization	82
Ultrasound	84
Catheterization	86
Prostate & Vasectomy	90
Laparoscopy	92
Minimally Invasive Training	96
Surgical Simulation	99
Suturing	100
Auscultation	102
Ear Examination	109
Paediatric Clinical &	
Nursing Skills	110
Obstetrics & Gynaecology	114





## SECTRA BOARD & TABLE

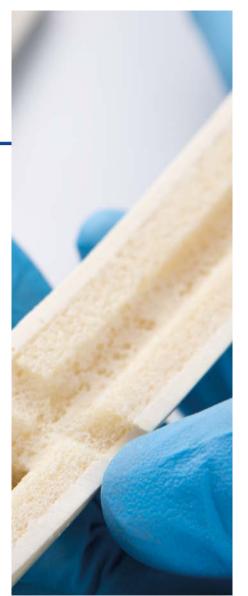
Sectra Hardware Sectra Software





## HUMAN ANATOMY

NEW in Human Anatomy Skeleton Models Individual Bone Models Hand & Foot Models Joint Models Vertebrae Models 3B BONE <i>like<sup>™</sup></i> Models Spinal Column Models Pelvis & Pelvic Skeleton Models Skull Models Musculature Torso Models Skin Models Head & Brain Models Nervous System Models Eye Models	144 150 160 164 168 172 174 176 182 186 192 198 206 208 216 218 221
Ear, Nose & Throat Models Dentition Models Heart Models Lung Models Digestive & Urinary System Models	221 224 228 234 236





## **3B ORTHObones**

3B Ortho <i>bones</i> Standard	243
3B Orthobones Premium	244
3B Biomechanical Test Blocks	245





## HEALTH EDUCATION

Women's Health	247
Contraceptive Education	248
Pregnancy & Birth	250
Parent Education	253
Men's Health	254
Nutrition	256
Healthy Lifestyle	258
Diabetes	260
Drugs & Substance Abuse	262

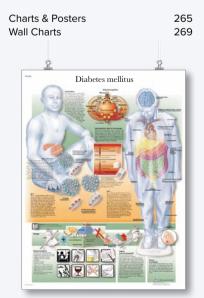








## MEDICAL CHARTS



# NEW IN MEDICAL SIMULATION





RealMom
• The world's most natural and realistic vaginal birthing simulator

page **116** 

## C-Celia Suite

• A complete and fully integrated solution for labor and delivery training





Tactical Casualty Care Simulator

• A super-realistic point of injury casualty care simulator for TCCC training







## Suture Training Arm

- Movable fingers for suture training of challenging wounds between fingers
- Skin and subcutaneous tissue differentiated for realistic suture experience





## PPH Trainer P97

- Identific anual compression and fundal massage
- Up to 1,500 ml blood loss capacity



## Gynecologic Skills Trainer P91

- Bimanual examinations with palpable,realistic, normal and abnormal uteri
- Interchangeable "normal" and "pathologic" cervices
- Offers realistic flexibility of the vaginal wall for practice of speculum placement

## Hysteroscopy laparoscopy Trainer P92

- Polypectomy with hysteroscopy
- Ovarian cystectomy with laparoscopy



page **124** 

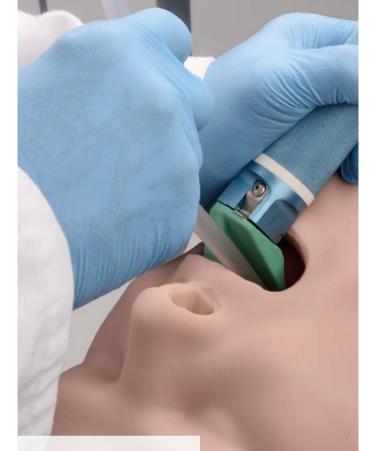
page **132** 



## MEDICAL SIMULATION

3B Scientific is your trusted partner for anatomical models and medical simulators for more than seventy years. Our deep knowledge of human anatomy and expertise in plastics and silicones have been the foundation for the design and development of our medical simulators.

SKIN/*like*<sup>™</sup> and BONE/*like*<sup>™</sup> are trademarks that stand for our efforts to create the most LIFE/*like* training aids for customers like medical and science universities, technical colleges, teaching hospitals, simulation centers, nursing schools and all teaching areas of allied health, practicing doctors, dentists etc. Today 3B Scientific offers an extensive range of high quality medical simulators, clinical skill trainers and complete skill lab set ups.



The quality standards upheld in every 3B Scientific product are guaranteed by permanent and uncompromising controls.

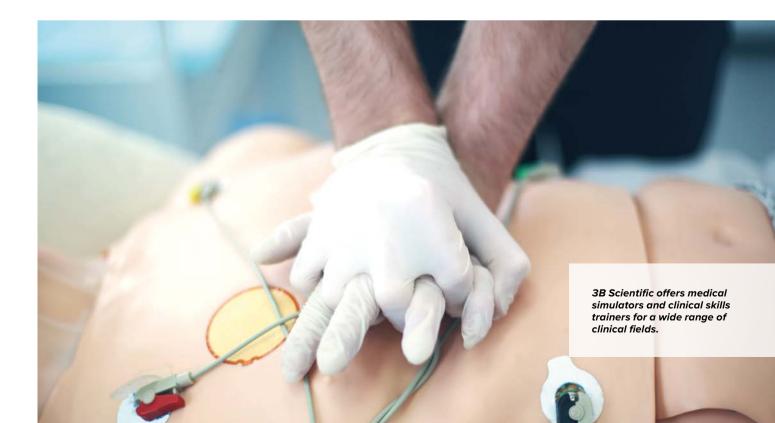


Through our deep global customer relationships we have learned that medical educators will increasingly demand more realism and durability in our products.

3B Scientific is an expert in plastics and silicones and continues to search for new more realistic materials to provide you with simulators made of high-quality silicone for a realistic look, feel and texture in addition to a LIFE*like* softness.

Our medical simulators and clinical skill trainers are designed to help trainees develop the confidence and skills needed to provide highquality, comprehensive care to their patients across various faculties.

Following our commitment to meeting your needs for medical education, we offer products that are affordable, versatile and realistic training tools that will enhance the competence and confidence of the healthcare professional.



## TACTICAL CASUALTY CARE SIMULATOR



 NEW! A super-realistic point of injury casualty care simulator for TCCC training

## The next generation of simulation

A ruggedized, soldier-form simulator for comprehensive Tactical Combat Casualty Care preparation, available in 5 standard wound pattern configurations that simulate injuries from an IED (Improvised Explosive Device) followed by an ambush. Simple to operate, fully-mobile and remotely operable, the Tactical Casualty Care Simulator (TCCS) provides the ability to create realistic and challenging training scenarios in any simulated battlefield or active shooter environment.

## Operative Experience

## Standard TCCS features



Emergency, oropharyngeal and nasopharyngeal airway



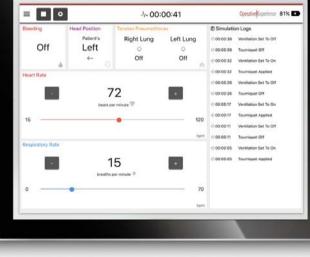
Remote-controlled breathing with pulsating bleeding



Standard and junctional tourniquet application







Ruggedized and remotely activated for realistic in-the-field scenarios



The next generation of healthcare simulation is not simulation at all. It is Biofidelic Emulation. See for yourself in this short product video https://youtu.be/c7cfxERdFcE



Wound packing



Humeral and sternal intraosseous



Needle decompression midaxillary and midclavicular

## A COMPLETE TACTICAL CARE TRAINING SUITE

## > Improving patient care under fire

The world's only biofidelic emulation technology for super-realistic point of injury casualty care. The Tactical Casualty Care Simulator (TCCS) is a ruggedized simulator for comprehensive TCCC training with wounding patterns that simulate injuries from an IED followed by an ambush. Simple to operate, the TCCS is designed for training in pre-hospital patient care, wound management and hemorrhage control. The TCCS features arterial hemorrhage, humeral & sternal intraosseous, two-way communication and needle decompression; and is highly ruggedized, water-resistant and fully mobile providing the ability to create realistic and challenging training scenarios in any indoor or outdoor environment.

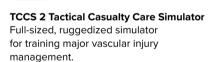
## > Available in five wound pattern configurations:



### TCCS 1 Tactical Casualty Care Simulator Full-sized ruggedized simulator for training of

Full-sized, ruggedized simulator for training gunshot wound management.

- Gunshot wound to face causing hemic drowning
- Gunshot wound to left upper arm
- Fragment wounds to the left chest
- M-1021380



- Shrapnel injury to neck causing major vascular injury
- One oblique through-and-through gunshot wound to right groin above tourniquet line
- Gunshot wound to left thigh
- Open tibular/fibular fracture
- Additional interventions include fracture splinting

M-1021381





## 3

## TCCS 3 Tactical Casualty Care Simulator

Full-sized, ruggedized simulator for training traumatic amputation injuries management.

- Triple amputee
- Traumatic amputations above left elbow, above left knee, and at upper right thigh above tourniquet line
- ${\boldsymbol{\cdot}}$  Has burn, blast and fragment wounds on left side of body

M-1021382







## TCCS 4 Tactical Casualty Care Simulator

Full-sized, ruggedized simulator for multiple traumatic gunshot wound and amputation injuries management.

- Traumatic amputation above left elbow
- Traumatic amputation above left knee
- Sucking chest wound i.e. open pneumothorax
- Burns to left side of face
- Fragmentation wounds to left side
   of the body

M-1021383





## TCCS 5 Tactical Casualty Care Simulator

Full-sized, ruggedized simulator for the treatment of abdominal wounds with evisceration.

- Open abdominal wound with evisceration
- Traumatic amputation above right wrist
- Deep avulsion of the posterior proximal right thigh
- Additional interventions include
   bowel evisceration treatment

M-1021384

## Blood (not shown)

A gallon of concentrated blood makes 30 gallons of blood. **M-10214303** 

## Operative Experience

## ADVANCED TRAUMA LIFE SUPPORT





## Truman Trauma System:

- + Chest tube insertion
- + Needle decompression of tension pneumothorax
- + Cardio pulmonary tesuscitation
- + Needle and surgical cricothyroidotomy
- + Airway management skills including OP and NP airway tube insertion, tracheal intubation, bag valve mask techniques, supraglottic airway insertion and ventilation
- + Percutaneous tracheostomy
- + Identification of tracheal deviation and jugular vein distension





## Truman Trauma

The Truman Trauma System offers an anatomically correct simulated human torso designed for practice of several surgical procedures together with the renowned AirSim head for training the full range of airway management and resuscitation skills. The Truman Trauma System also allows the use of replaceable tissue sets that allow each learner a

life-like & unique surgical experience.  $79 \times 45 \times 28$  cm; 14 kg

## M 1020959

M-1020959	
Consumables	Item No.
Needle Decompression Inserts	M-1017611
Overlay Neck Skin	M-1017613
Chest Drain inserts Three Layer (set)	M-1017608
Chest Drain inserts One Layer (set)	M-1019395
Lubricante	M-1017615

## **Cricotracheotomy Trainer**

An extremely realistic alternative to using animal tissue or cadavers. The soft tissue has the feel of real skin and the unique trachea make it a very effective teaching and learning tool. Using a disposable trachea transforms the trainer into an effective low-cost system.

## Key Skills:

- Palpation of anatomical landmarks and needle cricothyroidotomy
- Practise surgical cricothyroidotomy with scalpel
- · Identification of cricothyroid and thyroid cartilage
- Practise insertion of mini trach devices
- ${\boldsymbol{\cdot}}$  Use percutaneous tracheostomy kit or Seldinger approach
- Asses styled and obturator placement

## 45 x 15 x 36 cm **M-1005180**

Consumables	Item No.
Cricotracheotomy tracheal rings	M-1005182
Trauma kit 2 tracheas and 4 sheets of skin	M-1005181
Cricotracheotomy neck muscle	M-1005183









## Tracheostomy Care Simulator

The simulator replicates an adult male containing oral and nasal passages and all appropriate anatomy — pharynx, epiglottis, trachea, œsophagus, stoma, cricoid cartilage, and representative cervical vertebrae. The chest area contains left and right bronchi and the bronchial tree. The œsophagus "dead ends" 2" below the trachea opening. The side of the neck and chest area over the bronchial tree allow viewing of the suction and trachea tube. Viewing window at the bottom of the simulator to show the position of the suction catheter. Tracheostomy tube is not included.

53 x 28 x 53 cm; 11 kg

M-1005592



## **Cricothyrotomy Simulator**

The newly designed Life/form® Cricothyrotomy Simulator has been developed for learning and practicing the techniques necessary to perform needle or surgical cricothyrotomy procedures. Paramedics, EMTs, combat medics, flight nurses, anesthesiologists, and other emergency medical personnel will have the opportunity to strengthen their ability and confidence to perform or assist in implementing surgical airways.

- Anatomically accurate landmarks aid in site training and allow for fast action
- The hyperextended neck allows the user to determine the proper incision site. The trachea in the simulator is replaceable, as the airway passes completely through from top to bottom. This allows checking the stylet and obturator placement once the incision has been made
- Complete with a chin and full-size neck, ties can be used to hold the obturator in a secure position. Inflation of the simulated lung verifies correct placement.

Includes the simulator with base, six replaceable neck skins, six adult trachea inserts (four rigid, two soft), six child trachea inserts (four rigid, two soft), two simulated lungs, instruction manual, and hard carry case. M-1020255

## Mini Cricotracheotomy Trainer, Individual

Use of a non-biological disposable trachea transforms this trainer into a very effective low cost system.

18 x 16 x 10.5 cm; 0.56 kg **M-1005184** 

Consumables	Item No.
Mini Cricotracheotomy Trainer, 4-Packs	M-1005185
Cricotracheotomy Neck Muscle	M-1005183
Cricotracheotomy Tracheal Rings	M-1005182
Trauma Kit 2 Tracheas and 4 Sheets of Skin	M-1005181



### Cricothyrotomy Simulator

Designed for needle or surgical cricothyrotomy. Landmarks include thyroid cartilage, cricoid cartilage, and cricoid membrane. Inflation of simulated lung verifies correct placement. Adult and 3-year-old tracheas and soft carry bag included. With four overlay skins. 30.5 x 21.6 x 24.1 cm

## M-1017948

Consumables	Item No.
Overlay Skin	M-1019229



## Pneumothorax Training Manikin Designed for the practice of properly inserting a needle to permit built up air pressure to escape the thorax.

The torso accepts needle thoracotomy in the second intercostal space in the midclavicular line, or the fifth intercostal space in the midaxillary line. Comes complete with replaceable lungs, a rib cage, and a soft, life-like replaceable skin. Unit can be punctured approximately 75 to 100 times before replacement is necessary.

M-1005713

## More airway management training products on page 34!



## **Endotracheal Intubation Simulator**

Endotracheal intubations require highest skills and are accompanied by risks. This intubation simulator provides exceptionally good and realistic intubation training.

- Acquire both the skill of oral and nasal tracheal intubation
- Acquire the skill of handling supraglottic airway devices
- Confirm left and right air sounds with a stethoscope
- Determine ventilation of one lung

75 x 45 x 24 cm; 14 kg

M-1005396

Consumables	Item No.
Front Teeth, Set of 3	M-1005397
Synthetic Skin for the Body	M-1005399



## **Chest Drain Simulator**

This innovative design not only simulates realistic body tissue but provides an alternative to the use of animal tissue. The design is unique in having a replaceable chest wall with ribs that are encased into the realistic simulated flesh that forms the torso. This fleshy part is replaceable and can used for up to 25 incisions. It is housed in a white plastic torso-shaped box that is firmly secured and has strong suction feet to ensure non slip use on smooth table-top surfaces. The torso presents 3 patient positions: on the left side, on the back, and in upright sitting position.  $57 \times 37 \times 43$  cm

## M-1005175

Consumables	Item No.
Chest Wall	M-1005176
Pneumothorax Kit	M-1005177
Pericardiocentesis Kit	M-1005178



## Life/Form<sup>®</sup> Chest Tube Manikin

Comprehensive manikin to teach the theoretical knowledge and the practical skills needed to manage pre-hospital chest trauma as well as ongoing chest tube maintenance: The right side of the manikin has **two cut-away** viewing areas to provide awareness of the anatomical relationships between the skin surface, musculature, ribs and lungs. The left side has a **pressurised tension pneumothorax** site to relieve air that has accumulated within the pleural space and is restricting lung inflation. There is also a site where chest tubes may be surgically placed to treat pleural effusion by draining fluids from the pleural space. The fluid colour, volume and viscosity is controlled by the instructor. 75 ka

Item No.
M-1005697
M-1005776

## Life/form<sup>®</sup> Pericardiocentesis Simulator

Designed specifically for **skill training** in pericardiocentesis, chest tube maintenance and the management of prehospital chest trauma. The simulator has a pressurised tension pneumothorax site and a site for the surgical placement of a functional chest tube. Fluid colour, volume, and viscosity can be controlled by the instructor. Any commercially available closed water seal drainage unit can be used. Pericardiocentesis may be performed in the left subxiphoid space and in the left fifth intercostal space. Accurate placement of the needle will allow for the withdrawal of fluid from the simulated pericardium.

Includes fluid reservoir bag, foot pump, surgical skin pads, subcutaneous surgical pads, nurse training pads, pneumothorax pads, blood powder, methyl cellulose thickener, simulated pericardium, IV bag, and a hard carrying case. **M-1018828** 

Consumables	Item No.
Methyl Cellulose	M-1005697
REN Cleaner	M-1005776



## RESCUE



## Rescue Randy 9000

Designed to be customised by the user for optimal training use. The manikin is made from rugged polyethylene parts that allow for the addition of varying amounts of weight (maximum weight filled with water 77 kg or sand 113 kg) to each of the pieces. The empty manikin is easily moved and stored when training is completed.

## > Can be filled with water or sand to adjust the weight!

## Train with Randy 9000 in any environment imaginable!

The range of motion of the joints, including bending at the waist, mimics real life. Randy 9000 is perfect for RIT (Rapid Intervention Team) trainings or Combat Challenges as well as ship-board, heavyweight, horizontal rescues or lightweight packaging exercises like spinal immobilisation. The joint design protects rescuers' fingers. May be used in all weather conditions. Each manikin component is easy to replace.

M-1017945

## I.A.F.F. Rescue Randy

**Strengthened for Extrication Training** Designed with the help of the International Association of Fire Fighters (I.A.F.F.). Developed for life-like adult or juvenile patient handling and transportation. Includes additionally reinforced frame to increase durability for the forces used in extrication training.

## Features include:

- Fully articulated for positioning in widely diversified training environments
- Weight distribution according to human weight distribution chart
- 1.83 m tall, approx. 84 kg

Clothing not included. **M-1019955** 

## **Flexible Rescue Randy**

Developed especially for the aerospace industry and wing tank fuel cell rescue training, this regular sized Rescue Randy unit can be utilised in any confined space rescue scenario. The waist and head are flexible allowing a wide range of movements. This allows positioning under dashboards and in other extremely tight spots.

M-1017944



## TI Rescue Randy Trainer with Thermal Imaging Capabilities

The thermal imaging capability with TI Rescue Randy expands options for rescue training. Thermal imaging scanners are now able to see Randy at a distance of over 6 m. Special heaters in the face and hands operate off of standard 110V or 220V power outlets and reach the desired temperature in 15 minutes. You can set the temperature you want on TI Rescue Randy and he will be visible on a scanner for over 45 minutes unplugged. Ideal for rescue training in buildings or search and rescue in the field. Rescue Randy TI will stand out from the background thermal image. Approx. weight 74 kg. **M-1019954** 

## Bariatric Rescue Suit for use with Rescue Randy

Developed for training scenarios for the extrication of morbidly obese patients. The Bariatric Suit replicates the weight and the movement in body tissue associated with morbidly obese patients. The weight can be modified up to approx. 200 kg by adding water. When the exercise is complete, the water can be simply drained away, thus making the manikin more portable. In its dehydrated version, the manikin can be easily transported between locations. Suit is for manikin use only, fits the original Regular Rescue Randy manikin.

M-1017943

A simple way to upgrade your rescue manikins:

## Weighted Vests (not shown)

Optimise training and increase the complexity of scenarios by adding a weighted vest to rescue manikins.

9 kg M-1005705

13,5 kg M-1005706

18 kg M-1005707





## Rescue Manikins Developed for life-like adult or juvenile patient handling, transportation, and extrication training!

These manikins can be safely used in situations too hazardous or uncomfortable for human volunteers. Fully articulated for positioning in widely diversified training environments. The manikins can be seated in an automobile, positioned in a smoke-filled room for fire rescue training, and immobilised on a stretcher for mountain rescue instruction. They are also useful for simulating the removal of victims from utility poles, conduits, mine cave-ins, and tunnels as well as in limitless other training procedures. Made of tough cast vinyl with zinc-plated steel frame for longevity and rugged use. Not fire resistant, not for water rescue.

Rescue Manikin,	1.22 m tall
7 ka	M-1005704

Rescue	Manikin.	1.67 r	n tall

neseac manning	
25 kg	M-1005700
47 kg	M-1005701
65 kg	M-1005702
74 kg	M-1005703

## Rescue Manikin, 1.83 m 65 kg M-1005768 74 kg M-1005769

Recommended:

1.83 m Carrying Bag M-1005770

## Water Rescue Manikins

These manikins allow coast guards, lifeguard trainers, and emergency personnel to train water rescue and retrieval. When filled with water the manikins will sink to the bottom.

## A. Child Water Rescue Manikin

3 years old. Weight when filled with water: 9 kg M-1005739

## B. Infant Water Rescue Manikin

6-9 month old. Weight when filled with water: 5.5 kg  $\ensuremath{\text{M-1018327}}$ 

C. Newborn Water Rescue Manikin Weight when filled with water: 3.2 kg M-1005699



## **CPR Water Rescue Manikins**

Perfect for Coast Guards, Lifeguard Trainers, and Emergency Personnel to train water rescue and retrieval as well as CPR. The manikins have articulated joints and are made of durable plastic and rust-resistant steel. When filled with water the manikins will submerge to the neck, if an additional 2 or 4 kg. (a brick will do) is added, they will sink completely.

## Adolescent, 1.22 m tall, 9 kg M-1018325

Replacement Parts: 24 Airway Systems 10 Mouth/Nose Pieces	M-1005735 M-1018326
Adult, 1.64 m, 13 kg	M-1005767
Replacement Parts: 24 Airway Systems 10 Mouth/Nose Pieces	M-1005765 M-1005741



## Pocket CPR

This FDA cleared device reminds the rescuer what to do before initiating CPR and coaches the rescuer with feedback during CPR. **M-1018144** 



## **MOULAGE & WOUND SIMULATION**

## +

## Comprehensive set for advanced casualty simulation!

## **Casualty Simulation Kit IV**

This complex casualty simulation kit uses components applied to human and manikin patients for the widest variety of training situations possible. Wounds can be strapped on, stuck on, created from wax, and can bleed to challenge both the volunteer and the professional in areas of burns, lacerations, fractures of arms and legs, and amputations.

## Realistic tools for life-like emergency medical training!

## Simulated wounds include: Bleeding:

 Jaw wound, abdominal wound with protruding intestines, sucking wound of chest, compound fractures of humerus, femur, and tibia, laceration of the forehead, open amputation, gunshot wound of palm

## Non-bleeding:

- Assorted stick-on lacerations and open fracture wounds
- Phosphorous burn of the hand, face in shock
- 2nd & 3rd degree burn of the face, chest, back, hand, and forearm

Comes complete with extensive makeup accessories and reservoir bags with pump assembly. 61 x 23 x 46 cm; 14.6 kg M-1005711

Additional Stick-on Wounds (not shown) 12, assorted M-1019676







## **Casualty Simulation Kit I**

The most economical way to get started in simulated injuries. Re-useable wounds and refillable accessories let you practise bandaging and splinting techniques repeatedly.

## Includes:

- Bleeding wounds:
- 1 Compound fracture tibia

## Non-bleeding wounds:

• 12 Assorted stick-on lacerations and open fractures

Comes complete with basic makeup accessories (including acrylic to simulate glass embedded wounds) for basic injury simulation and reservoir bags with pump assembly.  $33 \times 25.5 \times 13$  cm; 2.3 kg **M-1005708** 



## **Casualty Simulation Kit II**

For more complex wounds to test higher levels of skill in bandaging and patient care while keeping initial expenditures low.

## Includes:

- Bleeding wounds:
- Open amputation, compound fracture of
- humerus, and compound fracture of tibia • Sucking wound of chest, gunshot wound of
- palm Non-bleeding wounds:

## 24 Assorted stick-on lacerations and open fractures

Comes complete with makeup accessories (including acrylic to simulate glass embedded wounds, blood powder for 13.5 litres) for complex injury simulation and reservoir bags with pump assembly. 25.5 x 23 x 46 cm; 4.1 kg

M-1005709





## **Casualty Simulation Kit III**

Especially suitable for use in the creation of disaster scenarios where application of makeup on multiple casualties creates the widest range of wounds. Contains speciality wounds associated with gunshots, like perforations, major avulsions, and complex jaw wounds.

## Includes:

## Bleeding wounds (complete with reservoir bags with pump assembly):

Compound fractures of humerus and tibia

## Non-bleeding wounds:

Assorted stick-on lacerations and open fractures

Comes complete with makeup accessories (including acrylic to simulate glass embedded wounds, blood powder for 13.5 litres, latex compound, and plastalene modeling paste) for advanced injury simulation and reservoir bags with pump assembly.

41 x 33 x 56 cm; 12.3 kg

M-1005710

## **Casualty Simulation Kit IV**

This complex EMT (Emergency Medical Training) kit uses components applied to human and manikin patients to get the widest variety of training situations possible. Wounds strapped on, stuck on, created from wax and made to bleed challenge both the volunteer

## Bleeding wounds (complete with reservoir bags with pump assembly):

- 1 jaw wound
- •1 abdominal wound with protruding intestines
- 1 sucking wound of chest
- 2 compound fractures of humerus
- 2 compound fractures of femur
- 2 compound fractures of tibia
- 1 laceration of the forehead
- 1 open amputation
- 2 gunshot wound of palm

## Makeup Accessories:

- 1 mirror
- 1 body adhesive for stick-on wounds
- 2 casualty simulation wax
- 3 bottles coagulant make Up blood
- 5 pkg. blood powder, each for 4.5 liter simulated blood
- •1 pkg. methyl cellulose for blood thickening
- 4 grease paint colors: white, blue, brown and red
- 2 pkg. broken Plexiglas® for simulating glass embedded wound
- 1 cold cream
- 2 atomizer mist sprayer
- 2 plasticine modeling paste: white and dark
- 6 tongue depressors
- 1 pkg. of tissues
- 2 fake dirt
- 1 charcoal
- 1 petroleum jelly
- 2 spatulas
- M-1005711

and the professional in areas of burns, lacerations, fractures of arms and legs and amputations; a good kit to simulate community disasters like bus accidents, or building explosions. The emergency medical training kit is supplied in a storage case and includes:

## Non-bleeding wounds:

- · 36 assorted stick-on lacerations and open fracture wounds
- •1 phosphorous burn of the hand
- 1 face in shock
- 2nd & 3rd degree burn of the face
- 2nd & 3rd degree burn of the chest
- $\bullet\,2nd$  & 3rd degree burn of the back
- $\bullet\,2nd$  & 3rd degree burn of the hand
- 2nd & 3rd degree burn of the forearm



## **BASIC LIFE SUPPORT**



## 3B Scientific<sup>®</sup> CPR*Lilly*AIR<sup>™</sup> for CPR and Airway Management Training

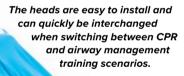
Train both cardio-pulmonary resuscitation (CPR) and airway management through the use of interchangeable heads. The simulator offers all the necessary features for learning about the lifesaving algorithm comprising heart massage and artificial respiration for adults.

## Ideal for skill training in:

- CPR training
- Mouth to mouth resuscitation
- Double naso-tracheal intubation
- Bag and mask ventilation techniques
- Full range of supraglottic devices
- Direct laryngoscopy
- Endotracheal tube insertion
- Awake fibre optic examination
- Combi tube insertion
- Direct feedback for immediate improvements via included tablet

Comes with 1 CPRL*illy*PRO<sup>™</sup> training manikin, 1 Trucorp<sup>®</sup> advanced airway head, 1 Android tablet PC with plug adaptor for charger, 5 lower face masks (including teeth), 25 throat bags. Carrying case, tracksuit top and 1 bottle of lubrication also included. 26 x 39 x 78 cm; 9 kg

M-1020137



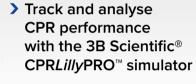
## Advanced Airway Management Head for 3B Scientific<sup>®</sup> CPRLillvPRO<sup>™</sup>

The intubation head is also available as an option to be added to your existing CPRLillyPRO" (see next page). M-1019711

24 MEDICAL SIMULATION | Basic Life Support (BLS) | Adult











No tools are necessary as it has strong magnetic connections.

## 3B Scientific<sup>®</sup> Qualified CPR Training with CPRLillyPRO™

CPRLillyPRO<sup>™</sup> – The best choice for your professional CPR training courses. All relevant CPR training parameters can be monitored comfortably and easily via the tablet provided. Trainers and trainees will very quickly attain the chosen training target via the direct feedback feature.

## Displayed training parameters:

- Compression depth
- Compression frequency
- Hand position
- Head tilt
- Respiration volume/speed (combined)
- Respiration pressure

The face masks can be changed, and are easy to clean. The software can control the carotid pulse and the eye movements. CPRL*illy*PRO<sup>™</sup> can react by opening the eyes when spoken to by the trainee. The correct head tilt, individual carotid pulse, and the moveable jaw to demonstrate the jaw thrust manoeuvre, provide realistic scenarios. CPR training with the CPRL*illy*PRO<sup>™</sup> complies with the latest AHA and ERC guidelines. Comes with carrying bag, 5 lower face masks (including teeth), 25 throat bags, 1 tracksuit top, 1 Android tablet PC, charger and plug adaptor. 78 x 39 x 26 cm; 9 kg

```
Light Skin M-1017773
Dark Skin M-1017775
```

## Fast and effective CPR training:

- + Track and analyse CPR performance with the included tablet
- + Easy to set up with magnetic connections no extra tools necessary
- + Very hygienic as it uses a separate air chamber system
- + Extremely durable material that is easy to clean
- + Fast cleaning process for efficient time management
- + Includes tablet and software for measuring training success with PDF view



Advanced Airway Management Head for CPRLillyPRO<sup>™</sup> Add the intubation head to your existing CPRLillyPRO<sup>™</sup> and also train advanced life saving techniques. M-1019711

## 3B Scientific<sup>®</sup> CPRLilly<sup>™</sup>

CPRL*illy*<sup>™</sup> is the basic version for all CPR training courses. This training manikin is hygienic, and will operate economically for a long time as it uses disposable throat airbags and has a seperate air chamber system. The face masks can be changed, and are easy to clean. The carotid pulse and the eye movements can be controlled separately by the instructor. When the correct compression depth is reached, a tone will sound. CPRL*illy*<sup>™</sup> can react by opening the eyes, this is controlled manually. The correct head tilt, individual carotid pulse, and the moveable jaw to demonstrate the jaw thrust manoeuvre, provide realistic scenarios. CPR training with CPRL*illy*<sup>™</sup> complies with the latest AHA (American Heart Association) and ERC (European Resuscitation Council) CPR guidelines.

Comes with carrying bag, 5 lower face masks (including teeth), 25 throat bags and 1 tracksuit top.

78 x 39 x 26 cm; 8 kg Light Skin M-1017772 Dark Skin M-1017774



	<
-	<
30 Science A	<
	<
	<
0000	<

	Replacement Parts for CPR <i>Lilly</i> <sup>™</sup> Simulators	Item No.
	Upper Face Mask Light (1x)	M-1017737
	Upper Face Mask dark (1x)	M-1017764
	Reanimador	M-1013678
_	Lower Face Mask with Teeth Light (5x)	M-1017738
	Lower Face Mask with Teeth Dark (5x)	M-1017765
	Throat Bag (pack of 50)	M-1017739
	Throat Bag (pack of 100)	M-1017743
	Bag Clip	M-1017748
-	Carrying Bag	M-1017744
	Disinfectant	M-1013579
	Lower Jaw	M-1017749
_	Torso Skin Light	M-1017747
-	Torso Skin Dark	M-1017766
	Eyes Light (pair)	M-1017758
	Eyes Dark (pair)	M-1017767
-	Tracksuit Top	M-1017746
	Squeeze Ball (light blue)	M-1017750
	Squeeze Ball (white)	M-1017751
	Eye Rings (pair), Light	M-1017759
-	Eye Rings (pair), Dark	M-1017778



## Features of 3B Scientific<sup>®</sup> BASICBilly™:

- + Anatomically correct for realistic training
- + Hygienic to use with low priced disposable airways
- + Head is easy to tilt to prepare for mouth-to-mouth or mouth-to-nose resuscitation
- + Thorax raises as the lungs are ventilated
- + Developed and manufactured in Germany

## > RELIABLE AND ECONOMICAL!

## Basic Life Support Manikin BASICBilly™

BASIC*Billy*<sup>™</sup> was developed utilising the results of extensive studies focussing on the depth and force of compression during cardiopulmonary resuscitation (CPR). It fulfills the latest guidelines from the AHA (American Heart Association) and ERC (European Resuscitation Council) on CPR and was designed with optimal force and compression values in mind.

## 2 in 1

BASIC*Billy*<sup>\*\*</sup> is actually two manikins in one as it can be used as either an **adult or a child** (approx. 12 yrs.) CPR trainer. Just use the easy and interchangeable springs located in the back of the trainer to switch between the realistic depth feedback of either the adult (5cm) or child (4.5cm).

## Included:

- 1 BLS simulator (torso) with spring for cardiac massage of adults
- 1 additional spring for cardiac massage of children
- (approximate age of 12)
- 5 lung bags, adult
- 5 lung bags, child
- 2 telescopic guides
- •1 additional face mask and inner head for hygienic artificial respiration
- 1 disinfectant solution

• 1 carrying bag with combined training mattress

60.5 x 35.5 x 19 cm; 2.36 kg Light Skin M-1012793

LIGHT SKIII	1012/33
Dark Skin	M-1017679





 Easy to switch between adult and child CPR setup

Replacement Parts for BASIC <i>Billy</i> <sup>™</sup> Simulators	Item No.
Lung Bags, Adult (pack of 25)	M-1013573
Lung Bags, Adult (pack of 75)	M-1017695
Lung Bags, Child (pack of 25)	M-1013576
Lung Bags, Child (pack of 75)	M-1017696
Spring 340 N (red), Adult	M-1013577
Telescopic Guide Adult	M-1017699
Spring 280 N (green), Child	M-1013578
Telescopic Guide Child	M-1017700
Resuscitator with 1 Disposable Face Mask	M-1013678
Disposable Face Mask	M-1013677
Face Skins, Light	M-1013582
Face Skins, Dark	M-1018563
Set Jaw Insert + Lung Bag Socket	M-1017698
Thorax Skin, Light	M-1013587
Thorax Skin, Dark	M-1018564
Carrying Bag with Combined Training Mat	M-1018565



## CPR Simon BLS Full Body Simulator with OMNI® Code Blue® Pack

Quality CPR simulator designed to operate for years! Strong, sturdy construction with full-size, realistic landmarks and one piece disposable airways. Prewired for CPRLink<sup>™</sup> for a first class BLS program.

- Disposable airways to practise hygienic mouth-to-mouth ventilation
- Fully articulating head, neck, and jaw permitting head tilt, chin lift, jaw thrust, and neck extension into the "sniffing" position
- Airway blocked when head is forward
- Easily accessible chest cavity with ribcage, lungs, and heart for realism and practice of the Heimlich manoeuvre
- Realistic chest rise during ventilation
- Carotid, femoral arterial pulse sites
- Femoral venous site
- Intramuscular (IM) Injection Sites on the deltoids, quadriceps and left gluteus medius
- · Jointed elbows, wrists, knees and ankles
- Eyes open and close; one pupil is dilated

## Included:

Omni<sup>®</sup> Code Blue<sup>®</sup> pack monitors and logs the cadence and depth of cardiac compression and airway ventilation. Comes with carrying bag, instruction manual and 10 disposable airways.

## M-1009220

## CPR Simon BLS Full Body Simulator with Venous Sites (not shown)

This life size adult manikin is designed to provide the fundamentals of CPR instruction as well as numerous patient care exercises. All features of M-1009220 but without the Omni® Code Blue® pack monitor and not prewired for CPRLink<sup>™</sup>. Comes with instruction manual and carrying bag. **M-1017559** 

## CPR Simon BLS Torso Simulator (not shown)

All features of M-1009220 related to the torso, but does not include the Omni® Code Blue® pack. M-1005819

Replacement parts:

Left Arm Assembly	M-1020120
Right Arm Assembly	M-1020121
Carrying Bag	M-1020124





## **CPR Susie Advanced Emergency Care**

This life size adult manikin is designed to provide the fundamentals of CPR instruction as well as numerous patient care exercises such as intramuscular and subcutaneous injections, male and female catheterisation, intubation, enema administration, decubitus treatment and palpation of right and left carotids. Other features include:

- Neck brace
- Amputation stump
- Electronic CPR monitor
- Interchangeable male and female breasts (left female breast contains malignancy)
- Interchangeable male organ
- Movable jaw with removable upper and lower dentures
- $\bullet$  Oral, nasal, otic, tracheotomy, and gastrostomy openings for instruction in nasogastric
- lavage and gavage
- Removable internal tanks
- Sculpted stomas for transverse colostomy, ileostomy, and suprapubic stoma, each connected to an internal, removable tank

Comes with instruction manual.

## M-1017543





Code Blue<sup>®</sup> I – Multipurpose Simulator with Intubatable Airway Provides practice in a wide range of CPR and patient care skills like:

General care

- Gynaecological examination
- Airway management
- Breast examination
- Injection and infusion
- Colostomy and decubitus care

## Features:

- Interchangeable external genital organs that allow both male and female cathererization
- Interchangeable male and female breasts
- Left female breast contains malignancy

It has fully a movable neck, arms and legs, and the skin of face, vagina and cervix is soft for added realism. With anatomically accurate and intubatable airway.

Supplied with Omni® Code Blue® Pack, 10 training masks, Code Blue® Life Monitoring System, neck brace and carrying bag. M-1017533

## Code Blue<sup>®</sup> I – Multipurpose Simulator with Non-intubatable Disposable Airway

All features of M-1017533 but airway not intubatable. Supplied with Omni<sup>®</sup> Code Blue<sup>®</sup> Pack, 10 disposable one-piece airways, neck brace, and carrying bag. M-1005782

## Replacement parts:

hepiacement partor	
10 Airways	M-1005783
Lungs	M-1020591
BP Training Arm	M-1018870
Smash Arm	M-1019645

## **CPR+D** Trainer

## Advanced feedback, reporting and control

Stores the energy generated by chest compressions for power. Without the use of batteries or power cords, the trainer is capable of recording CPR quality and performance metrics, presenting realistic chest rise and palpable pulses after resuscitation, and more. Take your training to more places and reach more people with the convenience of truly tetherless technology.

## Features:

- Intubatable airway with tongue, vocal cords, and trachea
- Realistic head tilt/chin lift and jaw thrust
- Realistic chest cavity allows students to experience the correct force needed to perform proper chest compressions
- Anatomically correct landmarks for proper hand placement
   Proper chost compressions
- Proper chest compressions
- Defibrillation: Attach real AED pads directly to the conductive skin. Shock the conductive skinusing your defibrillator just like a real patient. Your AED will display the simulator's ECG.

• Automatic pulses and breathing with realistic chest rise Comes with handheld controller with 4.5 m cable, carrying bag and operating guide.

## M-1018867









## > CPR SIMULATOR WITH DEFIBRILLATION FEATURES!



Life/form® Electronic Monitoring with CPARLENE® - Full-Size Manikin with Electronics, Memory, and Printer Unit - Light This full-size manikin allows the practice of adult CPR techniques. The printer unit allows evaluation and the performance of each skill is displayed separately while averages are stored in the memory. Compression and ventilation waveforms are plotted in a time sequence. Averages are shown on the display and printed on paper.

## Features:

- Palpable anatomical landmarks (xiphoid, navel, nipples and ribcage)
- Enhanced student motivation through use of the optional SkillGuide indicator that allows real-time CPR performance feedback during training
- Adult CPR training with optional child springs
- Fully articulated head, neck and jaw
- Palpable carotid pulse
- Individual student face masks provide maximum protection against cross contamination

91.5 x 53.5 x 33 cm; 24 kg

## M-1005617

## **Replacement parts:**

25 Sanitary Face Masks
10 Tracheal Airways
10 Lower Airways
Electronic Monitoring,
Memory, and Printer Unit

M-1005600 M-1005601 M-1005602 M-1019633

## **CPR Torso with Light Controller**

This easy to transport torso allows the practice of adult CPR techniques. Optionally, child CPR can also be practised by changing the supplied springs inside the torso. Individual student face masks with a one-way non-rebreathing valve and disposable airways provide maximum protection against cross-contamination. The light controller allows for immediate CPR evaluation.

### Features:

- Palpable anatomical landmarks (xiphoid, navel, nipples and rib cage)
- Adult CPR training with optional child springs
- Fully articulated head, neck and jaw
- Palpable carotid pulse
- 48.5 x 30.5 x 80 cm

M-W44070

## Replacement parts:

25	Sanitary Face Masks
10	Tracheal Airways
10	Lower Airways

M-1005600 M-1005601 M-1005602

## Adult CPR Manikin with Electronics

This full-size manikin allows the training of BLS rescue techniques and CPR. The resiliency and weight of the body contribute to a realistic training experience: 165 cm; 24 kg

## Features:

- Natural resistance to chest compression
- Palpable carotid pulse
- Anatomical landmarks such as sternum, ribcage and sub-sternal notch
- Airway ball valve which allows the lungs to inflate only if the head is extended and accurately positioned
- Light controller which confirms correct hand placement, ventilation volume and compression depth

## M-W44556

**Replacement parts:** 

10 Mouth/Nose Pieces	M-W44560
10 Adult Airway Systems	M-W44579
Carrying Bag	M-W44580





## Simulaids® Adam CPR<sup>™</sup> Training Manikin with Electronics and Carry Bag

## This lightweight and easy to transport torso features:

- · Airway ball valve which allows the lungs to inflate only if the head is extended and accurately positioned
- · Life-like anatomical landmarks such as carotid pulse, sternum, ribcage and sub-sternal notch
- Light controller confirms correct hand placement, ventilation volume and compression
- Easy to replace mouth/nose pieces
- Soft carrying case with kneeling pads

70 cm; 8.4 kg M-1005726

## Replacement parts:

10 Mou	th/Nose Piece
10 Airw	ay Systems

M-1005741 M-1005742

## **CPR-Torso Brad<sup>™</sup>Junior** with Electronics

Brad Jr.'s realistic appearance, accurate anatomical landmarks, and individual-use mouth/ nosepieces with disposable airway/lung system and non-

rebreathing valve combine for function, durability, and ease of use. Includes a carrying bag. Approximate age: 7 years. M-1018850

## Life/form<sup>®</sup> AED Trainer with Brad <sup>™</sup> CPR Manikin

Prepare students for emergency situations with the Life/form® Universal AED Trainer complete with Brad<sup>™</sup> the CPR Manikin. Simply push a button to set the sequence of events that will help students learn the appropriate steps to follow in both "shock" and "no shock" situations. The instructor can select from four training scenarios for manual and hands-free training. Train for AHA scenarios with both audio and written prompts in English.

instructions. Includes Brad<sup>™</sup> CPR Manikin with 3 mouth/nose pieces, 3 disposable lung/airway systems, nylon carrying bag and kneeling pads

M-1018858





## Brad<sup>™</sup> Compact CPR Training Manikin with Electronics

This economical CPR manikin is constructed of soft, realistic vinyl plastic over polyurethane foam for a "human" feel. Comes with an exterior console box that indicates proper hand position, adequate chest compressions, and adequate air volume.

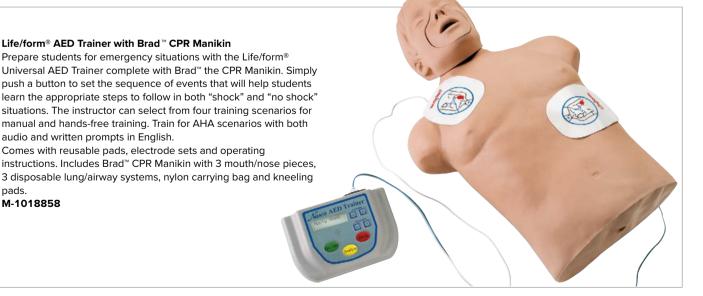
## Features include:

- Long torso for realistic abdominal thrusts
- Realistic head tilt and chin lift for opening airway
- Can easily be manipulated to realistically simulate airway obstruction or choking situations
- User-friendly, low maintenance lung/airway design

Includes 3 mouth/nose pieces, 3 disposable lung/airway systems, nylon carry bag and kneeling pads. M-1009004

## **Replacement parts:**

Ribcage	M-1013247
24 Adult Airway Systems	M-1005740
10 Mouth/Nose Pieces	M-1005741



## ZOLL AED Trainer Package with CPR Brad™

This unit allows students to practice realistic device operation using AHA recommended training scenarios. An identical graphical operator interface and complete audio and visual prompts mimic the AED Plus in its look and operation. Screen messages, audible tones, and voice prompts guide the user through all aspects of the rescue. The convenient handheld remote control for instructor use is pre-programmed with the eight AHA Heartsaver AED training scenarios and offers a manual scenario function, plus attach pads, low battery, and call-for-service simulations.

Powered by six "C" cell batteries (not included) or an AC adaptor. Supplied with training electrode kit, training remote control, AC adapter, handheld cord, operator manual, administration guide.

M-1018859



## Zoll AED Trainer Plus 2

Provides a variety of simulations to help responders become familiar with an AED device. The simulated shock delivery has no high-voltage capabilities, ensuring safety during training. It is pre-configured with 10 training scenarios that simulate realistic sudden cardiac arrest episodes and can be used with appropriate manikins. Software and manual are only available in English. **M-1018143** 



## Simulaids<sup>®</sup> Full-Body CPR Manikin

This full-body CPR manikin with additional trauma options features life-like positioning, a carotid pulse, and anatomical landmarks that include the sternum, ribcage, and substernal notch. Caucasian appearance. Add trauma options in the table to the right as needed for additional training features. The manikin comes ready to go with a sweat suit, five mouthpieces and five airway systems with lungs. **M-1018871** 

Add any of these trauma options to the CPR manikin for extended training possibilities:

Trauma Options	Item No.
Casualty Simulation Kit I	M-1005708
Casualty Simulation Kit III	M-1005710
Trauma Moulage Kit	M-1005712
Replacement Lungs	M-1019296
Rescue CPR Head	M-1020119
IV Arm	M-1005749



### Features:

- · Longer torso for realistic abdominal thrusts
- Realistic head tilt and chin lift for opening airway
- Easy to manipulate and realistically simulate airway obstruction or choking situations
- User-friendly, low maintenance lung/airway design  $65 \times 38 \times 22$  cm; 5.4 kg

M-1005753

## **Replacement parts:**

Ribcage	M-1013244
24 Adult Airway Systems	M-1005740
10 Mouth/Nose Pieces	M-1005741

### Jaw Thrust Brad

Jaw Thrust Brad utilises simple moving-parts technology for the instruction of the jaw thrust manœuvre. Unique to the industry is the function of ventilating the patient when the proper manoeuvre is done without tilting the head.

### Features:

- Moveable jaw
- Individual mouth piece
- Sanitary one-way bag allows multiple users while requiring a single replacement at end of day
- Removable chest plate for adolescent and adult CPR
- Rugged vinyl skin and long-lasting foam filling
- Includes kneeling pads and carry bag.

71 x 46 x 25 cm

M-1013162

## Life/form<sup>®</sup> Overweight Fred Manikin

This unique manikin helps to prepare students to respond to a more typical cardiac arrest situation with a victim who is elderly and overweight. The airway can be setup to simulate airway obstruction or choking situations.

## Features:

- Elderly physical appearance
- · Large body type with extra "fat" layer
- Realistic head tilt and chin lift for opening the airway
- Palpable and visual anatomical landmarks including the sternum
- Ribcage substernal notch

Included are 3 mouth/nose pieces, 3 disposable lung/airway systems, and a convenient carrying bag.

## M-1005685

## **Replacement parts:**

Replacement Sternum	M-1018479
Replacement Foam	M-1018481
Lung/Airway Systems	M-1005686
Mouth/Nose Pieces	M-1005687





## Simulaids® Choking Manikins

Life-size torsos allow practice of abdominal/chest thrust back blow procedures (Heimlich manoeuvre) and mouth sweep for clearing a blocked airway. When correct procedures are performed, the manikins will expel the object causing the obstruction. Made of durable vinyl to create realistic feel. Include anatomical landmarks such as ribcage, xiphoid process and jugular notch. Supplied with choking objects, shirt and soft carrying bag.

Description	tem No.
Obese Mature Choking Manikin	M-1005684
Adult Choking Torso	M-1005724
Adolescent Choking Torso	M-1005750
Child Choking Torso	M-1005751



## Adam CPR<sup>™</sup> Training Manikin - Light

This lightweight and easy to transport torso features:

- Airway ball valve which allows the lungs to inflate only if the head is extended and accurately positioned
- Life-like anatomical landmarks such as carotid pulse, sternum, ribcage and sub-sternal notch
- Easy to replace mouth/nose pieces
- Soft carrying case with kneeling pads
- M-1005725

Replacement parts: 10 Mouth/Nose Pieces 10 Airway Systems

M-1005741 M-1005742



## Act+Fast Rescue Choking Vest

Invaluable tool for CPR instructors to easily and effectively teach students the correct way to perform the Abdominal Thrust Manoeuvre (Heimlich) without using a manikin. When performed correctly, a foam plug shoots into the air, making teaching easy and learning fun. 10 foam plugs included.

## Act+Fast Blue M-1017938

Act+Fast Red

Features a Back Blow Pad for practising ARC and ERC protocol.  $\ensuremath{\textbf{M-1014589}}$ 





## Basic Buddy<sup>™</sup> CPR Manikins

The one-piece, disposable lung/mouth protection system makes this manikin completely sanitary – there is no risk of cross contamination and no need to sanitise the manikins after use! Rugged carrying bags make transporting the lightweight Basic Buddy<sup>™</sup> 5 and 10-Packs convenient (manikins fit into bags fully assembled).

## Life/form<sup>®</sup> Basic Buddy<sup>®</sup> Single CPR Manikin

1 manikin, 10 lung/mouth protection bags, 1 insertion tool, instruction manual. 20 x 37 x 52 cm; 2.2 kg **M-1005637** 

## Basic Buddy<sup>™</sup> 5-Pack

5 manikins, 50 lung/mouth protection bags, 5 lung insertion tools, 1 carrying bag, instruction manual. 6 kg **M-1005636** 

## Basic Buddy<sup>™</sup> 10-Pack

10 manikins, 100 lung/mouth protection bags, 2 carrying bags, 10 lung insertion tools, 2 instruction manuals. 12 kg M-1005635

Replacement parts: 100 ct Lung/Mouth Protection M-1005638

5 Torso Carrying Bag M-1005639



## Optional equipment:

## Life/form<sup>®</sup> AED Trainer with Basic Buddy<sup>™</sup> CPR Manikin

Prepare students for emergency situations! Simply push a button to set the sequence of events that will help students learn the appropriate steps to follow in both "shock" and "no shock" situations. Instructors can select from four training scenarios for manual and hands-free training. Provides both audio and written prompts in English.

M-1018857



## CPR Prompt<sup>®</sup> Training and Practice Manikins

Low cost, professional quality manikins ideal for group training! Comprehensive design allows for practice of Heimlich manoeuvre, CPR and mouth-to-mouth breathing. Realistic anatomical markings (Adam's apple, carotid arteries, navel, rib cage, chest notch) make it easy to learn correct hand placement for checking pulse, performing chest compressions, and more.

## Provides valuable student feedback and other important features:

• Head tilt/chin lift required to open airway

- Proper anatomical landmarks
- Audible compression "clicker" to ensure proper technique
- Age selector dial to adjusts chest compression piston for learning adult or child techniques

Easy-to-clean heads are dishwasher safe and can easily be sanitised. Lung bags are replaceable. Includes a supply of face-shield lung bags, insertion tool, and assembly instructions

Note: Only use AED pads designed for foam body manikins.

Adult/Child Manikin M-1017939

Adult/Child Manikin, 5-Pack Includes carrying case M-1017940

Infant Manikin M-1018141

## Infant Manikin, 5-Pack Includes carrying case

M-1017942

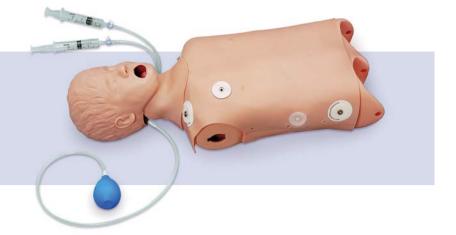
## TPAK 700 CPR Prompt® 7-Pack

Includes five adult/child manikins, two infant manikins, 50 adult/child face shield/lung bags, 20 infant face shield/lung bags and nylon carry case. M-1017941

## +

## **Realistic training of:**

- + Oral, digital and nasal intubation
- + Ventilation
- + Suction
- + CPR
- + Jaw thrust techniques
- + Defibrillation



## Advanced Child CPR/Airway Management Torso with Defibrillation

This Life/form® advanced airway management trainer with tongue swelling and laryngospasm is perfect for practising skills on paediatric patients and represents the size of an 8-year-old patient:

 Realistic anatomy and landmarks include teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false and true vocal cords, trachea, lungs, oesophagus, and inflatable stomach bladder to indicate oesophageal insufflation Practise defibrillation using standard manual, automatic, or semi-automatic external monitor defibrillators. An internal load box absorbs the full strength of every shock to protect students and equipment
Monitor the manikin, just like a real patient

Compatible with all standard brands and types of defibrillators, monitors, and patient simulators. Features 4 ECG sites and 2 defibrillation sites. M-1018864







## Child CPR Torso

This economical CPR torso has a single-use airway/lung/face shield system so you will never have to clean, disinfect, or disassemble it.

## Features include:

- Realistic chest rise
- Anatomical landmarks like sternum, ribcage and substernal notch
- 3 airway/lung/face shields included.

40 x 18 x 22 cm; 1.7 kg **M-1005752** 

## Additional Items Required:

100 Airway/Lung/FaceShield SystemsM-1005743Carrying BagM-1005744

## Mike and Michelle CPR and Trauma Care Simulator (5 years)

This anatomically accurate representation of a school age child is a perfect training tool for basic life support such as CPR and trauma care.

## Some of the features:

- Fully articulating head and jaw with teeth and tongue
- Individual disposable airways to practise hygienic mouth-to-mouth ventilation
- Airway blocked when head is forward
- Easily accessible chest cavity with moulded rib cage, lungs, and heart
- Realistic chest rise during ventilation
- · Carotid, femoral, and brachial arterial pulse sites

Comes with T-shirt and shorts, custom nylon carrying bag, and instruction manual  $% \left( {{\boldsymbol{x}_{i}}} \right) = {{\boldsymbol{x}_{i}}} \right)$ 

M-1017539



#### CPR Simulator (Infant)

This infant manikin features a realistic look and feel (soft facial skin, jointed elbows and knees, realistic hands, feet, fingers and toes) and is an invaluable educational tool for paediatric basic life support as well as patient care:

#### Multipurpose training features:

- Bag valve mask ventilation
- Intubation
- Tracheotomy
- Ostomy care
- CPR feedback
- Injection and infusion
- Interchangeable genitalia (catheterization exercises)
- Intraosseous access
- Enema administration
- NG and otic exercises
- Whole set of patient care activities like bathing and bandaging
- Placement of rectal suppositories

#### M-1014623



#### Paediatric One Year CPR and Trauma Care Simulator

CPR and trauma care simulator with an automatically accurate representation of a one (1) year-old child. It is a superb training tool for paediatric basic life support. The upper torso of the simulator has life-size lungs, heart and ribcage, moulded in soft vinyl. The anatomy provides a realistic experience when practising cardiopulmonary resuscitation.

#### Features:

- Fully articulating head and jaw with teeth and tongue
- Individual disposable airways
- Airway blocked when head is forward
- Easily accessible chest cavity with molded ribcage, lungs and heart
- Realistic chest rise
- Four arterial pulse points

Comes with exercise suit, custom nylon carrying bag, and instruction manual.

#### M-1017541



Easy to change airway system



#### Paediatric CPR Manikins

Economically priced manikins for teaching CPR. The lightweight, rugged, realistic manikin is foamfilled with no internal parts to break. Completely disposable airway system with a uni-directional valves. Life-like anatomical landmarks such as nipples, xiphoid process and sub-sternal notch.

Description	Size	Item No.
Child Manikin (3 years)	82 x 24 x 15 cm, 4.1 kg	M-1005733
Infant Manikin (6-9 months)	66 x 20 x 20 cm, 2.8 kg	M-1005731
Newborn Manikin	66 x 20 x 20 cm, 2.3 kg	M-1005728

#### PREMIE<sup>™</sup> Blue Simulator with Smartskin<sup>™</sup> Technology

28-week premature infant manikin that includes an injection arm as well as an intraosseous leg. Students can intubate and perform BVM and CPR exercises. The skin changes colour in direct response to the treatment, a great way of measuring training success. This is intensified by the possibility to track rates of improvement and deterioration on the monitor.

#### Realistic training of neonatal intensive care:

- Simulate "heelstick" manoeuvre for capillary blood sample
- Oral and nasal Intubation and suction procedures
- Bilateral lung expansion with realistic chest rise
- Distinguishing peripheral and central cyanosis from healthy skin tone
- Feeling pulse umbilicus
- Practise placement of umbilical lines
- Simulate CPR with either two-thumb "encircling" technique or
- two finger alternate compression method
- Practise delicate intraosseous access
- Practise injection and intravenous techniques

#### Simulator components included:

- PREMIE<sup>™</sup> Blue neonate
- ${\scriptstyle \bullet}\, {\rm Omni}^{\scriptscriptstyle (\! 8\!)}$  Controller for managing cyanosis and monitoring CPR
- Omni<sup>®</sup> Code Blue<sup>®</sup> pack
- International power supply 100-240 VAC
- Connecting cables, instruction manual, carrying bag
   M-1018862









#### Newborn CPR and Trauma Care Simulator with Code Blue® Monitor

This manikin is designed to teach the fundamentals of infant CPR and Trauma care. The Omni<sup>®</sup> Code Blue<sup>®</sup> pack monitors and logs the cadence and depth of cardiac compression and airway ventilation. Its features include a fully articulating head and jaw with tongue and SAFE CPR<sup>™</sup> individual disposable airways. Comes with instruction manual and carrying bag. **M-1017560** 



#### Newborn CPR and Trauma Care Simulator with Code Blue<sup>®</sup> Monitor plus Intraosseous and Venous Access

With intraosseous access and femoral venous sites. Includes Omni<sup>®</sup> Code Blue<sup>®</sup> pack to monitor and log the cadence and depth of cardiac compression and airway ventilation. Instruction manual and carrying bag included.

M-1014570



#### Newborn CPR and Trauma Care Simulator with Intraosseous and Venous Access With intraosseous access and femoral venous sites. No Omni<sup>®</sup> Code Blue<sup>®</sup> monitor. Instruction manual and carrying bag included.



The Susie® and Simon® Newborn CPR and Trauma Care Simulator Life support training simulator featuring a fully articulating head and jaw with tongue, and SAFE CPR<sup>™</sup> individual disposable airways. Its airway is blocked when the head is forward, and the chest cavity with moulded ribcage, lungs and heart is easily accessible. It has a realistic chest rise during ventillations and multiple arterial pulse points which enhance the effectiveness of the training. Comes with instruction manual and carrying bag.

M-1018866





#### Infant Choking Manikin

Train the challenges associated with foreign body obstruction in the young paediatric age group with this 9-month-old baby manikin. By placing the included obstruction in the pharyngeal cavity, you will occlude the throat and initialise the need for protocol manoeuvres to remove the object. When proper hand placement occurs with sufficient force, the object expels from the mouth.

#### M-1005778

Options	Item No.
Pocket Mask	M-1018855
Pocket CPR	M-1018144
AED Trainer Plus 2	M-1018143

#### CPR Cathy<sup>™</sup> Infant Manikin with Electronics for Direct Feedback

The infant manikin can be filled with water to approximate the same weight and "feel" as a real child of corresponding size. Realistic chest rise, and other features like life-like ribcage, sternum, xiphoid process, and suprasternal notch help train effective compression techniques. The trouble-free electronics housed outside of the manikin can be used to monitor correct performance during CPR training. Sensors activate lights and/or an audio signal to indicate correct lung ventilation, depth of compression, and correct finger or hand placement. Includes carrying bag and 12 disposable lungs.

66 x 20 x 20 cm; 2.7 kg M-1017247

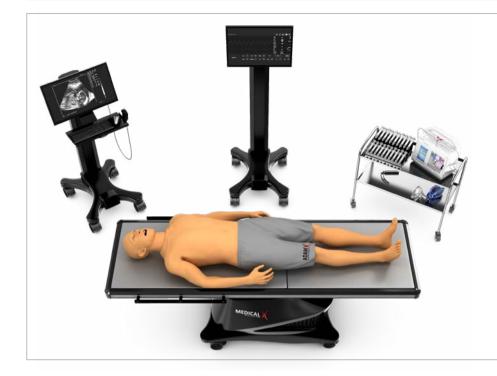


#### Sani-Baby CPR Manikin

This economical, baby-size manikin has a disposable, sanitary, single-user lung/airway and face shield system: no cleaning, disinfecting or disassembly necessary. Sani-Baby features a realistic face, moulded hair, and xiphoid process, as well as a realistic chest rise and anatomical landmarks such as sternum, ribcage and sub-sternal notch. 66 x 20 x 20 cm; 1.1 kg M-1005745

**Replacement Parts: 10 Mouth/Nose Pieces** M-1018326 100 Airway/Lung/Face Shield Systems **Carrying Bag** M-1005744

# **ADVANCED LIFE SUPPORT**



#### ADAM-X

- ADAM-X is the male patient simulator designed for practicing skills and providing medical assistance in case of emergency. ADAM-X is a reproduction of a skeletal and anatomical structure of a human.
- ADAM-X is durable and suitable for training in any trauma emergency situation in any environment, ideal for military and civilian trauma emergency training.
- ADAM-X is a wireless system; a fully functional wireless computer allows the instructor to monitor and make adjustments in the course of the training.
- ADAM-X has distinctive and unique characteristics and features, making the training more realistic.

M-1021109

#### Realistic anatomy

ADAM-X is a reproduction of a skeletal and anatomical structure of a human with distinctive characteristics and features. It is humansized and has a very realistic skin. ADAM-X has automatic blinking depending on physiological status, as well as a physiological reaction of the pupils to light and to touch. The teeth are replaceable and the tongue of the ADAM-X can swell.

#### Training

The ADAM-X is ideal for ALS training, scenario training and medical treatment training. Because the ADAM-X is completely wireless and tetherless, and has realistic human proportions, it is very portable and ideal for on-site training. During CPR training, the accuracy of the hand placement is tracked, as well as the depth and rate of compression.

#### Sounds

ADAM-X has a wide variety of sounds. Auscultation is possible with 8 points of breath sounds, 5 points of heart sounds and 14 points of lung sounds on the front of the mannequin, with the possibility of an independent set of options of the sounds in 4 areas. There is also the possibility of auscultation on the back of the mannequin. Breath sounds are independent and are related to ventilation of each lung. ADAM-X has speech, and can say "yes", "no" and some interjections. Also featured are guttural and coughing sounds.

#### Cardiovascular system

The ADAM-X has a bilaterally palpable pulse on the carotid artery, the femoral artery, the radial artery, the dorsal artery of the foot, the popliteal artery and the posterior tibialis.

#### Pulmonology

ADAM-X has a very realistic respiratory tract. It has fully independent right and left lungs, and ventilation of the lung automatically leads to the appropriate sounds of breathing, chest excursion and pulmonary gas exchange. The occurrence of apnea or hypoventilation, along with the low fraction of oxygen in the inspired gas mixture, lead to corresponding physiological changes: the hypercapnia, the hypoxemia, the decrease of the SpO2 and the tachycardia. Ventilation of the lungs at a positive pressure or spontaneous ventilation restoration returns ADAM-X to the breath with an appropriate amount of respiratory rate. ADAM-X also features chest flotation, and the resistance of the airway changes accordingly.

Replaceable Neck M-1021671 Crycothyroid Membrane M-1021618 Replaceable Knee M-1021619

## Additional Features

- + Work with a real electrocardiogram and with a real defibrillator
- + Possibility to connect a real human patient monitor and a real anesthesia machine
- + Training of normal course of the anesthesia
- + Training of complications of the general character in the anesthesiology
- + Unique pharmaceutics system: the ADAM-X recognizes not only the administered drug, but also the received dose, a change of the vital parameters occurs correspondingly
- + Create more scenarios with the scenario editor
- + Realistic feedback force



#### SMART STAT Complete with iPad<sup>®</sup>\*

This high end patient simulator takes ALS training into the student's environment. Instructors can evaluate student knowledge, skill levels, and critical thinking abilities by utilising the applications via the included iPad<sup>\*</sup>: the new interface makes these tasks a lot easier. Responsive controls and dynamic scenarios are easy to manage with PDF formatted reports.

This simulator can function in the lab and in the field for ascertaining diagnostic ability. Student performance records can be transferred to a computer, and chronological scenario event logs can be printed. SMART STAT has an on-board air compressor, includes a free app on the iTunes Store<sup>®</sup>, and storage for students' performances.

#### SMART STAT Complete comes with:

- Amputated bleeding leg
- Intraosseous leg
- Sim vitals 5-line hospital monitor (simply display all vital parameters on the iPad® or an external monitor)

Also comes with an iPad<sup>®</sup>, USB cable, blood pressure cuff, hard carry case, shorts, and a supply of replacement parts: 10 neck skins, 4 IM injection pads, 6 pneumothorax pads, 3 sets of teeth, and IV vein kit. 140 x 71 x 28 cm; 88 kg

#### M-1018473

#### SMART STAT Basic with iPad®

The basic version of SMART STAT comes without the Sim vitals 5-line hospital monitor, amputated bleeding leg, and I/O leg. 140 x 71 x 28 cm; 61 kg

M-1018472

Consumables	Item No.
Amputated Bleeding Leg	M-1018590
Intraosseous Leg Adult	M-1018593
Pneumothorax Pads	M-1018571
IV Replacement Skin	M-1018572
Replacement Vein Set	M-1018573
Injection Site Replacement, Arm	M-1018574
Injection Site Replacement, Thigh	M-1018575
EMS Scenario Package	M-1018578
Nursing Scenario Package	M-1018579

\*IPad® is a trademark of Apple, Inc., registered in the U.S. and other countries.

### Key training features:

- + Advanced airway management
- + ECG
- + Pacing emergent lung sounds (anterior and posterior)
- + Emergent heart sounds
- + BP arm
  - + Pulse points
  - + Bilateral chest decompression
- + Bilateral chest tube insertion
- + Virtual capnography and oximetry
- + Printable chronological student session reports and scenarios



#### Adult ACLS Manikin with Interactive Arrhythmia Simulator

This full body manikin offers a wide range of Advanced Cardiac Life Support training possibilities including arrhythmia recognition and confirmable defibrillation. The interactive ECG Simulator unit allows defibrillator and pacer training directly on the manikin (training without a manikin is also possible). Various ECG rhythms can be generated and displayed on an ECG-monitor (not included) for diagnostic and defibrillation training. All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available.

- CPR: A printer unit allows CPR evaluation
- Airway management
- I.V. and I.M. injection (at arm)
- Defibrillation chest
- Interactive ECG-simulator

LED illuminates for pacer pulse detection, defibrillator discharge detection, adult mode, paediatric mode and low battery warning. Supplied with a storage case.

#### 119 cm; 28 kg **M-1005649**

7990
9717
9718
5608
5611
5647
5691
5692



Consumables and Options	Item No.
Blood Pressure Electronic Box	M-1019718
IV Arm	M-1019767
Complete Compression Unit	M-1019771
CPR Light Controller	M-1019779
Complete Crisis Update Package	M-1019784
Zoll Training Cables with Adaptors	M-1019785
Crisis Manikin Auscultation Kit	M-1019786
Electronic Monitoring, Memory, and Printer Unit	M-1019633
Interactive ECG Simulator	M-1005666

#### Deluxe CRiSis<sup>®</sup> Torso Manikin

This easy to transport torso allows training of the following ACLS procedures:

- **CPR**: Palpable and visual landmarks, fully articulated head, neck and jaw
- Airway Management: Cricoid cartilage allows for practice of Sellick manoeuvre, separate left and right lungs for auscultation, suctioning capabilities, and oral, nasal and digital intubation capabilities
- Defibrillation Chest: Internal load box absorbs full strength of every shock, manual, semi-automatic, automatic defibrillation, monitor manikin like a real patient
- Interactive ECG-Simulator: The external unit allows defibrillator and pacer training directly on the manikin. All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available Battery saver feature powers-off simulator automatically when not in use. 10.5 kg

#### 12-Lead Arrhythmia Simulator with Manikin Overlay – Zoll, Large

Use on any large-sized manikin to change it into a 12-lead trainer. Pace and defibrillate directly on the overlay system connected to the interactive 12-lead ECG simulator.

#### Training features:

- Four preset pacing capture levels: 70, 80, 90 or 100mA. Waveforms for pacing: Sinus Brady (two), 1st degree A-V block, 2nd degree type I A-V block, 2nd degree type II A-V block, 2nd degree type II A-V block, and 3rd degree A-V block
- Waveforms for defibrillator training: V. Fib, V. Tach (high rate), V. Tach (low rate), Torsade, A. Fib, A. Flutter, zPSVT, Sinus Tach, Sinus rhythm, Sinus rhythm with PVCs, and Asystole
- ST segments and T wave of abnormalities: Anterior MI, Inferior MI, Antero-Septal ST elevation, Anterior ST depression, Lateral ST elevation, and Inferior ST elevation

M-1020845



# Life/form® 15-Lead ECG Placement Trainer

Teaches up to 15-lead ECG electrode placements anatomically and provides visual feedback on the accuracy of electrode placement. Anatomical landmarks include intercostal spaces, midclavicular line, anterior axillary, line, midaxillary line, and scapula. Features connection sites for four limb leads and V1 through V9, with the ability to attach right- or left-sided electrodes. Does not provide ECG output signals, but simulations of rhythms and hands-free defibrillation can be performed by adding any ECG arrhythmia simulator directly to your ECG monitor.

M-1018638





#### Life/form® Deluxe Child CRiSis® Manikin with ECG Simulator

This full body manikin of a 5-year old child offers a wide range of ACLS training, including:

- CPR
- Airway management
- I.V. injection (at arm)
- Blood pressure measurement
- Intraosseous infusion
- Femoral access
- Defibrillation chest

The interactive ECG Simulator unit allows defibrillator and pacer training directly on the manikin. Various ECG rhythms can be generated and displayed on an ECG-monitor (not included) for diagnostic and defibrillation training. All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available.

#### 119 cm; 12 kg M-1005624

Consumables and Options	Item No.
Blood Pressure Cuff	M-1019717
Blood Pressure Electronic Box	M-1019718
Advanced Child Airway Management Trainer, Head Only	M-1019787
IV Ar Child – 5 years old	M-1019790
Blood Pressure Ar – 5 years old	M-1019791
Intraosseous Infusion/Femoral Access Leg – 5 years old	M-1019792
Artificial Blood, 1 litre	M-1017611
Life/form <sup>®</sup> Injectable Training Arm Replacement Skin and Vein Kit	M-1005654
Interactive ECG Simulator	M-1005666

### More consumables are available online!

#### ECG Training Vest The new ECG Training Vest offers an inexpensive way to communicate with a live patient while monitoring. Since the volunteer wears this vest there is no need to use a high fidelity simulator. Vest can be hooked up to the ECG Simulator. Includes the interactive ECG Simulator, contains no electrical energy and is not for defibrillation practice. 30.5 x 30.5 x 22.9 cm; 2.25 kg M-1017249



#### Basic Life/form® Infant Crisis Manikin

This dramatic training manikin is ideal for beginning practice and building basic skills. Anatomical landmarks provide key features necessary to learn proper infant handling in emergencies. Allows practice of:

• Infant airway management

• CPR

Includes 6 umbilical cords, 6 umbilical cord clamps, 1 IV bag with clamp, 1 quart artificial blood, lubricant and 8 towels. The basic version can be upgraded by adding the modular components available below. **M-1017248** 

### > Add these modules for advanced training features or choose the advanced or deluxe version right away:

Consumables	Features	Item No.
Life/form <sup>®</sup> Infant IV Arm	Cephalic and basilic vein are accessible, as well as the dorsal venous arch on the hand. Comes with 2 IV bags with clamps, on pint Life/form® blood, and winged infusion set.	M-1017949
Life/form <sup>®</sup> Infant IV Leg	The greater and less saphenous veins are accessible, as well as the dorsal venous arch on the foot. Comes with 2 IV bags with clamps, 1 pint artificial blood, one 3 cc syringe, one 22-gauge needle, and winged infusion set.	M-1017950
Life/form <sup>®</sup> Single Intraosseous Infusion Leg	Comes complete with 10 replaceable bones, 2 sets of replacement skins, a fluid administration kit enabling you to visualise a flashback and infuse fluid into the leg, and intraosseous infusion needle.	M-1017951
ECG/Umbilical Cannulation Skin	Has four sites for ECG monitoring. Comes with 1 pint of Life/form® blood, 1 IV bag with clamp, one 3 cc syringe, 6 umbilicus clamps, and 5 replacement cords.	M-1017953
ECG-Simulator	All arrhythmias can be displayed in adult or paediatric mode so that a total of 34 rhythms are available.	M-1005666

#### Advanced Life/form<sup>®</sup> Infant Crisis<sup>™</sup> Manikin

Complete resuscitation system designed for teaching life-saving techniques for infants.

- Allows practice of: • 4-lead ECG monitoring
- IV therapy
- Umbilical catheterisation
- Infant airway management
- Intraosseous infusion
- CPR

Includes: IV bags with clamps, synthetic blood, winged infusion sets, syringes, 22-gauge needles, disposable umbilical cords and clamps, lubricant, intraosseous bone kit with needle, towels, instruction manual, and hard carry case **M-1005658** 

### Deluxe Life/form<sup>®</sup> Infant Crisis<sup>™</sup> Manikin with Interactive ECG Simulators Everything you need for PALS training in one manikin!

Allows practice of:

- 4-lead ECG monitoring
- IV therapy
- Umbilical catheterisation
- Airway managementIntraosseous infusion
- CPR

#### Added realism with Interactive ECG Arrhythmia Simulator:

Simulates 17 adult heart rhythms and 17 pediatric rhythms. With an external pacer, you can also simulate electronic capture and cardioversion with manual, semiautomatic, or automatic defibrillation.

*Includes:* ECG Chest Skin, IV bags with clamps, synthetic blood, winged infusion sets, syringes, 22-gauge needles, disposable umbilical cords and clamps, lubricant, intraosseous bone kit with needle, towels, instruction manual, and hard carrying case. 65 x 44 x 14 cm **M-1018146** 

```
Consumables and replacements for Life/form® Infant Crisis Manikins
                                                                               Item No.
                                                                               M-1019799
Leg Skin Replacement Kit
                                                                               M-1005661
IV Leg Replacement Skin/Veins
Intraosseous Leg Replacement Skin (Pkg. of 4) and Bones (Pkg. of 10)
                                                                               M-1005659
                                                                               M-1005660
Intraosseous Infusion Needle (15 gauge)
IV Arm Replacement Skin/Veins
                                                                               M-1005662
                                                                               M-1019796
Bone Replacement Kit
Artificial Blood, 1 litre
                                                                               M-1005611
                                                                               M-1005691
Artificial Blood, 1 gallon
Fluid Supply Bag, 500 ml
                                                                               M-1005693
6 Umbilical Clamps
                                                                               M-1005664
Infant Airway Management Replacement Stomach
                                                                               M-1005653
Infant Airway Management Trainer, Head Only
                                                                               M-1017953
```



#### PEDI® Blue Neonatal Simulator with SmartSkin® Technology

A spectacular newborn simulator which changes colour based upon an initial pre-selected condition and measures the effectiveness of airway ventilation and chest compression. In addition, the simulator has all the conventional features found in airway management trainers. Can be upgraded with an intraosseous leg and an injection training arm.

#### Simulator components included:

- PEDI Blue neonate
- Omni<sup>®</sup> Controller for managing cyanosis and monitoring CPR
- Omni<sup>®</sup> Code Blue<sup>®</sup> pack
- International power supply 100-240 VAC
- Connecting cables, instruction manual, carrying bag
- M-1013066





#### **PEDI®** Neonatal Simulator

This anatomically accurate newborn simulator features a fully articulating head, neck, and jaw, permitting head tilt/ chin lift, jaw thrust and neck extension. Realistic mouth, trachea, bronchi, lungs, and distensible stomach for practising gastric suctioning and feeding exercises. Airway with crico cartilage permits intubation, suctioning, and the Sellick manoeuvre. Realistic internal organs for unparalleled CPR performance. Includes carrying bag and Omni<sup>®</sup> Code Blue<sup>®</sup> Pack for CPR monitoring.

#### This simulator is ideal for training:

- Airway management
- Femoral IV
- Intravenous access
- Umbilical catheterisation
- IO access
- M-1014584

#### PALS Manikin with ECG-Simulator

This simulator model of a female infant allows practice of a wide range of paediatric ALS techniques. Soft carrying bag included. 57 cm; 3 kg

#### Features of the PALS Manikin include:

- Bag valve mask ventilation
- Oral and nasal intubation including Sellick's manoeuvre
- Placing of NG tube
- Three lead ECG monitoring (16 different arrhythmias with adjustable heart rate)
- Palpation of brachial pulse
- External chest compressions
- Movable jaw
- I.V sites in hand and arm for blood sampling or fluid injection
- Intraosseous needle insertion and aspiration of bone marrow in both legs
- · Palpation of scalp vein, cranial sutures and fontanelles





#### STAT Baby – Training for Life

STAT Baby brings you an extremely life-like simulator for infant care by utilising new materials for tactile awareness during patient assessment. Developed in conjunction with leading paediatric physician involvement, this baby contains a wide range of skill sets in a simple format that is very affordable. The infant is sized to a 9-month-old.

#### Features:

- IO leg
- Peripheral IV (left hand and foot)
- IM left deltoid and thigh and SC injection sites
- PICC line
- ET tube insertion
- Laryngeal spasm
- Tongue edema
- LMA insertion
- Trachea care
- NG tube placement with fluid reservoir
- Feeding tube care
- Rectal medication
- Pulses (6 pulse locations 2 brachial, 2 femoral, 2 carotid)
- Defib (shock level 2-4 joules per kg)
- Foley cath insertion (female manikin)
- Pneumothorax

Comes with IV vein kit (1 arm and 1 leg), leg skin (1), arm skin (1), IO leg bones (12), pneumothorax sites (4), injection site (2), Picc line site (1), reservoir bag (4), defibrillator adaptors, ECG interactive simulator, and simulated blood powder (1).

6.8 kg

M-1005779



**IO** Insertion Leg



IV Insertion



#### STAT Baby Advanced

STAT Baby Advanced has all the features of a STAT Baby, but utilizes easy-to-use iPad® technology. It gives the instructor control of the physiological features of the baby to deliver challenging training to develop student assessment skills and easily tracks sessions for later review and debriefing. Key functions include managing student information, easily create alternate scenarios or use those already existing, and efficient records management of the training, all managed through an easy iPad® interface. It satisfies every training need for post-neonatal care of pediatric patients, from introducing students to basic concepts to challenging medical staff in advance medical procedures. This affordable trainer augments your training budget by utilizing low-cost replacement items in those areas where repetitive, perfect practice, makes perfect skill attainment.

#### Includes the following standard features of the STAT Baby:

- 7 pulse points
- I/O leg
- 3 IV sites
- PICC access site
- IM/SQ injection sites
- Advanced intubation head with tongue edema and laryngospasm
- Pneumothorax reduction bilaterally

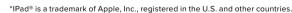
- 4-lead monitoring
- Chest tube insertion (left side only)
- Defibrillation
- Rectal medication
- Urinary catheterization
- Very lifelike new skin material
- Replacement parts
- Accepts LMA, ET, OPA, NPA, and LT airways

#### Also includes these additional features:

- Sternal retraction
- Fully enclosed crib with waterproof surface
- 6 ft. (183 cm) tether assembly so that the baby can be handled
- Aneroid blood pressure cuff
- Heart sounds
- Lung sounds
- Voice sounds
- Spontaneous breathing

The STAT Baby Advanced comes with its own iPad®\*.

140 x 71 x 28 cm **M-1020195** 





Simulated Rectal Temperature



Urinary Catheter



Nasal Tube Insertion



## LIFE-LIKE NEONATAL PATIENT CARE SIMULATION!

**NENAsim** was created to complement realistic multidisciplinary team or individual baby patient simulation training. NENAsim is a neonatal, high-end simulator with an unprecedented level of realism and offers an ideal training solution for a wide range of healthcare professionals including patient care, emergency medical intervention and resuscitation training.

The combination of the neonatal simulator and the software make for the perfect training combination. Experiencing the movements with realistic haptic feedback and being able to use varying scenarios with the software allow for a fast and lasting learning effect.

The software provides WI-FI communication between the baby and the monitor (not included). It has a user-friendly touchscreen interface, which allows control of the movements and shows its vital signs. Configurable parameters are displayed on the patient monitor for real-time training interaction.

# Scenarios can be pre-programmed by the user or accessed from the extensive scenario library

The NENAsim patient software is a perfect tool for training neonatal examination. It has the following parameters for setting up various scenarios: blood pressure, heart-rate, ECGs,  $SpO_2$ ,  $CO_2$ , ABP, CVP, PAP, PCWP, NIBP, TOF and many more. The trainer can choose from one of the 5 available standard scenarios or build their own. New parameters can be added at any time in order to alter the existing scenarios. Individual as well as team trainings with different language options are possible. Trainees learn from monitoring the displayed parameters – it enables them to deduct the correlation between the measured values and the clinical picture of the patient, thus helping in recognising and managing paediatric emergencies.

Please scan the code to see the realism of NENAsim in a video demonstration.





Comes with carrying case and charger. Compatible with both Microsoft Windows and MacOS.

#### **Realistic Anatomy**

NENAsim has a life-like appearance and movement of the eyes, head and neck. The silicone skin changes its temperature, whereas no visible artificial joints make its outer appearance even more realistic. Variable breathing patterns as well as torso motion can be controlled via provided software.

#### Airway Management

Paediatric airway management remains the most difficult task that many healthcare professionals need to face. Success of any technique or clinical performance depends on constant training which comes from understanding anatomical and paediatric airway facilities. NENAsim allows performing of all aspects of neonatal airway management training and gives trainees the necessary confidence to deal with their little patients in the future.

#### New Airway features:

- ET Tube Insertion
- LMA Insertion
- Positive Pressure Ventillation
- Right Mainstream Intubation
- Gastric Tube insertion

#### Breathing

Newborns and infants might experience breathing difficulties resulting from several different illnesses. NENAsim offers a variety of difficult breathing patterns and complications to help learners tackle these difficult problems in the future. In addition, NENAsim makes the training even more realistic through its vocal sounds library.

#### **Breathing Features:**

- Spontaneous Breathing with variable rate
- Bilateral and Unilateral Chest rise and fall with Mechanical ventilation
- CO<sub>2</sub> Exhalation
- Breathing Complications:
- Pneumothorax
- Unilateral chest movement with Mechanical ventilation
- Unilateral Breath sounds
- Unilateral needle thoracentesis, Mid-axillary



#### Sounds

- · Lung: Normal, stridor, pneumonia and others
- Heart: Normal, diastolic murmur, systolic murmur and others
- · Possible for users to add more sounds of their choices

#### CPR

About one quarter of all neonatal deaths are caused by failing to initiate and sustain breathing at birth. Effective resuscitation can prevent a large proportion of these deaths – NENAsim has been designed to teach the fundamentals of infant CPR and trauma care. Open the airway by tilting NENAsim's head and chin, and begin the resuscitation.

#### **Blood circulation**

Blood pressure, pulse rate and respiratory rate are the routine vital signs measured in neonatal care. NENA*sim* offers versatile BP and ECG features, all of which can be controlled and displayed on the monitor.

- Extensive ECG Library with rates form 10 300 bpm
- ECG Monitoring via 3- lead monitor

#### Additional Features

Wireless autonomous local network broadcast its own signal so the training can be organised anywhere or with any scenarios (outdoor, accident, emergency and not only in clinical setup).

55 x 61 x 23 cm; 10 kg Light skin M-1020899 Dark skin M-1018876

Please contact the Customer Service Team for more information or to schedule a demo



Practice resuscitation



IV Drain point



Head tilt/chin lift







Consumables and replacements for Life/form <sup>®</sup> C.H.A.R.L.I.E. Neonatal Resuscitation Simulator Without Interactive ECG Simulator	Item No.
Life/form® Replacement Bilateral Chest Rise	M-1021590
Life/form® Replacement Unilateral Chest Rise	M-1021591
Life/form® Replacement Airway	M-1021594
Life/form® Replacement IV Hand Skin and Veins	M-1021597
Life/form® Replacement IV Foot Skin and Veins	M-1021598
Life/form® Birth Defects - Set of 2	M-1021599
Replacement Advanced Airway	M-1021611
Defibrillation Chest	M-1021612
Replacement Genitalia - Male and Female	M-1021613
Replacement I/O Skin	M-1021614
Umbilicus with Pulse	M-1021615
I/O Bone and Blood Capsule - Pack of 12	M-1021616

#### Life/form<sup>®</sup> C.H.A.R.L.I.E. Neonatal Resuscitation Simulator Without Interactive ECG Simulator

- C: Compressions, Cardiac
- H: Heat compatible
- A: Airway, Arterial access via the umbilicus
- R: Resuscitation
- L: Laryngeal mask capable for oxygen use or PPV I: Intravenous, Intraosseous, Intubation
- E: ECG

#### Features:

- Airway, breathing, intubation and ventilation
- Birth anomalies
- Chest tube placement
- CPR
- ECG simulation
- Gastrointestinal (GI) tube
- Interchangeable genitalia
- Intraosseous infusion
- IV hand and foot
- Observation and measurement
- Palpable manual pulse points in 7 locations
- Patent umbilicus with venous and arterial access
- PICC site in arm
- Urinary catheterization

#### C.H.A.R.L.I.E. comes complete with:

- Airways, 2; standard and advanced
- Baby powder
- Bilateral chest
- Blood
- Carry bag
- Defibrillation chest
- Intraosseous bones and skin
- IV bag
- IV skin and veins for hand and foot
- Male and female genitalia
- Myelomeningocele
- Needles
- Omphalocele
- Umbilicus
- Instruction manual



#### Life/form<sup>®</sup> S.A.L.A.D. Simulator

- Suction Assisted Laryngoscopy and Airway Decontamination (S.A.L.A.D.) simulator uses suction to enhance first pass success-laryngoscopy (FPS-L) with a non-anesthetized patient in active emesis
- Simulates a non-anesthetized patient for practicing intubation, ventilation and suction
- Practice oral, digital and nasal intubation, as well as E.T., E.O.A., P.T.L, L.M.A., Combitube<sup>®</sup> and King System insertion
- Permits suction techniques and proper cuff inflation with active emesis
- Anatomy and landmarks include teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false cords, true vocal cords, trachea, esophagus and cricoid cartilage
- Offers room to maneuver and a slightly anterior position, making the simulator great for introductory classes as well as advanced students
- Apply cricoid pressure to change the position of the trachea and close the esophagus
- Rigid suction catheter distracts lower mandible and tongue to permit laryngoscope insertion
- Realistically practice the Sellick maneuver
- Features durable, rugged, 1-piece construction
- Manual carotid pulse
- Includes "Airway Larry" Adult Airway Management Trainer Head, suction canister with 2 right-angle tubing adapters, gallon container with hand pump, two simulated latex-free lungs, thickener, rigid suction catheter, two 3-ft. lengths of clear vinyl tubing, pump spray lubricant, 5 red caps with white fittings, tubing couplings, 5 pinch clamps, #10 spanner bit and carrying case with handle

Consumables and replacements for Life/form® S.A.L.A.D. Simulator	Item No.
Life/form® Rigid Suction Tool	M-1021590
Life/form® Suction Canister	M-1021591
Life/form® Gallon Container with Hand Pump	M-1021594
Life/form® Replacement Lungs - Set of 2	M-1021597
Life/form® Replacement Kit	M-1021598



# AIRWAY MANAGEMENT | Adult



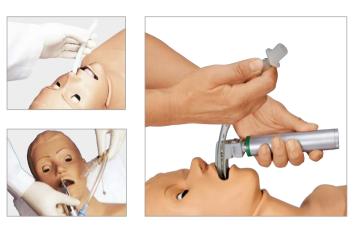
#### Adult Airway and CPR Trainer

The perfect trainer for practising fundamental intubation and CPR skills. Features a life-like airway and a durable chest recoil system. It is CPR and Omni<sup>®</sup> Code Blue<sup>®</sup> Pack (M-1020211) compatible, thus capable of providing real-time CPR quality feedback and reporting.Nasal and oral Intubation: ETT, LMA, King LT®

Gastric distension with oesophageal intubation

Nasal passage permits placement of NP tube

M-1019855



#### Adult Multipurpose Airway and CPR Trainer

Train participants to recognise laryngospasm and if needed, perform an emergency tracheotomy or cricothyrotomy. To improve CPR training, add the OMNI® Code Blue® Pack option to view real-time CPR quality feedback via the handheld OMNI controller and PC link software.

- Laryngospasm
- Tracheostomy and cricothyrotomy
- Nasal and oral Intubation: ETT, LMA, King LT®
- Right mainstem intubation presents unilateral chest rise
- Gastric distension with oesophageal intubation

M-1019856

Option:



Omni<sup>®</sup> Code Blue<sup>®</sup> Pack

Monitors and logs the cadence and depth of cardiac compression and airway ventilation M-1020211

Adult Deluxe Airway Management Trainer

The life-like feel and an anatomy emphasising accurate visualisation features makes this trainer the choice for advanced airway management with the convenience of board mounting. Features include laryngospasm and tongue edema. Both air bags for lungs and stomach are visible for easy determination of successful intubation. All the anatomical landmarks are shown and the vocal cords are highlighted for easy viewing. The upper teeth break out if inappropriate technique is applied during intubations. Board is anchored to surfaces by suction cup feet. Delivery with soft carry bag, lubricant and instructions for use. M-1018851



# **B**

#### AirSim Advanced Model

The AirSim Advanced Model features the uniquely constructed AirSim airway designed to provide true, anatomically correct and visually accurate internal features. The addition of a "real-feel" skin covering provides a more realistic bag mask ventilation training experience.

#### Features:

- Improved neck design allowing for accurate articulation
- Anatomically accurate nasal passage
- Inflatable tongue to increase difficulty of airway
- Option to include "breakout teeth" to simulate the effects of bad practise in laryngoscopy
- 46 x 26 x 33 cm; 3.05 kg

AirSim Advanced M-1015527 With Bronchial Tree M-1015530





#### AirSim Bronchi Model with Nasal Passage

The AirSim Bronchi is the latest product addition to the AirSim family, providing anatomically correct detail down to the fourth generation bronchi. The AirSim Bronchi provides exceptional detail in both internal and external features; made possible through a combination of cutting edge moulding technology and carefully handcrafted processes.

#### The AirSim Bronchi unit will provide a solution to your training needs in:

- Diagnostic bronchoscopy
- Lung isolation techniques using left and right endobronchial tubes and bronchial blockers
- Lung suctioning techniques
- 46 x 26 x 33 cm; 3.05 kg M-1015523



#### AirSim Multi Model with Nasal Passage

The AirSim Multi contains the key features of the AirSim Standard Model with the addition of a nasal passage and a chin. The AirSim Multi Model facilitates training on nasal procedures as well as bag and mask ventilation techniques. The nasal passage has been developed in a manner similar to the main airway. This gives the same anatomical realism and functionality, important landmarks such as the turbinates are clearly defined. In addition, the material used offers the same tactile feedback which is delivered with the main airway itself.



# "Airway Larry" Torso with Defibrillation Features, ECG Simulation, and AED Training

The Life/form® Advanced "Airway Larry" Airway Management Trainer is now even better with chest skin that lets you practise defibrillation using standard manual, automatic, or semi-automatic external monitor defibrillators. An internal load box absorbs the full strength of every shock to protect students and equipment. The included interactive ECG simulator comes with 6 waveforms available for pacing and 17 Adult/ Pediatric Rhythms. The included Life/form® Universal AED Trainer can be used to set the sequence of events that will help students learn the appropriate steps to follow in both "shock" and "no shock" situations. **M-1018868** 



#### Life/form<sup>®</sup> "Airway Larry" Adult Airway Management Trainer on Baseboard

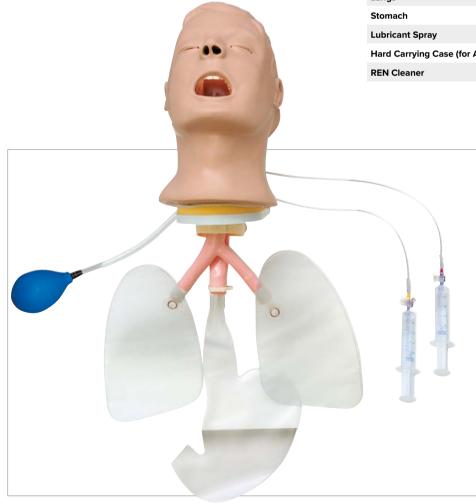
This trainer simulates a non-anaesthetised patient and features anatomical landmarks such as: teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false cords, true vocal cords, trachea, lungs, œsophagus, cricoid cartilage and stomach. Train the following procedures: Oral, digital, and nasal intubation E.T., E.O.A., P.T.L., L.M.A., E.G.T.A., and Combitube® insertion, Sellick manoeuvre, ventilation, CPR, suction techniques, and proper cuff inflation can all be practised and evaluated. Comes with a training stand to mount. 63 x 30.5 x 40.6 cm; 15.1 kg

M-1005633

Consumables	Item No.
Mounting Kit	M-1019812
Lungs	M-1005607
Stomach	M-1005608
Lubricant Spray	M-1005634
Hard Carrying Case (for Airway Trainers with Stand)	M-1019811
REN Cleaner	M-1005776

#### Advanced Airway Larry Trainer

The Life/form® Advanced Airway Management Trainer Larry offers tongue swelling and laryngospasm in addition to all the features on the standard models. Your students can now be presented with the additional challenges they may face in the real world. The trainer simulates a non anaesthetised patient for practising intubation, ventilation, and suction techniques. Realistic anatomy and landmarks include teeth, tongue, oral and nasal pharynx, larynx, epiglottis, arytenoids, false cords, true vocal cords, trachea, lungs, œsophagus, and stomach. The trainer allows you to practise oral, digital, and nasal intubation, as well as E.T., E.O.A., P.T.L., L.M.A., E.G.T.A., Combitube<sup>®</sup>, and KING Airway System<sup>™</sup> insertion. Comes with a training stand for mounting. M-1019249







#### Adult Airway Management Trainer

The detailed anatomy provides a clear picture for intubation training: sculpted alveolar sac, bronchial tree, blood vessel structures of the cross-sectioned and exposed flexible lungs, interior main bronchus and oral/nasal pharyngeal spaces. Combine these with an airway complicated by breakout teeth, tongue edema, and laryngospasm, and this airway trainer really stands out. The stomach swells with oesophageal intubation, or excessive pressure with the BVM during rescue breathing and it also has the capability of vomiting. Comes complete with instructions for use, soft carry bag, lubricant, and replaceable lungs and stomach.

32 x 24 x 12 cm; 18.65 kg **M-1005774** 

#### Economy Adult Airway Management Trainer

The basic version for training of intubation procedures and skills, including anatomy knowledge and recognition, endotracheal intubation, nasotracheal intubation, use of field emergency airway adjunct tubes like LMAs and Combitube, securing, and suctioning, and maintenance of the installation can all be practised with this unit. **M-1005780** 

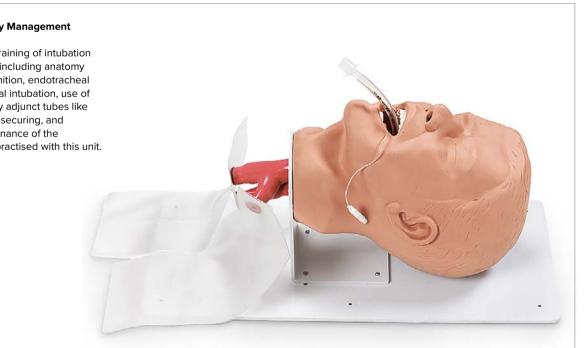


#### **Critical Airway Management Trainer**

This advanced intubation head and coupled with the CPR torso supply the challenges for initiating respiratory care to the critical patient. By using the features of tongue swelling and laryngospasm the instructor creates a critical airway management problem that requires the student to perform cricothyrotomy. In addition, two external and one internal bleeding wounds demand attention with suctioning and bleeding control.  $68.6 \times 43.2 \times 25.4$  cm **M-1017955** 

Optional Extras and Replacement Parts	Item No.
Lungs/Stomach – 3 Pack	M-1017956
REN Cleaner	M-1005776

### > Critical Airway Management Training



# AIRWAY MANAGEMENT | Child



**Optional equipment: Defibrillation Chest** Skin M-1019789

the foundation of the Child

**Management Torso** (not shown)

CRiSis<sup>™</sup> system.

M-1018865



#### Airway Trainer, 1 Year old Child

Skill training designed to present the same challenges experienced by paramedics and physicians in the real world with very young patients.

#### Full body manikin features:

- Realistic chest cavity containing realistic organs
- Fully articulating head, neck and jaw permitting head-tilt/chin lift, jaw thrust and neck extension into the sniffing position
- Anatomically accurate mouth, tongue, airway and œsophagus of a 1 year old child
- Soft neck with cricocartilage permits classic Sellick manoeuvre
- Realistic chest rise during ventilation
- Realistic trachea, bronchi and lungs. Observable bilateral lung expansion under positive pressure ventilation
- · Airway narrows below vocal cords (realistic with "fish-eye" appearance)
- Airway diameter
- Nasal passage permits placement of NP tube
- Includes carrying bag and instruction manual.

M-1018863

#### Life/form® Advanced Child CPR/Airway Management Torso with Defibrillation Features

This advanced airway management trainer is perfect for practising skills on pediatric patients (5-year-old). Practise intubation, ventilation, suction, CPR, and jaw thrust techniques. Also offers tongue swelling and laryngospasm in addition to all the features on the standard models.

- Realistic anatomy and landmarks
- Oral, digital, and nasal intubation
- E.T., E.O.A., P.T.L., L.M.A., E.G.T.A., Combitube<sup>®</sup>, and KING Airway System<sup>™</sup> insertion
- Separate lungs for auscultation
- Manual carotid pulse

 Inflatable stomach bladder indicates oesophageal insufflation Practice defibrillation using standard manual, automatic, or semiautomatic external monitor defibrillators. An internal load box absorbs the full strength of every shock to protect students and equipment. M-1018864



#### Child Airway Management Trainer Head with Lungs and Stomach

A simulated head of a 5-year-old child featuring realistic size and anatomy. Perfect for practising airway management skills on pediatric patients. Realistic anatomy, practise suctioning and oral, nasal, and intubation techniques. Separate lungs (1005652) can be added for auscultation. Can be attached to any Life/form® Child Airway Management Trainer or Child CRiSis<sup>™</sup> Manikin. Pump spray lubricant included. Manual carotid pulse.

### M-1019788

Advanced Child Airway Management Trainer, Head Only (not shown) M-1019787





#### AirSim Baby

Features realistic anatomy and a clinical functionality that enables basic and advanced pediatric airway management. AirSim Baby facilitates training in the use of bag/mask ventilation, supraglottic airway insertion and both naso and orotracheal intubation. In addition, it can be used with all current video laryngoscopes. Realistic airway allows for training in all aspects of infant airway management including positive pressure ventilation, insertion of laryngeal masks and endotracheal intubations (nasal and oral). M-1015536

#### Infant Intubation Head

This trainer of an infant allows practice and training of nasal and oral intubation.

#### Features include:

- Inflatable lungs and stomach
- Vocal cords are highlighted in white for easy laryngoscope viewing
- Anatomical landmarks such as uvula, vocal cords, glottis, epiglottis, larynx, arytenoid cartilage, trachea, œsophagus

Supplied with carrying bag and lubricant. 30 x 20 x 13 cm; 0.8 kg M-1017245

WI-1017245



#### Advanced Infant Intubation Head with Board

This station trainer incorporates new skin technology. The new material eliminates tearing of the airway, caused by beginning student intubation attempts. New tear-resistant material especially for beginners. Translucent property allows for life-like illumination of the airway and neck as the skill is attempted. Vocal cords are highlighted for easy viewing, the tongue swells, and all the anatomical landmarks are present.

38.1 x 25.4 x 20.3 cm; 4.08 kg **M-1017236** 



#### Infant Airway Trainer on Baseboard

The infant airway management trainer features realistic size and anatomy and is perfect for practising airway management skills on an infant. Comes with a training stand to mount. **M-1017954** 

#### NG Tube Insertion Trainer

For nasogastric tube insertion and care practice. The œsophagus and stomach reside within the head for ease in storing and transporting to various classrooms or lab tables. The head comes mounted on a flat plate to hold it steady. No moving parts and simple construction assure longevity. 31 x 31 x 23 cm; 1.4 kg M-1017250

# **ALEX** | Patient Communication Simulator



#### **ALEX Patient Communication Simulator (PCS)**

- ALEX is the first patient simulator to have speech recognition ability and an HD camera
- It is a full-body, easy to operate and intuitive patient simulator with advanced communication skills
- Speech recognition ability allows ALEX to respond verbally to clinical interview questions with answers related to the scenario
- Students can practice medical interviewing skills to aid them in better assessing the patient

#### **Physical Description:**

- Full-body patient simulator weight: 20 kg
- 8 hours of battery life
- 8 pulse touch points
- Automatically moving chest
- Opening jaw
- Airway management
- CPR mechanism
- BVM-ready lungs
- IrisCam<sup>™</sup> HD camera in the right eye, speakers for voice and a high-sensitivity microphone

#### Features:

- · Airway: Oral, digital and nasal intubation, as well as all other standard airway procedures
- Blood Pressure: Measure BP using the included sphygmomanometer with SmartCuff<sup>™</sup> sensor
- Breathing: Moving chest in sync with set respiratory rate, set profiles with varying depth of breath
- BVM Ventilation: Lifting chest and measuring and recording airflow over time when done during CPR
- Circulation: Pulses (carotid x 2, brachial x 2, radial x 2 and pedal x 2); pulse sensation on touch
- CPR: CPR with metrics of chest compression depth/timing, automatic logging of CPR
- Injectable Training Arm: Realistic skin and veins including flashback with proper insertion
- Waveforms: Simulated cardio, respiratory and SpO2 waveforms in virtual patient monitor
- IrisCam<sup>™</sup>: HD camera built into the eye of ALEX, digital video for live streaming and review
- Patient Monitor: Direct control of HR, RR, SpO2 and TEMP to set target value and transition length
- Patients: Scenarios with patient-specific states, resources, checklists and voice replies
- Sounds: Realistic lung/heart/bowel sounds and Korotkoff sounds using the SmartScope™
- Speech: Speech recognition and synthesis for automated medical interviewing





#### Connectivity and Compatibility:

- Simulator requires Internet connection for operation
- Bandwidth requirement: ~3G (0.1 Mb/s) for control, ~4G (2 Mb/s) for full AV
- Can utilize wired or wireless (including guest)
   networks
- Control from a modern browser using HTML5
   user interface, Chrome or Firefox
   recommended
- Requires no plugins or apps to be installed
- Responsive and scalable user interface, full functionality from smartphones to desktops

Difference between 3 versions:	ALEX Lite	ALEX Plus	ALEX Pro
	M-1021410	M-1021415	M-1021424
All physiological features	√	1	√
Cloud connected control	✓	1	1
Advanced speech features	Up to 250 questions per day	Up to 250 questions per day	Unlimited
IrisCam™	✓	1	1
Recording time		1,000 hours	Unlimited
Simulation Log Archive	60 days	1 year	5 years
Enterprise API for Logs & Physio Events		1	√
Live Videos			√

Replacement Parts	Item No.
ALEX Right Arm	M-1021632
ALEX Left Arm	M-1021633
ALEX IV Arm Replacement	M-1021634
Alex Stethoscope Puck Replacement	M-1021635
Alex BP Cuff Assembly	M-1021636
Replacement Lung Set	M-1021637
Replacement Gastric Bag	M-1021639
ALEX Skin and Vein Replacement Kit	M-1021640
Vein Tube Seiling Kit	M-1021642
ALEX Male Genitalia	M-1021643
ALEX Female Genitalia	M-1021641

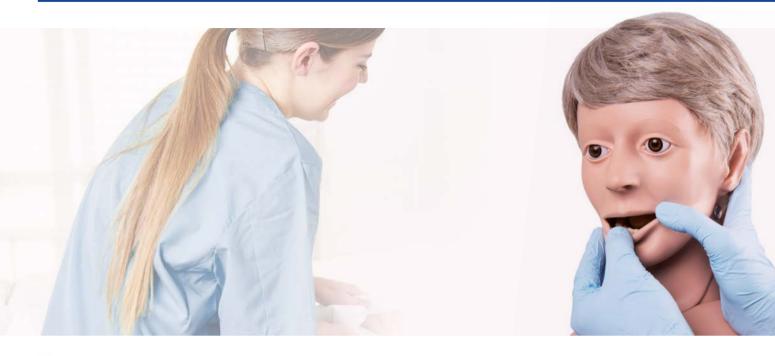
#### Software Highlights:

- Real-time remote simulation control with multiuser capabilities. Alter physiological state through the Patient Monitor; control simulator's voice with text-to-speech and push-to-talk; watch live streaming video with audio; collect checklist data
- Simulation archive: search, locate and review past simulation sessions with physiological data trend chart, video and audio review, log and checklist data
- SmartLog: A single searchable log for every simulation includ¬ing physiological settings, voice transcripts and custom entries by facilitators and learners
- Restricted access mode for both live and archived simulations for learner self-review
- Sharing simulator access, control and live or archived sessions

#### Accessories included:

- SmartScope<sup>™</sup>: Wireless stethoscope accessory delivering realistic lung, heart and bowel sounds through any stethoscope or headset attached to it. By placing the speaker outside the simulator, the distortions of "through-the-skin" playback can be eliminated. Uses NFC technology for location identification with below-skin location patches and BlueTooth<sup>®</sup> for control and audio playback
- Size: 6.35 cm x 6.35 cm x 1.30 cm
- Uses rechargeable Li batteries
- SmartCuff<sup>™</sup>: Compact battery-operated pressure sensor attached to blood pressure cuff wirelessly communicating with simulator using Bluetooth<sup>®</sup> LE to control blood pressure measurement (playback of Korotkoff sounds and brachial pulse sensation)
   2.5 cm x 2.5 cm x 1 cm
   Uses a single user-replaceable battery

# **PATIENT CARE**





#### 3B Scientific® Patient Care Manikin PRO Build and evaluate advanced patient care and nurse aid competencies with scenario based training!

The patient care manikin simulates an adult, life-size patient, with interchangeable genitals. It can be positioned like a real patient with natural movement of the arms, legs, and joints. It is made of durable, unbreakable, and water-resistant plastics for longevity in the everyday training use.

The PRO version includes removable organs for additional patient care training features like catheterization, enema administration, ostomy care, irrigations and naso-gastric lavage and gavage.

#### Delivered with:

Organs (lungs, heart, stomach, bladder and intestinal section), injection pads (upper arm, thigh, and buttocks), intestine tube, catheter, duodenal probe, talcum powder, Vaseline, lubricant, amputation stump, inserts with wound depictions (upper arm and thigh), and tools for fitting. Meets the OBRA requirements of Nurse Aide Training and Competency Evaluation Programs (NATCEP).

174 cm; 15.5 kg delivered with assembly tools M-1018816

#### 3B Scientific<sup>®</sup> Patient Care Manikin BASIC

The 3B Scientific® Patient Care Manikin is also available in a basic version, offering a variety of training possibilities for basic patient care and nurse aid competencies. It comes without organs but can be upgraded to include all training features of the PRO version using the Upgrade Kit available below. 174 cm; 14.4 kg

M-1018817



#### Ugrade Kit (not shown)

You can easily upgrade the Basic Patient Care Manikin to the PRO version using this kit. It includes the inner organs and allows for training of catheterization and naso-gastric lavage and gavage.



#### Patient care training features:



Removable organs for advanced training features like catheterization



Wound care (laceration and abrasion)



Decubitus evaluation and care (stages 2-4)



Diabetic foot syndrome



PRO version delivered with organs



Hair care (washing, combing, drying)



Wound management (Stomie and surgical staple)



Simplified assembly

### > PRACTISE BASIC AND ADVANCED NURSING, CLINICAL AND EMERGENCY SKILLS!

The BASIC and PRO versions of the patient care manikins offer different training features:

	Patient Care Manikin BASIC	Patient Care Manikin PRO
	M-1018817	M-1018816
Training features:		
Personal hygiene, cleaning (removable partial prothesis)	1	1
Lifting, mobilisation	1	1
Bandaging and wound dressing (including stump dressing)	1	1
Irrigations (eyes, ears)	1	1
Injections (intramuscular and subcutaneous)	1	1
Oxygen treatment, artificial respiration	1	1
Tracheotomy care	~	√
Decubitus Evaluation and Care	1	1
Diabetic Foot Syndrome Care	1	1
Catheterization (male and female)		1
Enema administration		√
Naso-gastric lavage and gavage		1
Ostomy care (colostomy)		~
Irrigation (intestines, bladder, vagina)		1

# All parts also fit older models. More available online at 3bscientific.com

BASIC and PRO Replacement Parts	Item No.
Spare amputation stump, right	M-1020714
Spare head, complete	M-1018812
Set of 6 spare injection pads	M-1012754
Spare sealing cap for tracheotomy	M-1020715
Spare chest skin	M-1020707
Spare dental partial prosthesis	M-1020705
Spare forearm with hand	 M-1020711 M-1020709
Spare thigh	 M-1020712 M-1018813
Spare upper arm	 M-1020710 M-1020708
Spare lower leg	 M-1020713 M-1018814
PRO Replacement Parts	Item No.
Spare female genital insert	M-1020723
Spare male genital insert	M-1020724
Spare lung	M-1020718
Spare heart	M-1020719
Spare bladder	M-1020722
Spare section of intestine	M-1020721
Spare stomach	M-1020720

## KERi<sup>™</sup> and GERi<sup>™</sup> Nursing Skill Manikins

These manikins feature a life-like range of motion and can be positioned just like a real patient. KERi<sup>™</sup> is the age neutral version, while GERi<sup>™</sup> simulates an elderly patient with skin wrinkles and folds.

#### Both manikins share the following features:

- Lightweight (13 kg) full-size adult at 146 cm tall
- Female appearance, easily converts to male with removal of wig and attachment of male genitals
- Allow practice of over 35 patient care procedures

#### Visual inspection features:

- Decubitus Sacral Ulcer Stage 1
- Dilated and Constricted Pupil Comparison
- Cancerous Mole Comparison
- Reddened Skin Folds

Please see the feature differentiation on the next page.

KERi<sup>™</sup>

Basic KERi™	M-1020187
Complete KERi <sup>™</sup>	M-1013742
Advanced KERi™	M-1017567
Auscultation KERi	M-1020147

Basic GERi™	M-1005620
Complete GERi <sup>™</sup>	M-1005597
Advanced GERi <sup>™</sup>	M-1005606
Auscultation GERi™	M-1020146

#### Upgrade Kits:

#### Nursing Care Wound Kit

This wound kit offers a highly detailed variety of disease, pressure and surgically induced wounds. M-1017984

#### Life/form<sup>®</sup> Optional Pressure Ulcer Foot

Great for reinforcing that pressure ulcers are more likely to appear on various pressure points. **M-1017985** 



	Basic: KERi <sup>™</sup> M-1020187 GERi <sup>™</sup> M-1005620	Complete: KERi <sup>™</sup> M-1013742 GERi <sup>™</sup> M-1005597	Advanced: KERi <sup>™</sup> M-1017567 GERi <sup>™</sup> M-1005606	Auscultation: KERi <sup>™</sup> M-1020147 GERi <sup>™</sup> M-1020146
Skin inspection and care	$\checkmark$	$\checkmark$	√	1
Bandaging	$\checkmark$	$\checkmark$	√	1
Washing	$\checkmark$	$\checkmark$	$\checkmark$	1
Denture Placement	√	√	√	1
Hearing aid placement	$\checkmark$	$\checkmark$	$\checkmark$	1
Ear and eye irrigation	$\checkmark$	$\checkmark$	$\checkmark$	1
Ostomy and tracheostomy care	$\checkmark$	√	$\checkmark$	1
Positioning and transfer techniques	$\checkmark$	$\checkmark$	✓	1
Pericare	$\checkmark$	√	√	1
Intramascular injections	$\checkmark$	$\checkmark$	✓	1
Gastrostomy		$\checkmark$	√	1
Pap smears and douching		$\checkmark$	$\checkmark$	1
Enema administration		$\checkmark$	$\checkmark$	1
Prostate exam		✓	✓	1
Urinary catheterisation		$\checkmark$	√	1
Nasogastric tube placement		$\checkmark$	✓	1
IV insertion			√	1
Blood pressure monitoring			✓	1
Rocognition of heart sounds				1
Recognition of lung sounds				1



I.M. injections



Cancerous mole comparison



Reddened

skin folds

Options and Consumables	ltem No.
Replacement Head GERi	M-1013811
Replacement Head KERi	M-1019743
GERi <sup>°</sup> Female Wig	M-1013355
Constricted Pupil	M-1019723
Dilated Pupil	M-1019722
Hearing Aid	M-1019745
Upper Arm	M-1019728
Elbow	M-1019729
Forearm	M-1019730
Right Hand	M-1005669
Left Hand	M-1005668
Complete Right Arm	M-1016665
Complete Left Arm	M-1012736
Right IV Arm	M-1017827
Left Blood Pressure Arm	M-1019741

Options and Consumables	Item No.
Complete Right Leg	M-1019746
Complete Left Leg	M-1019747
Optional Edema Foot	M-1019744
Ankle	M-1019736
KERi <sup>®</sup> Upper Torso	M-1019737
GERi <sup>®</sup> Upper Torso	M-1005677
Male Genitalia	M-1005674
Female Genitalia	M-1005673
IV Skin & Vein Replacement Kit	M-1019742
Blood Reservoir	M-1019748
Enema Reservoir	M-1019749
Stoma Set	M-1019627
Speaker System	M-1019721 (110V) M-1020046 (220V)
Hard Carrying Case	M-1019725



#### Clinical Chloe<sup>™</sup> Patient Care Simulator with Sculpted Stomas

# The basic version for nursing care training allows you to practise:

- General Patient Care
- Injections (IM injection sites in arm, thighs, and buttock)
- Breast Palpation
- Airway management
- GYN Training (vaginal douching and pap smear exercises)
- M-1017542

#### Clinical Chloe<sup>™</sup> Advanced Patient Care Simulator In addition to the basic version, the advanced version features:

- CPR monitored by included OMNI® Controller
- Injections (advanced training arm and hand for IV, IM, and subcutaneous techniques)

Carrying bag and instruction manual included. Detachable and removable internal tanks, latch provides secure seal between ostomies and internal tanks. **M-1017574** 



 Impacts vision, hearing, grip strength and physical abilities.

#### Code Blue® Multipurpose Patient Care and BLS Manikin Simulator with Non-intubatable Disposable Airway.

#### This adult manikin features training of:

- Oral and denture hygiene
- IM (arm and buttock), IV and subcutaneous injection
- Ostomy care
- Naso-gastric lavage and gavage
- Male and female catheterisation
- Enema administration
- Vaginal douching and pap smear exercises
- Palpable prostate and breast
- Amputation stump
- 2 decubitus ulcers
- Eyes open and close (one pupil is dilated)
- Regular or counter pulsation CPR
- Mouth to mouth resuscitation
- Palpable carotid pulse

Omni<sup>™</sup> Code Blue<sup>®</sup> Pack included. Also supplied with ten disposable one-piece airways, neck brace, and carrying bag. M-1005782



#### **New Aged Simulation Suit**

In order to better understand your patients, walk a mile in their shoes. There is no better way to create empathy than to actually experience the physical challenges aging patients face on a daily basis.

#### Easy to put on and adjust!

The body suit is worn like an overall, the different restrictions can easily be adjusted to change the range of motion, and even simulate hemiparesis.

Size S	M-1020111
Size M	M-1020112

#### Susie Simon<sup>®</sup> Patient Care Manikin with Ostomy

Full-size dual sex adult manikin with movable joints as well as soft fingers and toes for training of important basic nursing skills such as:

- Removable upper and lower dentures for oral hygiene
- Realistic eyes for opthalmic exercises
- Ear canal or otic drops and irrigation
- Mouth, nose, and tracheotomy openings for nasogastric lavage and gavage
- Interchangeable genitalia
- Intramuscular injection site in right and left upper arm and buttock
- Enema administration capability
- Realistic urethral passage and bladder for catheterisation exercises
- Vaginal douching and pap smear exercises
- Stomas of a transverse colostomy, ileostomy, and suprapubic stoma
- Bathing and bandaging activity 162.6 x 45.7 cm; 16.5 kg

#### M-1005785

Consumables and Optional Equipment	Item No.	
Arm Injection Site	M-1005786	
Buttock Injection Site	M-1005787	
lleostomy	M-1012749	
Ulcerated Foot	M-1019238	
Carrying Bag	M-1005788	



#### Simple Simon<sup>®</sup> and Simple Susie<sup>®</sup>

The full-size adult manikins with movable joints and soft fingers and toes are ideal for training of important basic nursing skills such as:

- Hair care and surgical draping
- Bathing and bandaging
- Oral and dental hygiene (movable jaw with removable dentures)
- Ophthalmic care
- Ear irrigation and application of otic drops
- IM injection (arm and buttock)

The legs can be removed for compact storage. Supplied with neck brace.

Simple Susie®	M-1005803
Simple Simon <sup>®</sup> (not shown)	M-1005807

#### **Enema Administration Simulator**

Each student can realistically practise administering an enema using this life-like model. The upper buttock is flexible so that the trainee must raise the buttock in order to locate and make insertion into the anus. The simulator features a one quart fluid reservoir that is adequate for most demonstration and practice purposes. For large groups, a drain tube is provided so that the fluid can be drained directly into a large container or sink for continuous use. Includes a hard carrying case, enema administration set, and teaching guide.

Consumables	Item No.
Highly-concentrated Lubricant	M-1005629
Fluid Administration Set	M-1013186
REN Cleaner	M-1005776



#### Multipurpose Patient/Emergency Pediatric Simulator

This manikin of a 5-year old is ideal for training pediatric patient and nursing care a well as CPR. Its realistic face skin and moulded hair, the articulating joints, and realistic hands and feet make for an impressive training experience.

#### Training Features:

- Ophthalmic procedures
- Realistic chest cavity, with realistic internal organs for unparalleled CPR performance
- Bathing and bandaging activity
- Place nasal and oral gastric tubes
- Lavage/gavage
- G-tube placement
- Stomas for ileostomy, colostomy, and suprapubic exercises
- Male and female catheterisation
- Enema administration
- Placement of rectal suppositories
- IM injection sites in deltoid and upper thigh

#### **Emergency Care Features:**

- Oral, nasal, and digital intubation
- Place OP/NP tubes
- Right/left mainstem bronchi
- Suctioning
- BVM
- Chest compression/rise
- Intraosseous infusion
- IV arm with variable, palpable pulses

Supplied with T-shirt and shorts, soft carrying bag, and instruction manual.

#### M-1017564







#### Mike & Michelle® Child Patient Care Manikin

This manikin simulates a five-year old child with rotatable arms and legs (jointed elbows and knees) and articulating head. Supplied with T-Shirt, shorts, neck brace and carrying bag. It allows training of basic and advanced pediatric patient care procedures such as:

- Bathing and bandaging
- Ophthalmic exercises
- Oral and dental hygiene (articulating jaw with teeth and tongue)
- Tube feeding and gastric suction
- IM injection (upper thigh and deltoid)
- Tracheotomy care
- Male and female catheterisation
- Enema administration

#### M-1005808

#### Optional Part: IV Injection Arm M-1005795 Intraosseous Leg M-1018459

89 x 38 x 22.5 cm M-1005804 £716.00

Mike & Michelle® Infant Patient Care Manikin

Features the same training possibilities as the Mike & Michelle®

Child Patient Care Manikin, but simulating a 1-year old infant.

Supplied with T-shirt, shorts, neck brace and carrying bag.





#### 3B Scientific® Pediatric Nurse Training Baby, Newborn

Practise paediatric nursing care on a realistic newborn manikin. This advanced and incredibly realistic manikin with male and female features includes internal organs (heart, lung, intestine system, stomach, and bladder), interchangeable genital organs and fully movable head, arms and legs. It allows the trainees to easily practise **basic care** like washing, dressing and umbilical care, as well as the following **pediatric nursing care** options:

- Suctioning of Nasopharynx
- Tube Insertion
- Insertion and Care of a Tracheal Cannula
- Intramuscular and Subcutaneous Injections
- Obtaining Urine Specimens with a Urine Collection Bag
- Bladder Catheterization, male and female
- Taking a Rectal Temperature
- Enema insertion

52 cm; 2.3 kg

M-1000505

Consumables: Injection Pads for Thigh and Buttocks M-1020735





#### Life/form® Micro-Preemie Simulator

This 25-week ELBW (Extremely Low Birth Weight) neonate is the smallest and most realistic pre-term infant available. Delivery of an ELBW infant remains to be an extreme medical emergency, requiring specialized techniques that can be trained with this outstandingly realistic simulator. The baby can be ventilated and will accept a functional ET tube, NG tube, umbilical catheter, and IV line, as well as a non-functional chest tube and stomas.

Delivered with: diaper, hat (colour may vary), umbilicus, omphalocele, neural tube defect, bilateral chest block, unilateral chest block, airway, 3 cc syringe, 25-gauge butterfly needle, lubricant, blood powder, and bulb and tube assembly.



#### Life/form<sup>®</sup> Special Needs Infant

This newborn-size infant allows health care facilities and medical staff to teach procedures for special needs infants. The simulator was developed for a wide range of training, including for beginning nursing students. Procedures that can be practised include:

- Tracheostomy care (lavage and suctioning)
- Gastrostomy cares (lavage and gavage)
- Nasogastric care (placement, lavage, gavage, and suctioning)
- Urethra catheterisation (insertion, placement, and care)
- Colostomy stoma (basic care purposes only)

Female	,	M-1018099
Male		M-1018198







#### Susie® and Simon® Advanced Newborn Patient Care Baby

This manikin simulates a 0-8 week old newborn with rotatable soft arms and legs. It allows training of basic and advanced pediatric patient care procedures such as:

- Bathing and bandaging
- Tube feeding and gastric suction (movable tongue)
- Heel stick and finger prick practice
- Male and female catheterisation
- Enema administration

Supplied with T-Shirt, diaper and carrying bag.

M-1005802

#### **Optional Part:**

#### Intraosseous Leg

The Intraosseous leg simulates that of a newborn. A replaceable tibial bone lies under a smooth outer skin. It includes anatomic landmarks for teaching intraosseous access and infusion. A femoral vein/artery pair is included.

M-1018460





#### Male Baby-Care-Model

Very useful for pre-birth courses! This true-to-life model of a newborn male baby is suitable for a variety of different training procedures:

- Changing the baby's nappy
- Feeding and administration of medicine
- Obtaining urine specimens
- Dressing and undressing
- Picking up, carrying, and positioning of a baby (head tilts backwards if the baby is incorrectly held)
- Washing, cleaning of mouth, eyes, ear and nose
- Taking a rectal temperature
- Examination of fontanelles and testicles

52 cm; 2.3 kg **M-1000506** 



#### Life/form<sup>®</sup> Infant Ostomy Trainer

Created to educate caregivers and parents on how to give special care to an infant with a stoma. The anatomy of the colostomies were carefully reproduced to provide life-like appearance and functions. A soft, pliable material is used for the stomas in order to achieve the most realistic tactile sensation. The syringes included are used to inject simulated stool through ports to the colostomy sites. Consistency of the simulated stool can be thinned by adding water. **M-1013059** 



#### **3B Scientific® Decubitus Simulator**

With this realistic and affordable wound care trainer, nursing and medical students will be able to:

- Visualize and understand the differences in decubitus wounds
- Practice wound cleansing
- Practice bandaging techniques with multiples dressings methods
- Improve the classification, staging, and their wound assessment skills
  Measure wound length, depth, undermining, and tunnelling.

3B Scientific<sup>®</sup> Decubitus Trainer display the following pressure ulcers:

- Decubitus Stage I (greater trochanter): 6 x 3 cm
- Decubitus Stage II (buttocks): 7 x 6 cm
- Decubitus Stage III (buttocks): 6,5 x 7,5 cm
- Decubitus Stage IV (greater trochanter): 10 x 4.5 cm

The realistic texture and flexibility of the skin offer a realistic haptic and optic, and therefore promote effective training. Each wound has been colored exactly as seen on a real patient.

Delivered with carrying bag.

M-1019698



#### **3B Scientific® Diabetes Foot Treatment Trainer**

The after-effects of a diabetes mellitus can result in defects and pressure points in the foot area. In this skill trainer, a gangrenous alteration on the big toe of the right foot has already spread from the back of the foot to the metatarsal.

A mal perforans (trophic ulcer) is visible on the sole of the foot (plantar). A stage III pressure-ulcer is depicted in the heel area. A complete skin layer is lost and the subcutaneous tissue is damaged up to necrosis. This is recognisable by black coloration in the wound area.

M-1018815



#### **Ostomy Care Simulator**

Reproduction of an abdomen showing the anatomy of both a colostomy and ileostomy to provide life-like functions and appearance. Dilation of the stomas can be demonstrated and practised, along with application of postoperative and permanent ostomy bags. The colostomy can be irrigated. Drainage and excretion at the ileostomy (water) and colostomy (simulated stool) can be pumped by syringes. Delivered with simulated stool and carrying case.

45.5 x 45.5 x 30.5 cm; 11 kg **M-1005591** 

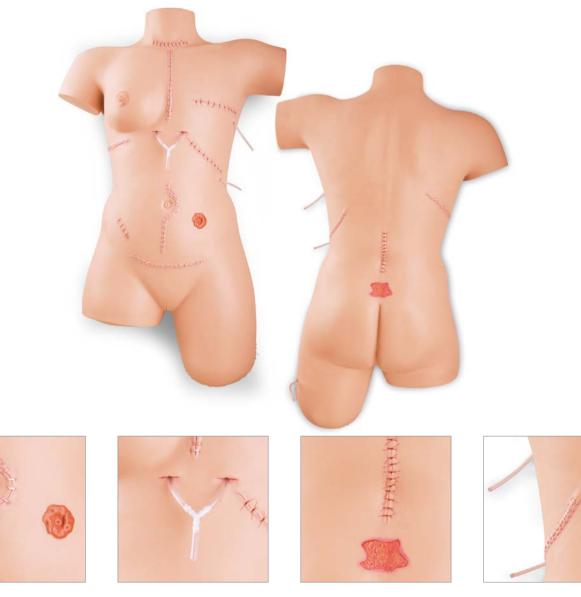


#### Ostomy Care Model

This BIOLIKE<sup>™</sup> life-size model contains four stomas that can be lubricated and dilated with an inserted finger. The model may be washed, taped, bandaged, and fitted with ostomy bags. Comes with lubricant, draping sheet, and carrying case. 33 x 46 cm M-1005570

# **WOUND CARE & BANDAGING**

## > REALISTIC PRACTICE OF WOUND CARE!



### >NEW!

#### **3B** Scientific<sup>®</sup> Trainer for Wound Care and Bandaging Techniques

Using this high quality simulator, students learn how to care correctly for their patients' wounds and can practice a wide range of dressing and bandaging techniques. The life-like skin reacts realistically to adhesives and bandages, so students can practice in conditions as close to reality as possible. Given the flexible structure of the material, students can practice putting on and changing bandages and dressings in realistic conditions.

The following 13 wounds and drain systems resulting from surgical procedures and injuries are represented realistically on the torso with already applied wound closures (staples and sutures):

- Wound after a thyroidectomy
- Wound after a sternotomy (with drain)
- Wound after a mastectomy (with drain)

- Wound after a spleenectomy (with drain)
- Wound after a thoracotomy (pneumonectomy)
- Wound after a median laparotomy (e.g. cystectomy)
- Wound after an appendectomy
- Wound after a Pfannenstiel incision (e.g. C-section or abdominal hysterectomy)
- Wound after a laminectomy
- Wound after a nephrectomy (side incision)
- Wound after an amputation (leg stump)
- Colostomy
- Decubitus (Stage II)
- Easy to clean and store, includes carrying bag.
- M-1020592



#### **Stump Bandaging Simulators**

Practise and demonstrate standard bandaging procedures as well as the attachment of prosthetic devices. Instruction booklet included.



#### **Upper Stump Bandaging Simulator**

The upper torso has two arms – one amputated above the elbow, the other above the wrist. Both arms are slightly extended to facilitate bandaging. M-1005680

Set of Upper and Lower Stump Bandaging Simulators Includes upper and lower stump. M-1005682

#### Lower Stump Bandaging Simulator

One leg is amputated below the knee, the other at mid-thigh. The torso is long enough to allow bandaging around the body over the uninvolved hip at the level of iliac crest. M-1005681



#### Life/form<sup>®</sup> First Aid Arm

Students will need to react just as in an actual emergency and select the appropriate method to control bleeding and treat the wound. Synthetic blood can be made to flow from either the cut on the forearm or from the severed thumb, or from both at the same time. The severed thumb allows training in proper care and handling of separated body members.

- Regulate rate of bleeding and create venous or arterial flow
- Blood returns to collection tray for reuse
- Pressure points function realistically at wrist and upper arm

Includes vinyl arm with wound, severed thumb, collection tray, arterial pulse bulb, venous supply bag, one quart of Life/form® blood, teaching guide, and hard carrying case.

Consumables	Item No.
Artificial Blood	M-1005611
Venous Blood	M-1005691
Fluid Supply Stand	M-1005692
Fluid Supply Bag	M-1005693



# **EPIDURAL & SPINAL INJECTION**



Train the localisation of the epidural space without ultrasound to administer epidural and spinal injections. You can easily adjust the trainer to simulate different pathologies. The training with realistic haptic feedback and correct anatomical landmarks is the basis for a successful preparation for real-life cases. Delivered fully assembled. All usual materials can be used, including disinfectant, plasters and wound dressing. Includes 1 LOR (Loss-of-Resistance) kit and 1 skin pad.  $45 \times 35 \times 24$  cm; 3 kg **M-1017891** 

Extremely realistic haptic feedback

Self-sealing material for repeated use

#### Training features:

- Realistic anatomical landmarks for assessing the correct insertion point
- Loss of resistance (LOR) syringe technique through realistic haptic feedback
- Hanging drop method: the negative pressure in the fluid filled spinal canal can easily be adjusted
- An epidural catheter can be inserted into the epidural space
- Spinal anaesthesia training with realistic resistance of the dura and arachnoid mater with or without a cannula

#### About the trainer:

- Developed in Germany in close co-operation with epidural anaesthesia specialists
- Simulates the anatomy of a standard patient (young adult between 20-30 years old)
- Intuitive to handle, continuously adjustable fluid pressure
- Easy to clean: filled with water (closed system) to simulate spinal fluid
- Sturdy construction, all parts are integrated and latched
- Can also be used in lateral position, suction cups ensure steady positioning on the table



Sturdy, non-slip construction, easy to set up





Continuously adjustable fluid pressure system on the backside

#### Low operating costs:

With the use of high-quality, hard-wearing materials, only a few parts need to be replaced periodically.

Consumables	Item No.
Replacement LOR Kit – Standard Patient	M-1017893
Replacement Skin	M-1017892
Carrying Bag (not included)	M-1018079

### > NEW!

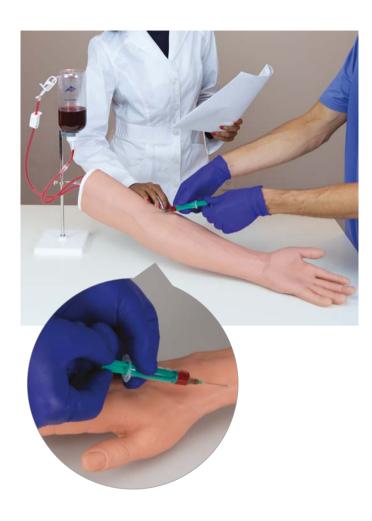
Optional Geriatric Module to complete your Epidural and Spinal skill trainer: Simulates the typical spine deformation of an elderly patient.



Geriatric LOR Kit set of 2 LOR inserts with 2 spinal tubes M-1020629

Single Geriatric Insert 1 LOR insert with 1 spinal tube (not shown) M-1020800

## I.V. INJECTION



#### SMASH Advanced Patient Training Arm, Latex-free

The training arm features an extremely durable design and is made of high quality material. The skin can be pierced in excess of 200 times with a 20 or 22 gauge needle. A micropump has been embedded within the shoulder to generate variable heart rates and pulse strengths for a realistic training experience.

#### The following training possibilities are featured:

- · Subcutaneous injection on volar forearm and lateral upper arm
- Intramuscular injection on upper arm
- Suture and incision on both upper arm and forearm
- · Haemodialysis on the forearm
- · IV and blood draw exercises, AV anastomosis, and placement of AV grafts
- · Incision and suturing exercise on multilayered inserts (skin,
- subcutaneous tissue, muscle, radial artery, and radial vein)
- · Surgical and arterial & venous stick exercises
- Collapsed or bulging vessels simulated by varying vessel palpability

#### M-1019645

Consumables	Item No.
Replacement Veins	M-1013385
Replacement Blood	M-1013386

#### 3B Scientific® I.V. Injection Arm

This injection arm made of 3B Scientific® SKIN/ike™ silicone allows realistic, hands-on training to develop competence in medical staff. The material used is of the highest quality, stain resistant and easy-to-clean. Changing the skin and tubing system is easy and only takes a few minutes.

#### The simulator is ideal for practicing:

- Intravenous injections
- Correct puncture of peripheral veins for blood sampling (basilic vein, cephalic vein, median cubital vein, dorsal venous rete of hand)
- · Positioning of a butterfly catheter

Delivered with stand, 250 ml artificial blood concentrate, 2 replacement tubing systems, infusion bottle, syringe and deluxe storage carton. 90 x 40 x 46 cm; 2,5 kg 8

Consumables	Item No.
Spare Tube Systems, 3 items	M-1021427
Spare Skin	M-1021426
Artificial Blood Concentrate, 250ml	M-1021251
Update kit infusion system	M-1021421

#### Life/form<sup>®</sup> Adult Sternal Intraosseous Infusion Simulator

Designed to demonstrate, simulate, and prepare all levels of health care professionals for use of the sternal intraosseous approach. Incredible realism and accurate landmarks will allow students to simulate this new procedure with skill, confidence, and accuracy. This procedure is a time saving and simple



alternative to conventional IV infusion. The simulator uses a replaceable bone that is designed to be rotated and punctured several times, extending the life of the simulator. The sternum may be filled with simulated blood to better visualise true flashback.

Comes with 10 replaceable simulated bones, syringe with tubing, blood mixture and a hard carrying case.

49.5 x 45.7 x 26.7 cm M-1017947





#### Injection Arm

This right arm combines all features required for I.V., I.M. and subcutaneous injection and infusion training as well as blood collection exercises:

- I.V. injection in subtle venous network of the arm and hand: cephalic, basilic, antecubital, radial and ulnar veins. A pressure bulb increase or decrease enables venous pressure
- I.M. injection in deltoid area
- Subcutaneous injection on the volar side of the forearm and the lateral side of the arm

Supplied with artificial blood, blood dispensing bag, funnel, talcum powder, replacement skin and veins, base and carrying bag. 76 x 15 x 15 cm

### M-1005809

Consumables	Item No.
Replacement Veins	M-1013385
Replacement Blood	M-1013386



#### Life/form<sup>®</sup> Venatech IV Trainer

This I.V. trainer is easily attached to a person's arm so the student can practise venipuncture techniques without the risks associated with puncturing living tissue. Includes the three main veins used in phlebotomy in correct anatomical position. The trainer also helps students learn basic communication skills such as explaining the procedure to the patient and asking them to close and release their fist. **M-1017966** 



#### **Geriatric IV Arm**

Developed from a live cast, this arm is unique to the industry. Its properties include veins that roll away or disappear as you attempt to catheterise the vessel and the specially developed skin is exceptionally thin. If your students work with the aged, this adjunct to your teaching lab will enable them to better serve this group as they pursue their careers. 91 x 36 x 23 cm; 10 kg **M-1005777** 



#### Intravenous Training Arm

This training arm features a prominent venous network with simulated cephalic, basilic, antecubital, radial, and ulnar veins.

#### The following can be trained:

- Simulation of infusion technique
- Blood collection exercises with simulated blood
- Administration of medication by intravenous bolus
- Simulation of clenched fist or tourniquet position
- Simulation of collapsed veins

A realistic pop appears as the needle enters the vein. Manufactured with resealing veins and outer skin for repeated usage.

Delivery content includes soft carrying bag and set-up kit (simulated blood concentrate, pressure bulb, blood dispensing bag, spare arm skin, funnel, and talcum powder).

#### M-1018755

#### Life/form® Portable I.V. Hand and Arm Trainer

The economical Life/form<sup>®</sup> Portable I.V. Trainer combines realism and lightweight convenience in a single device. Constructed of soft material with life-like veins that are visible and palpable. Venipuncture can be practised at any of the common sites (antecubital fossa, along the forearm, the back of the hand, and thumb) with the following features: • Realistically rolls as you palpate the veins

- Characteristic pop can be felt as the needle penetrates the vein
- Realistic flashback can be observed

Ideal for teaching venipuncture techniques including starting IVs and introducing over the needle IV catheters. Under normal use, hundreds of injections may be performed. The storage box can be converted into a workstation.

Includes: 2 IV bags, packet of blood powder, fluid supply stand, 2 pinch clamps, 3 cc syringe, 12 cc syringe, 12 gauge needle, a winged infusion set, and a plastic clamshell case for storage.

#### I.V. Hand Light Skin M-1017958 Dark Skin M-1017959

I.V. Arm Light Skin M-1017960 Dark Skin M-1017961

I.V. Arm & Hand Trainer Light Skin M-1013746





#### **I.V. Injection Hand**

An incredibly realistic hand with extreme attention to detail, right down to the fingerprints. Students have the opportunity to not only practise injection but to develop important manipulation skills provided by the flexion of the wrist. Under normal use hundreds of injections can be performed before skin or veins need replacement.

- Includes injectable metacarpal, digital and thumb veins on dorsal surface
- · Soft, flexible fingers are separately molded
- Flexible wrist
- Skin rolls when veins are palpated
- · Perform hundreds of injections before replacing vein and skins

<ul> <li>Supplied in</li> </ul>	storage box
Light Skin	M-1017963
Dark Skin	M-1017964

Consumables	Item No.
Veins for I.V. Injection Hand	M-1005665
Advanced IV Hand Replacement Skin and Veins – White	M-1005667
Venous Blood (1 litre)	M-1005611
Fluid Supply Bag	M-1005693
Fluid Supply Stand	M-1005692
REN Cleaner	M-1005776



#### Injection Training Hand

The back of the hand is the most common site for injection training. With this model you can teach the common procedure for IV drips. Comes with blood powder. **M-1017962** 

## An economic and easy to transport model to train LV, injection, Made of

I.V. Training Hand

model to train I.V. injection. Made of durable material for repeated use.

#### Features:

- Palpable life-like veins that roll-over
- Suitable for blood sampling or fluid injection
- Supplied with carrying tray and artificial blood

35 x 13 x 5 cm; 0.8 kg

#### M-1005754

Consumables	Item No.
Hand Skin	M-1005755
Arm and Hand Vein Set	M-1005756
Reservoir Blood Bag	M-1005757

## > The perfect volunteers to practice I.M. injections

#### 3B Scientific<sup>®</sup> I.M. Injection Simulators

These high quality simulators are the ideal way to teach proper I.M. injection techniques. Strap it onto the upper leg, upper right arm or the buttocks to locate all necessary intramuscular injection sites. Operates on AA batteries.

- Both audio and visual feedback
- Use for training and performance evaluation
- Includes all important anatomical palpable landmarks
- Life-like silicone skin is extremely durable, can quickly be exchanged
- Robust and easy to clean

A. Upper Arm M-1009840 B. Upper Leg M-1000511 C. Buttock M-1000514



с

в

Intramuscular injection can be practiced realistically without a real patient – with both audio and visual feedback!

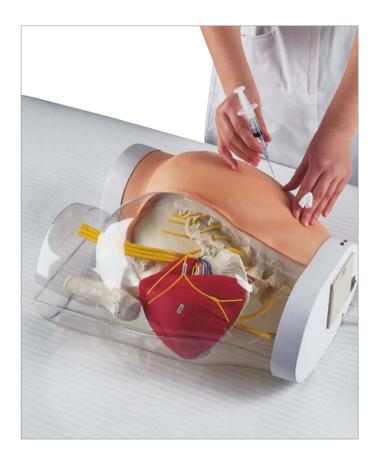
#### I.M. Injection Pad

A simple trainer that simulates muscle tissue for hands-on training.

- Injection made to a depth of 50 mmLife-like skin allows multiple
- Une-like skin allows multiple punctures
  Will absorb fluid
- M-1005190

#### 3B Scientific<sup>®</sup> I.M. Injection Simulator

Basic economical version for practising I.M. injections, perfect for clinical injection training in large class settings. **M-1010008** 



#### Two-in-One I.M. Injection Model of Buttock

This unique model of a human buttock has a special two-in-one function with audio-visual feedback:

ction s

- 1. Study the anatomy on the right hand side (bones, ilium crista, greater trochanter, m. gluteus medius, nerves and veins) through the transparent outer structure.
- 2. Transfer this knowledge about the position of nerves, veins etc. to the left hand side to find the correct insertion point and practise I.M. injections with fluid (water).

Correct injections are confirmed by a green light, incorrect by a red light and a buzzer.

38 x 35 x 22 cm; 5 kg **M-1005394** 



Muscular structure for realistic injection training

#### I.M. Injection Simulator

The simulator offers both visual and tactile learning for three types of intramuscular injections.

- Identification of proper injection sites and visualisation of underlying structures
- Practise of dorsogluteal, ventrogluteal, and vastus lateralis injections

Comes complete with teaching guide, supply of syringes, and hard carrying case.  $56 \times 24 \times 40.5$  cm; 8.5 kg

M-1005586

Consumables	Item No.
Replacement Muscle	M-1019801
REN Cleaner	M-1005776



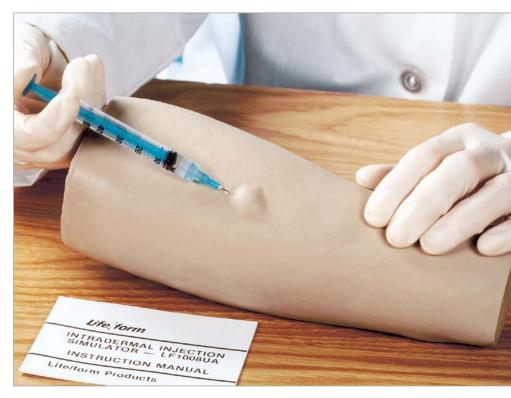
#### Life/form<sup>®</sup> Intradermal Injection Simulator Practise intradermal injections safely and conveniently!

- Life/form<sup>®</sup> vinyl skin ensures a realistic training experience
- Features eight sites for practising intracutaneous injections
- Natural cast from wrist to just below elbow

• Skin has realistic feel and appearance Includes arm section with eight injection sites, sealant, syringe, teaching guide, and storage box.

33 x 28 x 13 cm; 0.9 kg **M-1005628** 

Consumables	Item No.
Liquid Skin Repair	M-1013686
REN Cleaner	M-1005776



## VENIPUNCTURE



#### Two-Vein & Four-Vein Venipuncture Training Aids™

Your patients don't have one size of veins and these models were specifically designed to make accessing more challenging, as this is how technique and confidence are improved. Now made with latex-free Dermalike<sup>™</sup> with 50% less needle drag when accessing the underlying veins and improved tear resistance to permit a greater number of needle sticks.

#### **Two-Vein Option**

Two barely discernable blue veins of different inside diameters, positioned at the same depth in a semi-transparent, soft tissue-like material.

Light Skin M-1017969 Dark Skin M-1017970

#### Four-Vein Option

Four barely discernable blue veins in three different sizes – with a fourth vein more deeply placed.

Light Skin M-1017971 Dark Skin M-1017972







#### **Advanced Venipuncture and Injection Arm**

This revolutionary training arm provides complete venous access for IV therapy and phlebotomy, plus sites for intramuscular and intradermal injections. An extensive 8-line vascular system allows students to practise venipuncture at all primary and secondary locations, including starting IVs and introducing over the needle IV catheters.

- Realistic skin texture with wrinkles, pores, and visible fingerprints
- Soft and pliable for easy sewing, sutures will not pull out when tightened

• Supplied with three wounds that can be sutured repeatedly Conservatively, hundreds of injections may be performed and over one hundred cuts can be made on the trainer before replacement is needed. Delivered with artificial blood, 3cc syringe, 12 cc syringe, needle, two fluid bags, instruction manual and carrying case.

Light Skin M-1005678 Dark Skin M-1005679



#### Arterial Puncture Arm

This easy to use training aid is ideal for training and demonstration of proper arterial blood drawing techniques and for monitoring blood gases.

• Puncture locations can be identified

Life-like backflow of blood

Delivered with 2 syringes and tubules, artificial arterial blood, 2 replacement arterial sections and carrying case.

71 x 13 x 33 cm **M-1005598** 



#### Advanced Four-Vein Venipuncture Training Aid

In addition to the pop that is felt with the regular models as the needle enters the vein, the advanced version offers a realistic flashback of simulated blood, confirming the proper needle placement. The model permits the injection of fluids and withdrawal of simulated blood. Featuring four barely discernable blue veins in 3 different sizes – with the fourth vein deeply placed in a semi-transparent, tissue-like material. Light Skin M-1017967

Dark Skin M-1017968

## **BLOOD PRESSURE**

#### Deluxe Blood Pressure Arm with Speaker

This life-like simulator allows the presetting of values for both systolic and diastolic pressures. The instructor can unfailingly know whether the student has performed the procedure accurately. All electronically generated sounds are digitally recorded.

The five Korotkoff phases can audibly be discerned

• Can easily be calibrated for use with any sphygmomanometer Delivery content includes the Life/form® Arm Replica with embedded speaker, sphygmomanometer, electronic control unit, instruction booklet, and hard carrying case. Does not include a stethoscope.

#### 115 V M-1005622 220 V M-1005623

Options	Item No.
Amplifier/Speaker System 110 V	M-1019721
Amplifier/Speaker System 220 V	M-1020046
Electronic Control Unit	M-1019718

#### Blood Pressure Training System with Omni®

The Blood Pressure Training System includes a full-size adult left arm that may also be attached to the Code Blue® I Multipurpose Patient Care and BLS Manikin (M-1005782) and Susie Simon® Patient Care Simulator with Ostomy (M-1005785). It is a versatile training tool developed to assist health professionals teach the processes and skills required to perform blood pressure auscultation procedures and techniques.

- Systolic and diastolic pressures, auscultation gap and pulse rate are adjustable
- Cuff pressure can be seen on a display
- International power supply 100 to 240 VAC. Comes with one Omni<sup>®</sup> controller, soft carrying bag and instruction manual.

M-1018870

# **CENTRAL VENOUS CATHETERIZATION**

#### Chester Chest<sup>™</sup> with New Advanced Arm

The new, more advanced arm can also be ordered separately to upgrade your Chester Chest<sup>™</sup>. This simulator makes it possible to learn how to use the following long term vascular accesses perfectly:

- Implanted Port
- Central Venous Catheter (CVC)
- Peripherally Inserted Central Catheter (PICC)

#### M-1009801

Consumables	Item No.
Advanced Arm for Chester Chest <sup>™</sup>	M-1005840
Replacement Skin	M-1005841
Reservoir for Arm	M-1018084
Practice Port (IVAD)	M-1013202
Simulated Blood for Chest	M-1018085
Simulated Blood for Arm	M-1018084
Soft Carrying Case	M-1005839





#### Peter PICC Lines Simulator

It has become critical in controlling costs to ensure that the competency of all IV staff is assessed, maintained, demonstrated, and improved continually. Vascular access simulators are acknowledged as the most efficient way to teach staff and assess competency. Validate and train the knowledge and skills needed for Peripherally Inserted Central Catheter (PICC) lines with this simulator:

- Model presented in supine position with arm at 90-degree angle to body
- Movable chin simulates occlusion of jugular
- Anatomically correct cephalic, basilic, and median basilic veins, jugular, subclavian, and superior vena cava
- Palpable ribs allow measurement of proper catheter length externally
- Replaceable arm skin allows visualisation of veins
- Standard IV catheter placement
- Distal tip of catheter viewable in the superior vena cava
- Infusible veins allow realistic blood return in flashback chamber
- M-1017957



#### Deluxe Venous Access Device Model

Reproduction of a male chest mounted on a collapsible easel designed for training in vascular access device maintenance and dressing central venous catheters. Made of skinned, lightweight urethane foam, this model may be washed with soap and water or with antiseptics.

- Bilateral subclavian venous catheter connections
- Implanted PORT-A-CATH
- Both catheters may be flushed with water
- Accepts betadine and most other antiseptics
- Replaceable chest module

53 x 38 cm; 4.5 kg **M-1005563** 

Teach healthcare staff the care and use of two different types of catheters

#### Heart Catheterization Simulator

This simulator is ideal for practising central venous catheterization. All appropriate landmarks are palpable for realistic identification of insertion sites. Remove skin to reveal location of veins, arteries, and other landmarks. Artificial blood flows from needle to provide confirmation of proper needle location. Venous catheters can be snaked into place once the introducer is properly inserted.

Includes fluid supply bags, replaceable skin, tubing sealant, needles, one quart of blood, and teaching guide in a hard carry case. Fluid supply stand not included. 71 x 43 x 25 cm

#### M-1017260

Consumables	Item No.
Venous Blood (1 litre)	M-1005611
Replacement Skin and Vein Set	M-1005614
Lubricant Kit (pack of 6)	M-1017903
REN Cleaner	M-1005776



## ULTRASOUND



+

- 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> Ultrasound Trainer
- + Easy to use
- + Cost effective
- + Realistic echogenicity
- + Self-sealing for repeated use

### > THE ULTRASOUND TRAINING SET FOR

### MEDICAL SIMULATION

The material of the SONO*train*<sup>™</sup> trainer simulates the feel of real soft tissue for carrying out palpations and injections and shows realistic texture and echogenicity on ultrasound images. The SONO*train*<sup>™</sup> trainer is an excellent teaching tool for basic training and for improving dexterity and hand-eye coordination skills.

- Each individual unit is completely self-contained and can be used out of the box
- Units are stackable to save space
- Replacement blocks and all accessories are available separately
- The 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> series has been designed and developed in Germany





#### A. 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> Vein Model

Ultrasound block with three blood vessels with diameters of 4, 8 and 15 mm with adjustable fluid flow. Punctures and injections possible, and self-sealing injection channels.

M-1019637 Vein Replacement Block M-1019652

#### B. 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> Foreign Body Model

Ultrasound block with 6 different foreign bodies: Pellets, shard of glass, nail, projectile, loose chippings and splinters of wood can be clearly detected and recognized.

M-1019636 Foreign Body Replacement Block M-1019651

#### C. 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> Gallbladder Model

This Ultrasound block with three gallbladders, each with different pathologies: Gallstones (diameter: 8 and 10 mm), thickened gallbladder wall and biliary sludge deposit. The gallstones and the biliary sludge deposit move as the positioning of the block is changed like it would in a real patient. **M-1019638** 

Gallbladder Replacement Block M-1019653

#### D. 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> Breast Model with Cysts

Realistic reproduction of a breast made from ultrasound material with two cysts for realistic punctures and aspirations.

M-1019634

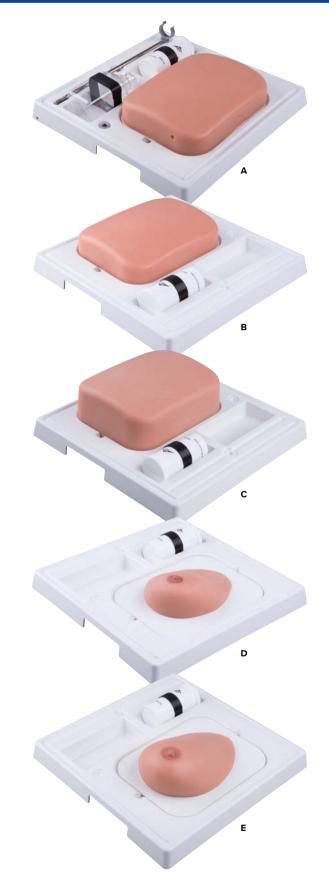
Breast with Cysts Replacement Block M-1019649

#### E. 3B Scientific<sup>®</sup> SONOtrain<sup>™</sup> Breast Model with Tumours

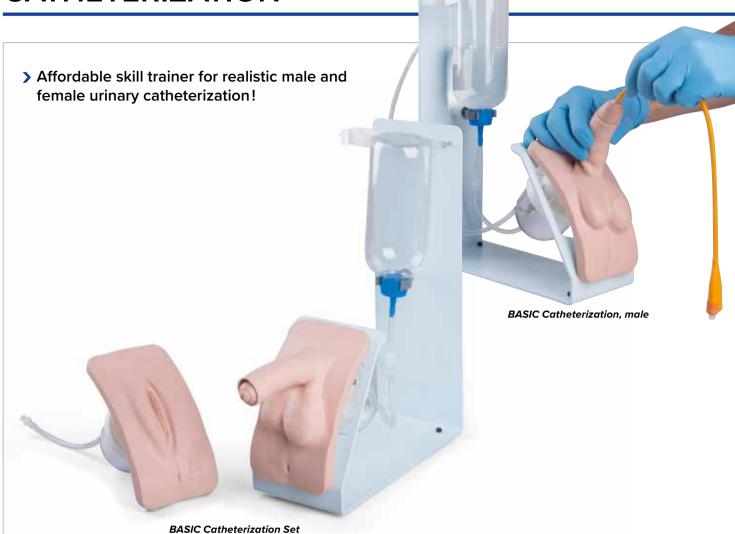
Realistic reproduction of a breast made from ultrasound material with three tumours for realistic punctures and biopsies. M-1019635

Breast Tumours Replacement Block M-1019650





## CATHETERIZATION



+

### **Catheterization Simulator**

- + Magnetic easy-to-change genital inserts
- + Easy to clean and maintain
- + Transparent bladder so you can observe the success of the procedure

#### For realistic training of male and female catheterization:

- Life-like resistance for a realistic training effect
- 3 levels of adjustable urethral narrowing
- ${\scriptstyle \bullet}$  Soft and movable foreskin and labia
- Liquid outflow if catheterization is successfully carried out

#### Immediate learning effects:

- Check the positioning of the catheter through the transparent bladder
- Fluid will flow if the catheterization has been carried out correctly
- In the PRO version, the abdominal wall can be removed so that the process can be directly observed

With the catheterization trainer, both male and female catheterization can be demonstrated, practised and assessed. The interchangeable genitalia are anatomically correct and made from realistic material. The foreskin and labia are soft and pliable, so that all necessary steps (like disinfecting the area) can be practised.

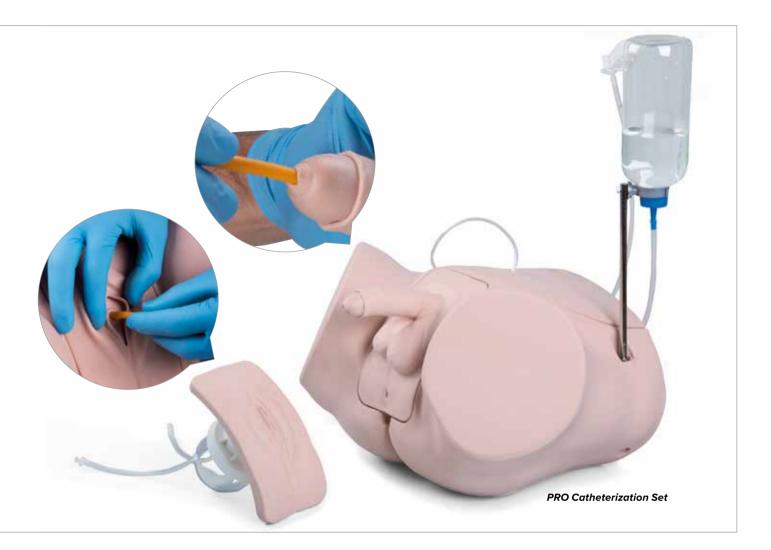
#### Adjust the levels of difficulty:

On the male insert, three different levels of urethral narrowing can be set. In the narrowest setting, catheterization is not possible, leading to the conclusion that a suprapubic catheter is needed. A suprapubic catheter is already in place on which correct care and cleaning can be practised.

#### Additional benefits:

- Non-slip feet
- Easy to clean, all parts can be taken apart easily
- Magnetic connectors for quick and easy set-up and dismantling





#### Available in these versions: 3B Scientific® BASIC Catheterization Set

- Stand with magnetic connections for genital inserts
- Male and female catheterization set with transparent bladder

<ul> <li>Bottle</li> </ul>	and tube	connectors.	

BASIC Catheterization Set
BASIC Catheterization, male
<b>BASIC</b> Catheterization, female

M-1020842
M-1020232
M-1020231

#### **3B Scientific® PRO Catheterization Set**

- Realistic lower abdominal model
- ${\mbox{\cdot}}$  Male and female catheterization set with transparent bladder
- Bottle and tube connectors
- Carrying case

PRO Catheterization Set	M-1020843
PRO Catheterization, male	M-1020230
PRO Catheterization, female	M-1020229

Replacement Parts	Item No.
Catheterization insert only, male	M-1020234
Catheterization insert only, female	M-1020233



The PRO version also contains a suprapubic catheter on which care and cleaning can be practiced.



The three different grades of urethral narrowing can be easily adjusted manually at any time.

#### **Transparent Catheter Trainers**

These transparent models allow viewing and practice of the proper insertion, position, and inflation of a balloon catheter. When practising catheter insertion, you will experience resistance and pressure as you would with an actual patient. Urine (water) actually flows when catheter is inserted properly. External genitalia is made of a special soft material to simulate real tissue. Comes with irrigator, irrigator stand, and case.

Female	M-1017242
Male	M-1017241

Male & Female Catheterization Trainers

THE CONTRACTOR

Practise male and female urinary catheterization on these newly designed anatomically correct models. Training is enhanced by a new material that has a realistic feel and flexibility. Both models utilise a 16 FR catheter and can be used to demonstrate balloon inflation procedures. A fluid reservoir allows for urine output upon successful completion of the insertion procedure. Instructors are able to teach sterile technique and insertion and removal of catheter, as well as practise preparing the patient for the procedure.

procedure	••
Set	M-1017251
Male	M-1017252
Female	M-1017253



#### A. Life/form<sup>®</sup> Female Cath-Ed II Simulator

Provides practise in female catheterization. Including most of the same features as the Male Cath-Ed I Simulator except the vulva has been moulded intact to facilitate identifying the urethra and proper spreading of the labia.

Comes with a hard carrying case, lubricant, catheters, 50 cc bulb, syringe, and instruction manual.

#### 38 x 36 x 20 cm **M-1017982**

#### 1017562

#### B. Life/form® Male Cath-Ed I Simulator

This unique Life/form® simulator combines visual and tactile learning sensations of catheterization in one compact unit. The mid-sagittal dissections allow detailed study of the internal anatomy and provide students an opportunity to follow what happens when they catheterize a patient. The removable plastic cover identifies key anatomical structures.

- Normal restrictions at the bulbous urethra and bladder sphincter can be detected and identified
- A Foley catheter can be demonstrated and seen through the viewing port

Includes a hard carrying case, lubricant, one catheter, 50 cc bulb, syringe, and instruction manual. Does not have a functional bladder. 38 x 36 x 46 cm

#### M-1017983

Consumables	Item No.
Foley Catheter Silicone (pack of 10)	M-1019720
Lubricant Kit (pack of 6)	M-1017903



#### **Catheterization Simulators**

Use these simulators to train the procedure of catheterization. Their realistic feel and resistance, and the high quality of the material make for a perfect teaching tool. For a better learning effect, artificial urine (water) will flow when the catheter enters the bladder.

Note: Improper use of a Foley can result in damage to the simulator, just as when using a Foley catheter with a real patient.

Male	M-1005587
Female	M-1005588

Consumables	Item No.
Lubricant Set (pack of 6)	M-1017903
Fluid Administration Set	M-1013186
Foley Urethral Catheters (pack of 10)	M-1019720
REN Cleaner	M-1005776

### > Anatomically realistic for both male and female paedriatic catheterization training

#### Life/form® Infant Male and Female Catheterization Trainer

The Infant Male and Female Catheterization Trainer is an inexpensive 2-in-1 trainer that provides realistic practise of this difficult skills procedure.

- Practise insertion, position, catheter balloon inflation and deflation
- Feel resistance and pressure as with a real patient
- Urine flows when catheter is in proper position
- Practise both male and female infant catheterization training
- Anatomically realistic with both male and female genitals
- Genitals made of soft, life-like material
- Replaceable male and female genitals
- · Lower half of infant only
- Design for use with a standard 8 French Slatex or silicone intermittent catheter

Includes: infant manikin, one male and one female genital insert, 2 oz. lubricant, infant Foley catheter, and instruction manual.

Consumables	Item No.
Lubricant Kit – 3 Pack	M-1009800
REN Cleaner	M-1005776



## **PROSTATE & VASECTOMY**

#### **Prostate Examination Simulator**

This prostate examination simulator consists of a male abdomen body and 4 different interchangeable prostate glands which can be inserted to allow realistic practise in diagnosis of prostate cancer by rectal examination.

- Stage A Gland: Benign, slightly enlarged, but otherwise normal prostate gland.
- Stage B Gland: A discrete, hard nodule is palpable in the upper right quadrant, simulating a beginning stage of carcinoma.
- Stage C Gland: The spread of carcinoma is demonstrated in this gland. The small nodule has increased in size and has become an external hard mass on the surface of the gland.
- Stage D Gland: This gland is totally replaced with carcinoma. The entire gland will feel hard and irregular.

Comes complete with four glands, hard carrying case, lubricant, cleaner, and teaching guide.

54.5 x 38 x 30.5 cm, 11 kg M-1005594

Consumables	Item No.
REN Cleaner	M-1005776
Lubricant Set (pack of 6)	M-1017903





#### **Advanced Patient Care Male Prostate Simulator**

The simulator features four interchangeable modules, each individually mounted on clear plastic cards for easy placement andremoval:

- 1. A moderately enlarged benign prostate
- 2. A prostate with two discreet nodules
- 3. A prostate with an easily palpable large mass
- 4. A prostate with malignant invasive cancer

Realistic anal opening permits insertion of a lubricated, gloved finger. Includes instruction manual and soft carrying bag.

M-1020127

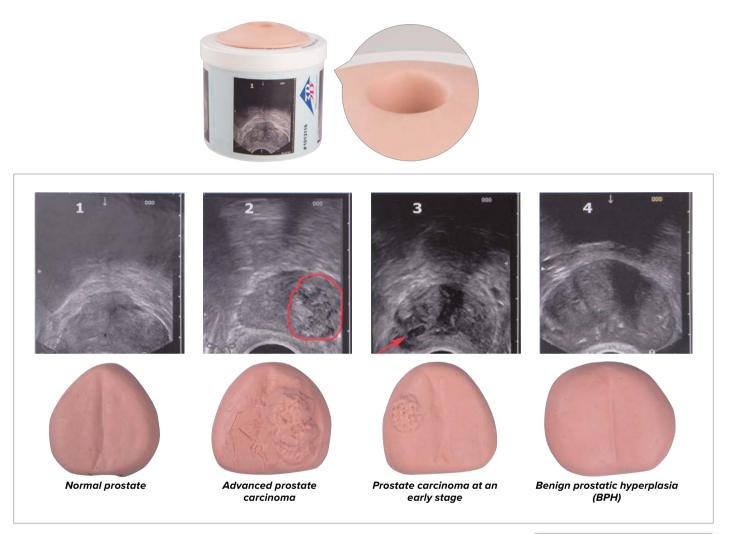


#### No Scalpel Vasectomy (NSV) Model

A compact simulator developed to assist in learning a new method of vas occlusion. To provide realism, the leg stumps are designed to get in the way of the student as the procedure is mastered. Includes two removable scrotal skins and two testicles, two long vas assemblies that can be advanced as needed for NSV exercises, and instructions for use. 30.5 x 30.5 x 32 cm, 2.25 kg M-1020196



### > NEW and affordable DRE simulator for clinical skill training!



#### 3B Scientific<sup>®</sup> Prostate Examination Trainer, 4 Stages in 1 Trainer

Demonstrate and practice digital rectal examinations (DRE) with this affordable skill trainer. The trainer includes 4 different prostates to train professional palpation methods (side position or bent forward) and diagnostic skills associated with rectal examinations:

- Normal prostate
- Advanced prostate carcinoma
- Prostate carcinoma at an early stage
- Benign prostatic hyperplasia (BPH)

The shape, position and consistency of the prostate can be assessed, allowing irregularities, induration and nodes on the otherwise smooth surface of the prostate to be felt. For reference and self-control, the trainer also includes the corresponding transrectal sonographic imaging (transrectal ultrasound, TRUS) for each stage. While in use, the prostate and the sonographic images are hidden and cannot be seen by the trainee. The compact shape of the DRE Trainer makes it easy to store and the perfect skill trainer for every medical simulation lab. **M-1013116** 



The Prostate Gland 50 x 67 cm, laminated M-1001566

## LAPAROSCOPY



#### Lap-X Series

Lap-X laparoscopic surgical simulators provide easily accessible minimally invasive surgery simulation training for medical professionals. They are designed for surgical residents, physicians and operating room assistants to train laparoscopic skills in medical schools, universities, hospitals and skills centres.

Lap-X models deliver simulation training for hand-eye coordination skills in various surgical specialties such as general surgery, gynecology, urology, pediatric surgery and gastrointestinal surgery, and offer the following advantages:

- Intuitive to use: software and hardware are self-explanatory and do not need third-party guidance
- · Use real surgical instruments to narrow the gap to reality
- Update new virtual reality exercises and modules free within license period
- Offer solutions for a wide range of healthcare professionals, from basic to advanced laparoscopic training

Excellent training aids to standardise, structure and complement hands-on skills training in surgical residency programs!



## > Lap-X II Expert enables highly realistic skill training for all minimally invasive disciplines!

#### Lap-X II Expert

Lap-X II Expert is the solution for highly realistic and sophisticated simulation of endosurgical interventions, providing realistic training for surgeons and surgical teams. The simulator offers an opportunity to learn and understand basic aspects of working with laparoscopic instruments and trocars as well as develop advanced tactile skills. It helps to maintain and consolidate already existing theoretical knowledge with regard to endosurgical interventions and technologies via a variety of different modules.

#### Training Features:

- Simulator for all minimally invasive disciplines, including but not limited to general surgery, gynecology, urology, gastro-intestinal surgery and pediatric surgery
- Offers an extensive training curriculum with increasing levels of difficulty within each module, allowing the learner to acquire basic laparoscopic skills to advanced laparoscopic procedure proficiency
- Uses unique haptic feedback technology with wireless extractable instruments and a laparoscope, which are interchangeable between three universal trocars
- Offers individual and team training possibilities as well as customisable training courses and real-life procedure videos

#### Laparoscopic training modules:

- Basic skills
- Suturing and knotting
- Salpingo oophorectomy
- Gynecology surgery
- Prophylactic oophorectomy
- Hysterectomy
- Cholecystectomy
- Sigmoid colon resection
- Appendectomy
- Hernioplasty
- Splenectomy
- Small bowel acute adhesive obstruction
- · Diagnosis of abdominal cavity

#### Delivery content:

- Lap-X Expert simulator with adjustable display and working height,
- comes with wheel cart for mobility
- 2 screens mounted on the simulator
- 2 extractable, wireless laparoscopic instrument imitators\*
- •1 extractable endovideocamera imitator\*
- ${\scriptstyle \bullet 1}$  footpedal with 2 switches for cauterisation and coagulation
- 1 software package
- 1 instrument holder
- Administrator mode

#### M-1020118

\* insertable through any trocar

#### Module examples:



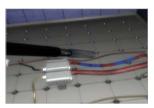
Appendectomy



**Bowel Surgery** 



Suturing and Knotting – Interrupted (Loop) Suture



Basic Skills – Endo Clip Applicator Handling

### HIGHLY ACCURATE MOTION DETECTION

#### Instrument tracking system

Instruments can be inserted and used simultaneously during endosurgical interventions. The simulator's tracking system has been developed in regards to this important feature.

#### Motion tracking of endosurgical instruments imitators

- Simultaneous
- Longitudinal
- Rotation

#### Endosurgical instruments

All endosurgical instruments required for different endosurgical intervention performance are featured in the simulator's software. You can choose from:

- Variety of forceps and scissors
- Clip appliers
- Dissectors
- Bipolar and monopolar instruments

#### Lap-X Hybrid

Lap-X Hybrid is a unique laparoscopic simulator that combines the functionality of a virtual reality trainer and a box trainer, providing an innovative and powerful tool for all minimally invasive surgeries.

Users can practise with virtual reality mode at different curriculum modules: basic, novice, intermediate and advance, as well as train with procedural modules such as appendectomy, cholecystectomy, nephrectomy and many others. The trainee can switch from virtual reality to box trainer mode anytime. As a box trainer, the Lap-X Hybrid has the possibility of metrics measurement and performance recording. All validated box exercises are compatible with the Lap-X Hybrid, providing the user with



Cholecystectomy

haptic feedback training. The instructor has the ability to pre-record the example exercises. Trainees can also record their own performance and submit it to the instructor for online assessment.

#### Training benefits:

- Using more than 40 different exercises divided into 6 modules with increasing difficulty
- Monitoring trainees' progress via online assessment
- Hybrid function: combining virtual reality and box training for better results
- Receiving instant feedback with values such as duration, path lengths or performance report

#### Virtual Reality:

Free software updates during licensed period

#### System specifications:

Two controllers ( $22 \times 15 \times 32$  cm, 1.6 kg each) HD camera, red light, footpedals Exercise platform ( $35 \times 30 \times 5$  cm)

#### Delivery content:

- · 2 controllers (left and right)
- •1 endovideocamera imitator
- 1 foot pedal with 3 switches for cauterisation, coagulation, zoom in, zoom out, change of camera angle and start of an exercise recording
- $\bullet$  Exercise platform (35 x 30 x 5 cm)
- 1 carrying case
- 1 software package
- Administrator mode

#### M-1020117

Lap-X Hybrid combines the functionality of a virtual reality trainer and a box trainer!

#### Simulator benefits:

- Ability to use simulator as a box trainer and as a virtual reality trainer
- · Exercises with increasing difficulty within the modules
- Instant feedback and scoring evaluation of different parameters
- Possibility to submit video recordings and scores to instructors via internet
- Possibility to review, approve and comment on trainee's video recording via provided website
- Possible to use animal organs

#### In the administrator mode, instructors can:

- Review scores
- Review curricula completion progress of all students
- Review user training information
- (i.e. total training hours)
- Customise a new curriculum
- Create an exam, a new box trainer exercise, record a standard performance and settle nominal scores for the exercise
- Export data and add E-learning URL
- Set mandatory training for learners

#### Lap-X Box

Lap-X Box is the basic version (a traditional box trainer) within the Lap-X simulator series and comes with the hardware needed to perform the following training:

- Moving objects bimanually from one instrument to the other
- Performing tasks under different camera angles via different endoscope insertion points
- Navigating with a 0°, 30° or 60° scope
- Mastering the fulcrum effect
- Completing tasks with one hand while keeping the instrument in the other hand steady

The hardware comes complete with the recording software package necessary to train various training skills. Includes an administration tool to monitor training progress of trainees: instructors can create different exercises and the students performance can be video recorded and evaluated with the following parameters: time, left path length, right path length.

#### Delivery content:

- 2 controllers (left and right)
- 1 foot pedal with 3 switches for cauterisation, coagulation, zoom in, zoom out, change of camera angle and start of an exercise recording
- •1 HD camera (1920x1080) with auto focus and low light support, powered by USB (2.0, 3.0)
- •1 tray unit to place different tasks and skill sets for training
- B. Braun Aesculap laparoscopic instruments (these instruments can be replaced by any 5 mm or 10 mm instruments)
- •1 carrying case (60 x 55 x 18cm)
- 1 software package
- Administrator mode

#### M-1020116

Skill building task set M-1019685

> The most affordable solution for basic laparoscopy skill training!

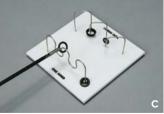


Hard carrying case for Lap-X Hybrid (M-1020117) and Lap-X Box (M-1020116)











Options to train hand-eye coordination	Item No.
A. Skill Set #1: Loops and wire	M-1019681
B. Skill Set #2: Pea on a Peg	M-1019682
C. Skill Set #3: Wire Chaser	M-1019683
D. Skill Set #4: Post and Sleeve	M-1019684
Complete Skill Set #1 – #4	M-1019685

# MINIMALLY INVASIVE TRAINING SYSTEMS

With removable

With attached

flip-up monitor

monitor

#### T5 Pelvic Box Series for Laparoscopic Skill Training

The large pelvic box is the most versatile system that is used from basic skill development to advanced procedure training. It is torso-like in size with 14 ports that are fitted with grommets designed

to hold an instrument or trocar.

The T5 Series is a complete portable system that does not require video tower equipment and is easy to set up.

#### Skill training:

- Basic laparoscopic skills
- Laparoscopic suturing
- Advanced laparoscopic procedures
- FLS<sup>®</sup> Skills practise
- Individual or team training
- Laparoscopic camera navigation (LCN)
- Hands-on skills training
- Psychomotor skills
- Hand-eye coordination
- Depth perception
- Timed activities

Includes large pelvic box with 14 laparoscopic ports with fitted interchangeable 5 and 10 mm grommets and interior lighting. The Sim-Scope<sup>™</sup> simulates a real laparoscope and can be inserted into any of the 14 laparoscopic ports. It zooms and rotates, has a realistic handle and is available in 0° and 30°.

#### Available in two configurations:

#### T5 Large Pelvic Box with Removable Monitor

Designed to remove the monitor from the trainer and attach it to the included stand, giving the user the ability to rotate and drape the box for a more realistic training experience.

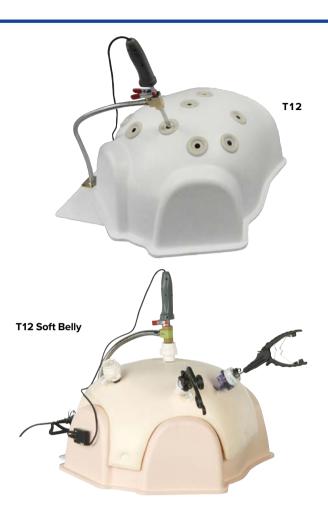
#### M-1020092

T5 Large Pelvic Box with Attached Flip-up Monitor M-1020091

## Reliable technology housed in a durable construction!

#### **T9 Abdominal and Laparoscopic Ultrasound Trainer**

Designed for Abdominal Intraoperative and Laparoscopic Ultrasound training. The extra large pelvic box has a slideout drawer that houses the Abdominal Intraoperative and Laparoscopic Ultrasound Phantom "IOUS-FAN". The pelvic box has 7 laparoscopic ports that provide training and demonstration flexibility. The ports are fitted with grommets designed to hold the ultrasound wand (not included). The slide-out drawer provides easy access for inserting the organs (not included). **M-1018120** 



#### **T12 Laparoscopic Trainer with Belly**

The belly has nine laparoscopic ports that are fitted with grommets designed to hold an instrument or trocar. It has a slide-out drawer with interior lighting for easy access to the organ tray. Both versions are delivered with an insufflated belly, Monitor Stand (monitor not included), Advanced 0° SimScope™ (camera is a NTSC signal), and Scope Holder. The Advanced 0° SimScope™ has an excellent resolution. The easy-to-adjust focus is located at the end of the shaft. Diameter measures 9.5 mm, length 220 mm.

T12 M-1018121 T12 Soft Belly M-1020093

#### T3 Plus: Portable Laparoscopic Skill Training Box

The NEW T3 PLUS is a complete minimally invasive training system that does not require video equipment, is portable and easy to set up. It has a joystick camera that zooms and rotates. The expanded front provides room for a wider selection of skill inserts. The T3 PLUS includes the redesigned pelvic box, SimScope<sup>™</sup> (camera) and

10" monitor. The T3 PLUS provides a versatile one-person laparoscopic skill training workstation.

#### M-1020150

Options	Suitable for	Item No.
Bowel Sections (6" wet)	LT, T3, T5, T12	M-1019686
Bowel Sections (6" dry)	LT, T3, T5, T12	M-1019687
Foam Stomach	LT, T3, T5, T12	M-1019689
Specimen Mounting Pad	LT, T3, T5, T12	M-1019688
Holiotomy <sup>™</sup> Insert	T3, T5	M-1019690
Penrose Drain (pack of 100)	LT, T3, T5, T12	M-1019691
Penrose Drain and Holiotomy <sup>™</sup> Holder	LT, T3, T5, T12	M-1019692
Vaginal Cuff (2" wet)	LT, T3, T5, T12	M-1019695
Vaginal Cuff & Ectopic Pregnancy Holder	LT, T3, T5, T12	M-1019696
Organ Finder	T5, T12	M-1019953
Skill Set #1: Loops and Wire	LT, T3, T5, T12	M-1019681
Skill Set #2: Pea on a Peg	LT, T3, T5, T12	M-1019682
Skill Set #3: Wire Chaser	LT, T3, T5, T12	M-1019683
Skill Set #4: Post and Sleeve	LT, T3, T5, T12	M-1019684
Complete Skill Set #1 – #4	LT, T3, T5, T12	M-1019685

#### Portable LT Lab Tab Trainer™

Technology meets simplicity with the fold-up Lab Tab Trainer<sup>™</sup> that works with your tablet or smartphone. No electricity required making it easy to practise or demonstrate laparoscopic skills anywhere! Developed in collaboration with Mr. Ali N. Bahsoun from Guy's and St. Thomas' Hospital, London, UK. The Lab Tab Trainer<sup>™</sup> is ideal for residents to take home and practise. The trainer folds up, is small enough to fit into a backpack and simple to set up.

## Trainer with Side PortsM-1018108Trainer with Side Ports PackageM-1018113

Includes: Lap Tab Trainer<sup>™</sup> with side ports, Soft Tissue, Suture Pad, Pair of Needle Drivers, 2/0 Sutures

Trainer Messenger Bag

M-1018114









#### Surgery and Laparoscopy Training Torso

This trainer is aimed at all levels of surgeons in training. Once set up, the torso can be used to self-educate using the preferred surgical laparoscopic instrumentation for a variety of techniques. The torso has the following features:

- Can insufflate and maintain air tight pressure
- Supports usage of wet tissue or prepared artificial materials
- Can be used for surgical diathermy. There is a fixed metal plate in the base of the unit with a connection on the outside to enable earthing
- ${\boldsymbol{\cdot}}$  Can be easily cleaned by flushing out through a large airtight drain plug
- ${\boldsymbol{\cdot}}$  Is lightweight and has a carrying handle
- 75 x 55 x 25.5 cm **M-1005135**

Consumables	Item No.
2 Neoprene Sheets	M-1005137
Abdominal Skin w/ Fatty tissue	M-1005138

#### Laparoscopic Trainer

## The Portable Laparoscopic Trainer is designed to provide low cost assistance in laparoscopic training:

- Supplied with 4mm black Neoprene skin
- Easily assembled and ready for use in seconds
- Works with wet tissue (eg. Pig liver) or dry (eg. foam)

#### M-1005139

Consumables	Item No.
2 Neoprene Sheets, black, 4 mm	M-1005141
Pink Skin with Fatty Tissue	M-1005140
Support Sheet for Pink Skin	M-1005142
Transparent Skin for Daylight Use	M-1005143



## **Operative** Experience

## > NEXT GENERATION SURGICAL SIMULATION

Fully-operative Biofidelic emulation simulators Unprecedented anatomical fidelity Designed by surgeons Anatomically accurate Clinically validated



#### **Replicating the Operative Experience**

Surgeons often lack hands-on experience in many surgical procedures upon completion of their residency program, according to a major study by the American Board of Surgery and the Association of Program Directors in Surgery.

OEI's unique, hands-in-the-body technology provides practitioners with the real world operative experience to master surgical procedures on fully operable, anatomically correct simulators.

#### Simulation Systems for Surgical and Pre-Hospital

OEI's biofidelic emulation technology delivers the only true "hands-inthe-body" open-surgery training experience for learners, featuring:

- Fully operative physical simulators with unprecedented anatomical and surgical fidelity
- Cost effective procedural and operative repetition
- Simulators that can be incised, dissected, retracted and sutured using standard surgical instruments
- Surgical mastery assured through psycho-motor and cognitive testing



#### Surgical fasciotomy of the lower leg

The Fasciotomy simulator is a high anatomic, soft-tissue lower leg simulator crafted from high quality silicone. The simulator provides the ability to perform a two incision, four compartment surgical fasciotomy procedure using standard surgical instruments. The model can be refurbished and reused. **M-1021398** 

Refurbished Fasciotomy Leg M-1021399



#### Subdural hematoma surgery and ventriculostomy model

This soft tissue, anatomically correct simulator provides the ability to surgically remove subdural hematomas on the right and left side of the brain and supports also ventriculostomy.

#### M-1021400

#### Note: This product is typically bought with a Craniotomy Base

The simulator attachable base enables a perfect stabilization during surgery simulation. Craniotomy Base: 1/2 Inch Bolt Handle - Steel M-1021402

Refurbished Craniotomy M-1021401



The next generation of healthcare simulation is not simulation at all. It is Biofidelic Emulation. See for yourself in this short product video. https://youtu.be/GygAZoQ8898

#### 3B Scientific<sup>®</sup> Suture Training Arm

The realistic anatomy of the 3B Scientific<sup>®</sup> Suture Training Arm offers the possibility for suture training that is a lot more complex than with regular suture pads. Given its movable hand and fingers, even challenging sutures in hard to reach places like between the fingers can be practiced. Both the skin and the subcutaneous tissue are represented for a life-like suturing experience.

The instructor can inflict wounds independently wherever needed on the arm. Their size and form can be customised, leaving room for a large variety of training possibilities. Additionally, each wound can be sutured several times, making this trainer very economic and suitable even for larger skill training classes.

- Movable fingers for suture training of challenging wounds between fingers
- Skin and subcutaneous tissue differentiated for realistic suture experience
- · Wounds can be inflicted by instructor anywhere on the training arm
- Each cut can be sutured several times
- For surgical staples procedure

M-1020904

#### Life/form® Interactive Suture Trainer

The trainer attaches easily to an arm, leg, or hip, allowing practise of suturing techniques in addition to essential communication and patient interaction skills. This convenient, cost-effective kit offers practise at all skill levels, including tying knots, placement of staples, and suturing both superficial and deep wounds.

Wounds automatically open when cut. Includes suture pad, attachable pad base with straps, needle holder, suture scissors, tissue forceps, scalpel, soft carrying case, nylon suture, instrument case and instruction manual.

#### M-1018196



#### Life/form<sup>®</sup> Suture Kit

Train incisions and determining the depth of suturing and the technique to be used. Practise and demonstrate tying knots, stapling and placement of staples, use of surgical glue, suturing deep tissue, and suturing subcutaneous tissue.

Features epidermis, dermis, fascia, fat, and muscle layers. The skin will allow placement and closure of superficial sutures. Includes suture pad, tray to hold pad, durable carrying case, needle holder, suture scissors, tissue forceps, scalpel, nylon suture and small case to hold the instruments. **M-1017981** 

#### Suture and Stapling Practise Trainers – Leg

Made with a soft vinyl skin over a core of stitchable foam to provide a life-like suturing experience. Soft and pliable for easy sewing, the skin is tough enough that sutures will not pull out when tightened. The unit is provided with three wounds. Conservatively, more than one hundred cuts can be made on the trainer and each of these cuts can be sutured several times. • Realistic skin texture with wrinkles, pores, and visible fingerprints

- Disposable limbs provide hundreds of suturing experiences before wearing out
- Trainer comes complete with a starter package of sutures, instruction booklet **M-1005683**





#### Lumps and Bumps Box

Consumables

Lumps

Effective tactile trainer is ideal for juniors getting to grips with their sense of touch and to understand the basic art of description about the feeling through gentle palpation. The trainer can be lab held and placed on a smooth surface where strong sucker feet provide stability while in use. Contains 2 skins and 2 layers of foam and an assortment of shapes compatible with modern teaching for Clinical Skills Centres.

Can be varied and customised to suit individual needs. M-1005164

2 Skins, 2 Layers of Foam and an Assortment of Shapes

	F	3
	-	
	Y	
-		-

#### **Surgery Skill Trainer**

The Surgery Trainer allows open surgery practise and offers an advanced skills capability for cut and suture practise. The single sided skin pad and a piece of abdominal bowel (which can be anastomosed) are replaceable.

• Portable with rubber suction feet to secure the base providing easy working conditions

• Washable, durable and all parts are replaceable

Sutures and string not provided.

25 x 23 x 9 cm M-1005144

Consumables	Item No.
Two Layered Abdominal Bowel, 3 x 27 cm	M-1005149
Two Layered Abdominal Bowel, 2 x 9 cm	M-1005146
Single Sided Skin Pad, 11 x 8 x 2 cm	M-1005145
Double-Sided Skin Suture Pad	M-1005133



#### **Skin Suture Trainer**

A great low cost way to practise surgical opening and closing techniques.

- Economical reversible pad
- Designed to make complex incisions such as flap and dog turn suturing more realistic
- A sub-dermal layer is present to make
- secure intradermal sutures

Base has suction feet to enable slip free use,

#### 11 x 14 cm

#### M-1005134

Consumables	

**Double-Sided Skin Suture Pad** 

Item No.

M-1005165

M-1005166



#### Suture Practise Trainer

This is a basic skill trainer which offers a limited facility for knot tying. The foam can be turned over and or replaced.

- Rubber suction feet
- Washable parts Sutures and string not provided. 24 x 22 x 7 cm M-1005147

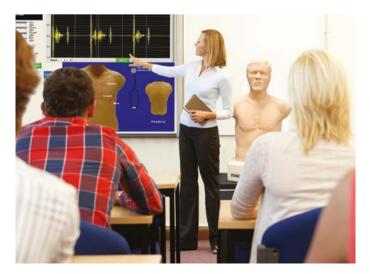
Item No.	Consumables	Item No.
M-1005133	Foam Pad	M-1005148

## AUSCULTATION



Skill training to identify adult heart, lung and bowel sounds.





#### SAM BASIC<sup>™</sup>

The SAM Basic<sup>™</sup> trainer engages the technology of the SimScope<sup>™</sup> stethoscope to simulate adult heart, lung, and bowel sounds utilising a large sounds library. Using the provided SimScope<sup>™</sup> stethoscope, users are able to access a large variety of pathological conditions in order to customise scenarios. By placing the SimScope<sup>™</sup> over the anatomically correct locations of SAM Basic<sup>™</sup>, the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills.

Delivery includes a male manikin, a SimScope<sup>™</sup>, the SimScope<sup>™</sup> software and site license, a USB cable, 1 SAM t-shirt and a user's manual. **M-1020097** 

#### SAM BASIC<sup>™</sup> with WiFi (not shown)

Enables wireless communication between the SimScope<sup>™</sup> and SAM Basic<sup>™</sup> manikin, allowing users to change sounds remotely or to use in conjunction with a scenario-based simulation. M-1020099

#### SAM II, the Student Auscultation Manikin

This Student Auscultation Manikin is a new innovation in teaching and learning heart, breath & bowel sounds. Containing the largest sound library available, SAM II is a portable and easy to use manikin. While SAM II is used in many simulation centers, it is also easily moved into a classroom or auditorium for group instruction. The computer software interface is easily projected into any smart classroom. The software includes phonocardiograms, correct anatomical locations, and written lessons for each sound.

Delivery includes a male manikin, a new DELL laptop computer with SAM II software installed, a digital copy of SAM II's Lesson Guide, and an Operator's Manual. The lesson guide is currently available in English. **M-1020095** 

SAM Storage and Carry Case with wheels and handle (not shown) M-1020109



## Skill Training for pediatric heart, lung and bowel sounds.

#### PAT BASIC

The PAT Basic<sup>™</sup> trainer engages the technology of the SimScope<sup>™</sup> stethoscope to simulate pediatric heart, lung, and bowel sounds utilising a large sounds library. Using the provided SimScope<sup>™</sup> stethoscope, users are able to access a large variety of pathological conditions in order to customise scenarios. By placing the SimScope<sup>™</sup> over the anatomically correct locations of PAT Basic<sup>™</sup>, the programmed sounds will be played through the scope, allowing for students to employ and enhance their diagnostic skills.

- Utilises an extensive heart, lung, bowel and bruit sounds library
- Listen at anatomically correct auscultation sites
- Customised library available to fit specific scenarios and
- programsPortable and lightweight
- Easy to use

• WiFi upgrade allows for remote selection of sound scenarios Delivery includes a male manikin, a SimScope<sup>™</sup>, the SimScope<sup>™</sup> software and site license, a USB cable, 1 PAT t-shirt and a user's manual.

M-1020098

#### PAT BASIC<sup>™</sup> with WiFi (not shown)

Enables wireless communication between the Simscope<sup>™</sup> and PAT Basic<sup>™</sup> manikin, allowing users to change sounds remotely or to use in conjunction with a scenario-based simulation. **M-1020100** 

PAT Storage and Carry Case with wheels and handle (not shown) M-1020110

#### SimScope WiFi<sup>™</sup> The Hybrid Simulator

The new SimScope WiFi<sup>™</sup> enables wireless communication between the Simscope<sup>™</sup> and the computer, allowing a seamless selection and change of pathological sounds and conditions of any standardised patient, O.S.C.E. or low-fidelity manikin.

• SimScope Patches<sup>™</sup> are customisable and easily programmable for specific diagnostic case studies

• SimScope<sup>™</sup> plays the programmed heart, breath and bowel sounds specific to each correct anatomical location enabling a realistic standardised patient encounter. Up to 20 patches may be programmed and simultaneously activated to simulate real time auscultation during a physical exam Delivery includes: SimScope<sup>™</sup>, SimScope Patches<sup>™</sup>, SimScope Software<sup>™</sup>, and USB cable.

#### M-1020104

Optional Extras: Additional SimScope WiFi<sup>™</sup> stethoscopes M-1020105 SimScope Patch<sup>™</sup> Kit (15) M-1020103



PEDIATRIC AUSCULTATION TRAINER



#### CardioSim<sup>®</sup> VII, portable version Develop your own pre-programmed lectures!

The CardioSim® VII is the only system available that allows an instructor to create custom simulated heart sounds: Editing of S1, S2, murmurs, clicks, third and fourth heart sounds, heart rate, etc. allows the instructor to accentuate the particular aspects of the sound that is being studied. CardioSim® VII comes with hundreds of simulated and live recorded sounds, built-in heart animations, ultrasound live video images, and dissection slides provide an extensive library of information.

- Animations There are over 125 animations on the CardioSim® VII. For example, in studying mitral stenosis the student can view a calcified mitral valve or watch an animation of mitral stenoisis in a beating heart
- Images The CardioSim® VII includes many images. Instructors can add their own slides and images, if desired
- Expanded Real Heart Sound Library The real heart sounds library has been expanded to approximately 200 real heart sounds
- Preprogrammed Lectures To present a lecture, sounds (both simulated or real) can be preprogrammed. Each may have as many as eight lectures.
- New simulated sounds The library of simulated sounds has been expanded to provide a variety of comparisons such as the difference between a split S2, OS and S3 M-1020108



#### Adult Heart and Lung Sounds Torso

Utilising this torso, students will learn to find the correct location where a specific sound can be heard. They will use the anatomical landmarks to orientate themselves, and once the location is found, they will hear the appropriate sound through the stethoscope and/or external speakers.

#### Features:

- Full size adult torso with palpable anatomic landmarks
- Sensor network hidden beneath the skin
- Hear the appropriate heart or lung sound as bell of stethoscope is moved across the front and back of the torso
- Includes Virtual Stethoscope® with multiple heart and lung sounds
- An external speaker plugs into the Virtual Stethoscope® so a classroom can hear what the student hears
- Includes instruction manual and carrying bag.

#### M-1019857

 Train the orientation with anatomical landmarks to find correct auscultation locations.

#### Auscultation Trainer and SmartScope™

The torso manikin presents itself as a real patient without visible auscultation sites. The student must **palpate to identify correct auscultation locations**, and will hear different heart and lung sounds as the SmartScope<sup>™</sup> is moved to different locations on the manikin.

The instructor selects from a menu of heart and lung conditions by **wireless remote control**. A diagnosis of the selected condition can be made by comparing the variations in sounds occurring at different sites. Lung sounds can be detected at 5 anterior, 10 posterior, and two midaxillary locations. Students can practise auscultation at six anterior heart sites.

- Invisible auscultation sites
- No internal speakers
- Completely wireless
- Palpable landmarks
- Remote controlled
- Heart and lung sounds vary at different sites
- Hard storage case included

Listen to the sounds either using headphones or the SmartScope<sup>™</sup> or by connecting to an amplifier (optional) or speaker (not included). Range on the unit is up to 100 feet of remote access.

#### 69 x 43 x 28 cm: 12 kg

Trainer	M-1005642
Trainer with Amplifier	M-1018149
Additional Body	M-1005644



## Adult Deluxe Plus CRiSis<sup>™</sup> Auscultation Manikin with ECG Simulator, SmartScope<sup>™</sup> and Printer

The manikin presents itself as a real patient without visible auscultation sites. The student must palpate to identify correct auscultation locations, and will hear different heart and lung sounds as the SmartScope<sup>™</sup> is moved to different locations on the manikin.

A diagnosis of the condition selected by the instructor can be made by comparing the variations in sounds occurring at different sites – just like in a real patient! Lung sounds can be detected at seven anterior locations and students can practise auscultation at six anterior heart sites. Delivery includes Complete CRiSis<sup>™</sup> Manikin with auscultation sites, one remote control with LCD display, one SmartScope<sup>™</sup> with single- and dual-user headpieces, hard storage case, ECG Simulator, and electronic monitoring, memory, and printer unit light controller which displays running averages and provides hard copy printout. Requires two AA batteries (included).

#### M-1015577

Replacement parts and consumables:	Item No.
Artificial Blood, 1 Litre	M-1005611
Skin and Vein Replacement Kit	M-1005647
Replacement Lungs	M-1013325
Lubricant	M-1005634
REN Cleaner	M-1005776
Amplifier/Speaker System 110V	M-1019721
Amplifier/Speaker System 220V	M-1020046
Replacement Blood Pressure Cuff	M-1019717
Physio Control Defibrillation Pad	M-1019781
Physio Control Training Cables	M-1017990
Marquette Electronics Defibrillation Pad	M-1019782
Light Controller	M-1019779
Electronic Monitoring, Memory & Printer Unit	M-1019633
Additional SmartScope <sup>™</sup>	M-1005643
Additional Auscultation Manikin Torso	M-1005644
Replacement Remote Control	M-1017310
Thermal Printer Paper	M-1019780

#### CRiSis<sup>™</sup> Manikin Auscultation Kit

Do you already own a CRiSis<sup>™</sup> Manikin? Upgrade it with heart and lung sounds now! Provides everything needed to add heart and lung sounds to an existing CRiSis<sup>™</sup> Manikin. Includes upper torso, chest skin, remote, and SmartScope<sup>™</sup>. **M-1019786** 





#### Arrhythmia, Heart & Breath Sounds TUTOR

Two-in-one TUTOR reproduces digitally stored heart and breath sounds or arrhythmias. This unique TUTOR allows instructors the flexibility to change menus by using plug-in modules. There is a volume control and two LEDs that illuminate during systole as well as an illuminated display showing the example currently playing. Sound Menu items are selected from the 16-panel keypad. Rhythms may also be viewed on any monitor or by connection to the Arrhythmia Display Interface.

Includes 2 stethoscopes from Sounders. Up to 50 Sounders can be connected at the rear panel jacks.

Sound menus sold separately, see table: Sounds libraries. M-1017976

Recommended Item: Arrhythmia Display Interface M-1018150



Sound Libraries	Item No.
Basic Heart Sounds	M-1018175
Murmurs	M-1018176
Breath Sounds	M-1018177
Paediatric Breath Sounds	M-1018178
Paediatric Heart	M-1018179
Infant Heart & Breath Sound	M-1018180
Rates and Rhythms	M-1018181
ACLS – Advanced Cardiac Life Support	M-1018182
ACLS II – Advanced Cardiac Life Support	M-1018183
CCU/ICU	M-1018184
CCU/ICU II	M-1018185
CCU/ICU III	M-1018186
CCU/ICU III Ventricular Waveforms	M-1018186 M-1018187
Ventricular Waveforms	M-1018187
Ventricular Waveforms Acute Myo-Infarcts Massive Anterior	M-1018187 M-1018188
Ventricular Waveforms Acute Myo-Infarcts Massive Anterior Paced Beats	M-1018187 M-1018188 M-1018189
Ventricular Waveforms Acute Myo-Infarcts Massive Anterior Paced Beats Paediatric PALS	M-1018187 M-1018188 M-1018189 M-1018190
Ventricular Waveforms Acute Myo-Infarcts Massive Anterior Paced Beats Paediatric PALS Mitral Valve Disease	M-1018187 M-1018188 M-1018189 M-1018190 M-1018191
Ventricular Waveforms Acute Myo-Infarcts Massive Anterior Paced Beats Paediatric PALS Mitral Valve Disease Aortic Regurgitation	M-1018187 M-1018188 M-1018189 M-1018190 M-1018191 M-1018192

### Choose from the extensive sound library to practise auscultation skills!

#### Heart & Breath Sounds Simulator

The portable TUTOR is a hand-held device that generates both heart and breath sounds. By utilising stethoscope Sounders students can auscultate at the same time or connect a speaker to broadcast the actual patient heart and breath sounds. The unit has two lights that illuminate during systole (heart menu) and expiration (breath menu). Includes 2 stethoscope sounders. Sound menus sold separately, see table: Sounds libraries. **M-1005884** 

#### Additional Stethoscope Sounders (not shown) M-1005892

Sound Libraries	Item No.
Basic Heart Sounds	M-1005885
Basic Murmurs	M-1005886
Breath Sounds	M-1005887
Paediatric Breath & Heart Sounds	M-1005888
Paediatric Heart Sounds	M-1005889
Infant Heart & Breath Sounds	M-1005890
Bowel Sounds	M-1018195



### Simulates heart, bowel and lung conditions via wireless remote control

#### Life/form<sup>®</sup> Infant Auscultation Trainer

The Life/form® Infant Auscultation Trainer simulates heart, bowel, and lung conditions selected by the instructor via wireless remote control. The student must palpate to identify the correct auscultation sites and will hear different heart, bowel, and lung sounds as the SmartScope® is moved from site to site. The instructor can program the remote control, selecting from two dozen conditions and even switch conditions so students can compare and make a diagnosis.

Includes Infant Auscultation Trainer, Smart-Scope® remote, and hard carry case.

#### Note:

Infant remote and SmartScope® are not compatible with Adult Auscultation Trainer. M-1017975

### Heart Conditions:

- Aortic Stenosis
- Pulmonary Stenosis
- VSD
- ASD
- S2 Split
- 7-month Heart
- Mitral Regurgitation
- Stills Murmur
- 1-year Heart
- Newborn Heart
- Venous Hum

#### **Bowel Sounds:**

- Borborygmus Normal 1 YO
- Normal Newborn
- Normal 2 YO

#### Wheezing Newborn Breath

Pneumonia

Asthma

- Rhonchi
- 9-month Breath

Lung Conditions:

- Newborn Stridor
- Stridor
- 9-month Stridor

### Use any stethoscope in the normal auscultation site for pediatric assessment

#### **Child Heart & Lungs Sound Trainer**

This self-contained heart and lung sound generator delivers site-specific heart and lung sounds typical of a four-year old child. Use any stethoscope in the normal auscultation site for pediatric assessment to listen as ten lung speakers and a heart speaker mimic actual sounds. The unit can be run from either a conventional PC using your mouse and monitor, or through the special handheld remote. An external speaker jack allows you to broadcast sounds to the entire classroom, or you can use it for audible testing of more than one student at a time. Classroom broadcasts of speakers/

sounds in specific locations allow students to hear precise sound anomalies encountered when they auscultate the manikin. No programming required. Simply plug in, attach your USB mouse and monitor cable, and point and click vour way to student excellence in lung and heart sound knowledge.

The simulator comes with a power cord, user reference, and carry case. No assembly of manikin or installation of programming is required. 48.3 x 45.7 x 23 cm

M-1017237

#### Lung Sounds:

- Asthma
- Bronchial
- Coarse crackles
- Fine crackles
- Normal breath sounds
- Pneumonia, lobar
- Tracheal
- Wheeze
- Insp. crackles, early
- Stridor

- Heart Sounds:
- Atrial septal defect
- Congenital aortic
- stenosis
- Normal paediatric heart
- sounds
- Patent ductus arteriosis
- Ventricular septal defect Pulmonary valvular
- stenosis



#### Heart and Lung Sounds Simulator, 5-Year Old (not shown)

Students must learn where the base heart sound may be best heard or where the bell should be placed to hear stress or wheezing in a young child. Site specificity is obtained through an exciting new "wireless" technique in which the student uses anatomic landmarks on the manikin to locate the site where a specific sound should be heard. If correct, they will hear the appropriate sound through the stethoscope and/or external speakers.

#### M-1020853

#### Additionally needed:

#### Heart and Lung Sounds Auscultation Training Kit (not shown)

Convenient torso overlay with sensor network hidden beneath the skin. Includes Virtual Stethoscope with multiple heart and lung sounds, carrying bag and instruction manual. An external speaker can be plugged in to the Virtual Stethoscope.

M-1020929

#### Heart and Lungs Sounds Manikin, 1 Year Old

Learn where the base heart sound may be best heard or where the bell should be placed to hear stress or wheezing in a young child. Site specificity is obtained through an exciting new wireless technique in which anatomical landmarks on the manikin are used to locate the site where a specific sound should be heard. If correct, the appropriate sound can be heard through the stethoscope and/or external speakers.

#### Features:

- · Fully articulating head, neck and jaw permitting head-tilt/chin lift, jaw thrust and neck extension into the sniffing position
- Anatomically accurate mouth, tongue, airway and œsophagus designed to illustrate the profound differences between intubating an infant, a child or an adult
- · Realistic trachea, bronchi and lungs. Observable bilateral lung expansion under positive pressure ventilation

M-1013899

Voice Sounds:

- Cough
- Crying
- Gasp
- Gurgling Sneeze
- Wheeze

# EAR EXAMINATION



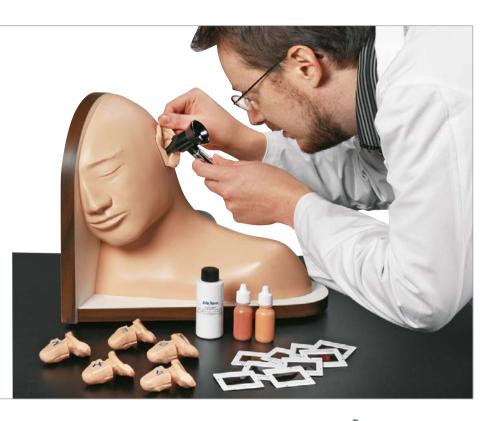
#### **Ear Examination Simulator**

The ear examination simulator consists of a head with 6 interchangeable flexible ears with life-like external and internal structures of the ear. Embedded coloured prints in 5 out of the 6 ears allow the diagnosis of various pathologies. One ear is not coloured, but can be used for earwax removal exercises. 38 x 38 x 26 cm; 7.7 kg

M-1005645

#### **Supplementary Ears**

This set includes 4 ears which allow observation of chronic otitis media with large perforation, attic cholesteatoma, attic cholesteatoma, and atelectatic middle ear otitis and tympanosclerosis. M-1005646



#### Life/form<sup>®</sup> Diagnostic and Procedural Ear Trainer

Life-like right and left ears teach diagnostic and procedural techniques and are removable for easy maintenance and storage. For the ultimate in realism, the middle ear can be filled with various fluids. Trainer comes complete with two ears, approximately 100 pre-cut eardrums, specially formulated ear wax, one standard middle ear cartridge with syringe, adjustable stand, and a hard carry case. Otoscope, ventilation tubes, and surgical instruments are not provided. See online for additional product features. 45.7 x 27.9 x 25.4 cm; 5.44 kg M-1017258

#### **Option:**

#### Life/form<sup>®</sup> Pneumatic Otoscopy Kit

This exciting Pneumatic Otoscopy trainer offers an exciting additional feature for the Life/ form® Diagnostic and Procedural Ear Trainer (M-1017245 shown above). While pneumatic otoscopy is indispensable for examination of the ear, studies have shown that most are performed incorrectly! Now with the valuable feedback offered by this kit, students, residents, and practising physicians can learn how to generate the correct amount of air pressure needed to perform accurate pneumatic otoscopy to test for tympanic membrane mobility. Kit includes a pneumatic pressure gauge, two pneumatic ears with pressure tubing, and a package of approximately 100 eardrums.

30.5 x 27.9 x 12.7 cm; 1.13 kg **M-1017259** 



# **PEDIATRIC CLINICAL & NURSING SKILLS**

# > Train key skills specific to pediatric lumbar puncture procedures



#### Life/form<sup>®</sup> pediatric Lumbar Puncture Simulator

The Life/form<sup>®</sup> Pediatric Lumbar Puncture Simulator represents a 10-12 month old infant placed in a left lateral decubitus position with the neck and knees flexed, approximating the necessary fetal position. The embedded iliac crest offers exceptional realism, while the removable spine, spinal canal and skin pad make training simple and hassle free.

- Perform lumbar puncture in the L3-L4, L4-L5 or L5-S1 spaces
- Palpate iliac crest and spine to find correct locations
- Fluid flows when needle is inserted correctly
   9 kg

M-1017244



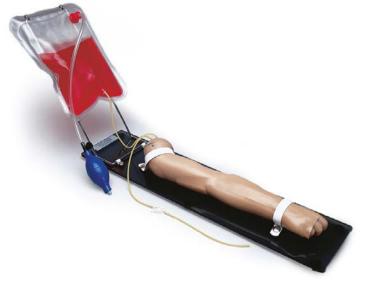
#### Injection Training Arm, Five Year Old

The Mike<sup>®</sup> and Michelle<sup>®</sup> Injection Arm with hand simulate that of a 5 year old, with life-like venous structure. The dorsum of the hand has two veins for additional intravenous set-up. Two interchangeable hands are supplied with the simulator.

#### Features:

- Intravenous injections, infusion, and blood collection
- Subcutaneous injections in both flexor and lateral sides of forearm
- Intramuscular injections in deltoid area

 Squeeze bulb simulating either collapsed or distended veins Mounted on smoked Lucite<sup>®</sup> base and supplied with blood bag and stand, synthetic blood concentrate, squeeze bulb, and spare arm skin. Soft carrying bag and instruction manual included.
 M-1018860





# > This arm trainer is a valuable tool for practicing injections on pediatric patients

#### Injection Training Arm, One Year Old

Simulates the arm of a one year old and features:

- Medial venous structure
- Two veins in dorsum of hand
- Radial and brachial arteries
- Squeeze bulb simulating either collapsed or normal veins

• Easily replaceable skin and veins that withstand multiple needle sticks Mounted on smoked Lucite® base and supplied with blood bag and stand, synthetic blood concentrate, squeeze bulb, and spare arm skin. Soft carrying bag and instruction manual included.

#### M-1018861





#### Life/form<sup>®</sup> Pediatric Arm

Providing realistic sensation and response, the life-like vinyl skin rolls when palpated to allow location of the vein. A soft foam is used to simulate the deltoid muscle and allows the student to get the feel of administering intramuscular injections to children. Simulated bone in the shoulder defines and limits the injection area. Water may be used as an injection fluid in the shoulder area.

Includes a Life/form<sup>®</sup> arm with white skin, fluid supply bag, 3 cc syringe, one pint Life/form<sup>®</sup> blood, teaching guide, and hard carrying case.  $56 \times 28 \times 15$  cm M-1017973

Replacement Parts	Item No.
Skin & Vein Kit	M-1018148
Artificial Blood, 1 Litre	M-1005611
REN Cleaner	M-1005776



#### Life/form® Difficult Access Infant Skin for IV & IO – Package of 3

The Life/form® Difficult Access Infant IV & IO skin sleeves have been developed to fit over the arms and legs of most infant training products. This soft, life-like skin is meant to represent a chubbier infant and may be used to prepare for intravenous and intraosseous insertions where the vascular system may be difficult to access. M-1017974

# Now 100% latex-free with redesigned umbilicus and umbilical valve allowing repeated catheterization with a 5 FR umbilical catheter!

#### Infant Venous Access Simulator

A unique, anatomically correct female baby developed to teach and practice the vascular accessing of newborns and infants. Barely discernable blue Dermalike<sup>™</sup> veins are under the replaceable translucent skin on the head, arms and the right leg. Veins give a realistic pop and flashback when needle is properly placed. The veins presented include the temporal, external jugular, post-auricular, basilic, cephalic, saphenous and popliteal. Practice accessing, securing, site care, and maintenance for standard IVs and PICC (Peripherally Inserted Central Catheter). Nasal and oral openings allow placement of nasal cannulas, as well as nasogastric and feeding tubes to teach suctioning, securing, dressing, cleansing, and maintenance. M-1009799

Replacement parts	Item No.
Vein Set with Umbilical Valve	M-1009800
Artificial blood, 4.5 Litres	M-1005837
Skin and Veins	M-1005834

# Simulates a twelve month-old infant for realistic training



#### Life/form<sup>®</sup> Pediatric Head

An invaluable tool for demonstrating and practicing infusions and injections in the temporal and jugular veins of a newborn to a twelve-monthold infant. Provides realistic sensation and response. The life-like vinyl skin actually rolls as you palpate to allow location of the vein. The synthetic rubber tubing for the veins was carefully selected to provide a lifelike simulation of vein size, and feeling of puncture and palpation for practicing venipuncture. The temporal vein of the Life/form® pediatric Head is easily accessible for IV infusions. Practice in the jugular vein is equally realistic. The neck is made of soft, flexible foam to provide a realistic feel of palpation and puncture.

Supplied with realistically modeled head with skin and veins, fluid supply bag, 2 different gauge winged infusion needles, artificial blood and hard carrying case. 0

M-1	00	56	53
-----	----	----	----

Consumables	Item No.
Head Skin and Vein Replacement	M-1005631
Artificial Blood, 1 Litre	M-1005611
REN Cleaner	M-1005776



#### Infant Circumcision Training Kit

Made with soft, life-like material. The trainers include the foreskin, glans penis, frenulum, meatus, and coronal groove. Practice separating foreskin from the glans, removal of the foreskin, and suturing techniques. The trainers have been designed for clamp methods, dorsal slit, and sleeve circumcisions. The trainer may also be used to demonstrate the procedure and practice aftercare skills to family members. Since there are different methods of circumcision, the Circumcision Trainer has been designed for Mogen clamp method, Guillotine clamp method, Gomco clamp method, plastibell method, dorsal slit method, forceps guided method, and sleeve circumcision. The Infant Circumcision Training Kit is a complete Kit for all circumcision training needs.

Includes one infant torso, six glans with attached foreskins, instruments (scalpel, 11.5 cm micro-forceps, 15.25 cm precision probe, Iris research scissors, 12.7 cm straight Halstead mosquito forceps, 12.7 cm curved Halstead mosquito forceps, Ethicon suture thread with needle), instrument case, instructions, and soft nylon carrying case.

M-1017254

# **OBSTETRICS & GYNECOLOGY**



# > Simulate high-stress birthing scenarios with the award-winning SIMone™!

# SIMone<sup>™</sup> Birthing Simulator for advanced training, now with 14 cases

# Train realistic and interactive high-stress scenarios for vacuum and forceps delivery:

- Haptic response technology
- Visual and audio interface
- Full debrief for optimal learning effect Multi-dimensional learning techniques are combined to assure a maximum effect! The haptic response technology assures realistic training of motoric skills by combining the simulated scenario with high tech sensors: any movement or force that is being used throughout the procedure is measured and direct feedback tells the student the impact it has on the baby.

# With SIMone<sup>™</sup>, your medical staff can be trained in:

- Correct use of instruments in assisted vaginal delivery
- Defining the position of the fetal head in relation to the maternal pelvis
- Management of birth complications by means of anamnesis, findings and interventions







# > DESIGNED AND MANUFACTURED IN GERMANY





#### Effective Training with SIMone™

SIMone<sup>™</sup> has a patented force feedback mechanism that allows the trainee to confidently learn and develop the skills necessary for performing complicated procedures. SIMone<sup>™</sup> gives the opportunity to practice an instrumental delivery in a realistic manner – over and over again with little or no setup time! In less than 60 seconds, a new birthing scenario can be initiated.

#### SIMone<sup>™</sup> also trains students in:

- Recognizing the right moment to select a vaginal assisted delivery
- · Correct handling of medical instruments for delivery
- · Assessing position of fetal head in relation to the maternal pelvis
- · Labor management using a partogram
- · Medication administration to achieve progress during delivery
- Interpreting fetal heartbeat and uterine contraction through a CTG
- Interpreting respiratory sounds
- Interpreting the sounds of pain experienced by the mother

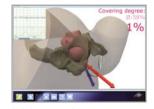
#### Accessories included with the simulator:

- 1 Vacuum extractor Menox 60 mm
- •1 Vacuum hand pump
- 1 Naegele forceps
- 200 ml lubricant
- Latex-free disposable
- gloves, size M/L
- 2 replacement genital inserts
- Assembly tools
- Extensive operating Manual M-1019599

Item No.
M-1008555
M-1009486
M-1012769
M-1009867

About the birthing simulator The simulator presents the haptics required in order to

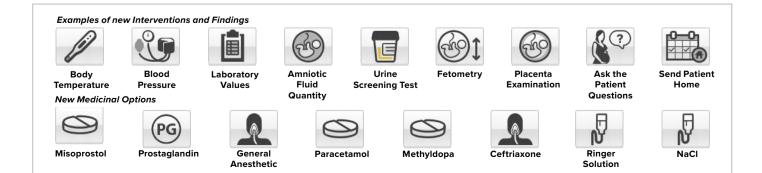
perform the



instrument assisted delivery in the correct manner: presentation data, placement of the forceps and extraction, taking care of the head of the infant and the maternal soft tissue. The monitoring software provides information in response to the manipulation of the fetal head in the context of force-feedback. Realistic speed and resistance are simulated during delivery.

# Train the diagnosis, management and medical interventions for these 14 realistic birthing scenarios:

- Multipara (normal birth)
- Nullipara (normal birth)
- Hyperactive labor
- Labor dystocia
- Intrauterine asphyxia
- Fever complications
- Infection complications
- Heavy Infection complications
- Mild preeclampsia
- Severe preeclampsia
- HELLP syndrome
- Overdue birth: mother refuses the labor induction procedure
- Overdue birth: mother accepts the labor induction procedure
- Overdue birth: post cesarean section, mother refuses a new cesarean section and the labor is induced





# > NEW!

# The world's most natural and realistic vaginal birthing simulator

#### RealMom<sup>™</sup> Birthing Simulator

RealMom is a groundbreaking, full-body childbirth simulator designed to revolutionize the way clinicians and practitioners develop proficiency in labor and delivery procedures.

Leapfrogging today's hard-plastic birthing manikins, RealMom is the most natural and realistic childbirth simulator ever created, featuring incredibly lifelike soft tissue, accurate internal anatomy and an active birth canal with human-like dilation and effacement.

RealMom provides learners with a high-adrenaline, "true-to-life" delivery room experience and a full spectrum of clinical scenarios from normal fetal delivery to more complicated procedures, such as breech, shoulder dystocia, nuchal cord, cord prolapse, and assisted delivery with forceps and vacuum devices. As well as being incredibly realistic and lifelike, RealMom is exceptionally reliable with no complicated set-up or programming required of instructors and subsequently no simulator downtime. RealMom can be operated remotely using an iOS or Android device or any standard computer browser. The ICI software requires very little programming or set-up and provides instructors with an intuitive and easy-to-use interface for control of:

- Dilation and delivery progression
- Contractions
- Shoulder dystocia
- Heart rate and tones
- Respiratory rate
- $\bullet$  Blood pressure, temperature, and  $\mathsf{SpO}_2$  levels
- Postpartum hemorrhage bleeding

RealMom comes with a full term baby with unsurpassed realism and lifelike appearance with a weight of 3 kg. The baby will be anatomically correct and will have innovative realistic skin.

#### M-1021404



# Operative Experience









#### Lifelike Mother and Baby

Full-body birthing simulator and full-term baby with unsurpassed realism and lifelike appearance. Features realistic, soft tissue and accurate internal anatomy.



#### Natural Delivery

First-in-the-world, natural delivery with active, soft tissue birth canal. Provides human-like dilation and effacement with massageable fundus and amniotic reservoir. Includes a fully-realistic uterus, placenta and umbilical cord.



#### Fully Operable

Provides normal delivery, breech, shoulder dystocia, nuchal cord, cord prolapse, transverse and placenta previa, compound delivery, and assisted delivery with forceps or vacuum devices.





Realistic postpartum hemorrhage control with appropriate flow control and the ability to effectively stop hemorrhage with a Bakri or Ebb balloon.





#### **Tablet Control**

Instructor control of dilation and delivery progression. Physiological presentation and control of maternal and fetal heart rate, fetal heart tones and contractions, pulses, blood pressure and SpO<sub>2</sub>. Supports iOS, Android and computer browsers.

Simple and Affordable No complicated programming or set-ups there's no simulator downtime.



Obstetric simulators focused on the two primary challenges in OB deliveries:

- Postpartum Hemorrhage (PPH)
- Shoulder Dystocia

Also exhibit a wide range of other birthing irregularities. Extensive Fetal Heart Rate (FHR) Programming ensures a broad exposure to variations in waveforms to test your knowledge and team leadership skills in handling patient treatment modalities. The tablet controls the birthing position and rotation of the fetus, descent speed, vaginal bleeding, amniotic fluid, meconium, and the mother's physiological condition in an easy-to-use application. Scenarios are included with the packages and an available library of scenarios makes physiological changes to treatments simple and quick.

#### Easy-to-use tablet controls ALS features:

- Bilateral IV and BP arms
- 5-lead ECG monitoring
- Intubation
- Papillary responses
- •10 active pulse points

#### **Obstetrics features:**

- Choice of delivery system: BASIC version with manual delivery or advanced version with auto delivery
- Baby, placenta, and umbilical cord
- 6 vaginal fluids for discharge
- · Palpation of fetus and delivery at same time
- •10 scenarios (made up of 36 vignettes)
- Flat-screen monitor
- Laptop monitor
- FHR chart Program

Both versions come complete with adjunct baby for Leopold manœuvres and birthing baby with placenta, umbilical cord, and first breath action. Accessories included: BP cuff, flat-screen monitor for FHR, tablet and laptop for mother's monitor, pulse oximeter, replacement skin and veins, replacement vagina and cervix, wheeled carrying case.

#### SMART MOM BASIC Birthing Simulator

The BASIC version comes with a manual delivery system.  $\ensuremath{\textbf{M-1018474}}$ 

#### SMART MOM Advanced Birthing Simulator

The advanced version comes with an automated delivery system saving time and resources.

M-1020765











Extensible dilating cervix permits students to conduct vaginal exams and record results

#### NOELLE® Birthing Simulator with PEDI® Blue Neonate

This comprehensive teaching system combines a patient care simulators and an advanced childbirth simulator. The complete birthing experience before, during and after delivery includes:

- Practice of Leopold Manœuvres
- Automatic birthing system
- · Measure head descent and cervical dilation
- · Practice of postpartum suturing on vulval inserts
- Replaceable dilating cervices
- New postpartum hemorrhage and palpation module
- Multiple fetal heart sounds heard through conventional stethoscope
- Practice of Shoulder Dystocia interventions

Monitor and log ventilations and chest compressions with the included Omni<sup>™</sup> Code Blue<sup>®</sup> Pack.

#### Includes:

- One articulating birthing baby with placenta
- One resuscitation baby with intubatable airway and umbilical catheter site

Comes with four umbilical cords, four dilating cervices, two umbilical clamps, talcum powder, water-soluble silicone lubricant, instruction manual and carrying bag. Omni<sup>™</sup> Controller, Code Blue<sup>®</sup> pack: CPR Link software, CPR Link connection cable, CPR module pre-installed in simulator.

Light Skin M-1012732 Dark Skin M-1017865

#### NOELLE® is available in these additional configurations:

#### **NOELLE® Birthing Simulator with Birthing Baby**

Includes one articulating birthing baby with placenta.  $\ensuremath{\textbf{M-1005815}}$ 



Monitor ventilations and chest compressions with Omni<sup>™</sup> Code Blue<sup>®</sup> pack

#### NOELLE® Birthing Simulator with Birthing and Resuscitation Baby Includes:

- One articulating birthing baby with placenta
- One resuscitation baby with intubatable airway and umbilical catheter site

Light Skin M-1012417 Dark Skin M-1017860

#### **NOELLE® Birthing Torso with Birthing Baby**

This comprehensive teaching system represents a full upper and lower female torso and Provides a complete birthing experience before, during and after delivery:

- Removable stomach cover
- · One articulating birthing baby with umbilical cord and placenta
- Automatic birthing system that rotates the baby as it moves through the birth canal
- · Measure head descent and cervical dilation
- Multiple placenta positions
- Replaceable dilating cervices
- Practice postpartum suturing on vulval inserts
- Practice Leopold Manœuvres
- M-1015567

#### **NOELLE® Simulation System Training Guide**

Authors Zerbe and Gamblian condense their combined 50 years of practical perinatal experience into an easy-to-read guide for obstetrics and neonatal care. Includes detailed information about BASIC and advanced interactive scenarios including normal labor and delivery, variations on normal labor, shoulder dystocia, preterm breech delivery, PIH labor and delivery, C/S for active Herpes, ruptured membranes with cord Prolapse, and hemorrhage.

- What "you really need to know"
- Discussion questions quizzes and puzzles
- Student readings



#### > NEW!

Be ready to discover the world's only biofidelic technology that delivers a true, hands-in-the-body surgical experience.

+-

# C-Celia<sup>™</sup> Emergency Obstetrics Suite

The Operative Experience C-Celia<sup>™</sup> Emergency Obstetrics Suite offers an unprecedented anatomical and surgical fidelity within a rigorous experiential instructional paradigm. C-Celia suite includes 5 independent smart simulators that provide practitioners and clinicians with the most comprehensive training experience for mastering:

- + Fetal Extraction
- + Postpartum Hemorrhage Control
- + Emergency Hysterectomy
- + Emergency C-Section Delivery
- + C-Section Skills



#### **Fetal Extraction Trainer**

The Fetal Extraction Simulator is designed for clinicians and learners to experience and practice a life like training of difficult deliveries procedure such as:

- Cord prolapse
- Shoulder dystocia
- Single footling breech
- Simpson Forceps delivery
- Prolapsed arm
- Nuchal cord, double and triple
- Features:
- Post C-section abdomen with unprecedented anatomical and surgical fidelity
- Low-transverse incision and uterus with a low transverse hysterotomy
- Enable various extraction maneuvers and techniques including suction assist and forceps
- Supports the use of standard obstetric instruments
- Integrated pressurized lubricant system emulate a true-to-life difficult delivery simulation
- Simulation of a twin delivery
- Simulation of a macrosomia delivery (large baby)
- Supports thousands of deliveries

#### Delivery content:

- Fetal Extraction Trainer
- 1 Large Baby with Placenta
- 2 Small Babies with Placenta
- Pressure Infuser Bag
- Lube Infusion TubeBag of Lube
- Silicone Glue
- M-1021386

# **Operative** Experience



#### Postpartum Hemorrhage Trainer

Designed for practicing various hemorrhage control techniques as:

- Repair of complex lacerations and uterine
   artery injuries
- Bakri Balloon
- B-Lynch suture
- Hayman suture
- O'Leary Stitch

#### Features:

- Integrated pressurized bleeding and lubrication system emulate a true-to-life effect simulation
- Open abdomen with empty, durable, multi-use uterus
- Multi-use uterus enables scores of procedures before replacement. Available as spare-part

#### Delivery content:

- Postpartum Hemorrhage Control Trainer
- 2 Hemorrhage Control Multi-Use Uterus
- Open Abdomen
- Pressure Infuser Bag
- Bag of Lube
- Lube Infusion Tube
- Bag of Artificial Blood
- Artificial Blood Infusion Tube
- 10 Extra Screws and one Screwdriver

#### M-1021387



#### **Emergency Hysterectomy Trainer**

The Emergency Hysterectomy simulator offers a training for postpartum and cesarean hysterectomy procedures including hemorrhage control and fully-operable removal of the uterus *Features:* 

- Open abdomen with bleeding and integrated lubrication includes durable, flaccid, abdominal wall insert, attachable, partially contracted uterus
- Model contains a uterus, bladder, ureters and detailed representations of uterine arteries *Delivery content:*
- Emergency Hysterectomy Trainer
- 10 Emergency Hysterectomy Uterus
- Open Abdomen
- Bag of Lube
- Pressure Infuser Bag
- Lube Infusion Tube
- Gallon of Artificial Blood
- Artificial Blood Infusion Injector
- 10 Extra Screws and one Screwdriver M-1021389



#### **Emergency C-Section Delivery Simulator**

A complete C-section delivery training system available as a full suite.

#### Features:

- Pregnant abdomen simulator enabling full transverse or vertical emergency C-section
- The C-section is performed with an accurate surgical fidelity through abdominal wall, muscle, fascia, linea, uterus and amniotic sack
- Integrated pressurized lubrication system
- emulate a true-to-life effect simulation
- Simulated amniotic fluid
- Realistic Baby and placenta

#### Delivery content:

- Emergency C-Section Delivery Simulator
- 5 C-Section Multi-Use Uterus
- •13 Foam Abdomens
- Bag of Lube
- Pressure Infuser Bag
- Lube Infusion Tube
- 10 Extra Screws
- Screwdriver
- 100 Plastic Bags with Ties
- 1 Large Baby with Placenta
- 2 Small Babies with Placenta
- Repair Kit

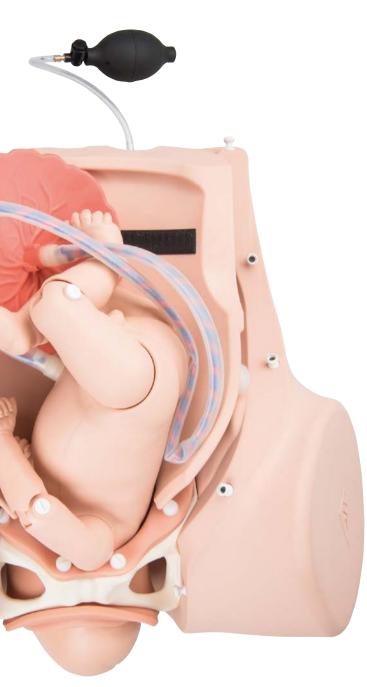
#### M-1021391

#### C-Section skills trainer

The C-section skills trainer is a stand-alone abdominal and uterine incision repair simulator which enables practitioners and clinicians to train the uterus incision practice and the different technique to repair the tissue after a C-Section.

#### Delivery content:

- C-Section Skills Trainer
- Open Abdomen
- Incision Ab Base
- Repair Ab Base
- Uterus Incision Base
- Vertical Incision Repair Uterus
- Transverse Incision Repair Uterus
- 50 Abdominal Inserts
- 50 Uterine Inserts
- 50 Amniotic Sacs
- •10 Extra Screws and one Screwdriver
- M-1021395



#### **3B Scientific® Birthing Simulator P90 BASIC**

The BASIC version of the 3B Scientific<sup>®</sup> Birthing Simulator offers all features of the PRO version but comes with a pre-cut cesarean insert and a BASIC birth canal. It does not include an amniotomy insert nor an inflatable uterus for Leopold.

#### Delivery content:

- 3B Scientific<sup>®</sup> Birthing Simulator P90 BASIC
- Detachable, padded stomach cover with BASIC insert with pre-cut cesarean section
- BASIC birth canal
- Lubricant
- Assembly Kit
- Fully articulating fetal baby
- Umbilical cord and placenta

The 3B Scientific® Birthing Simulator P90 BASIC can be upgraded to the PRO version with the Upgrade Kit M-1020337.

#### M-1020332

#### 3B Scientific<sup>®</sup> Birthing Simulator P90 PRO

The birthing simulator offers extremely realistic training features. It was developed specifically for the skill training in normal and complicated deliveries as well as for obstetric emergency training.

#### Assessment and manipulation of fetal positions:

Using the simulator, trainees will learn how to detect abnormal positions and presentations, and how to use manual techniques to assist the birthing process. Training of manual birthing maneuvers (like Leopold or Pinard's) can be trained so that correct measures will be applied during complicated deliveries. Furthermore, the trainee will learn when to apply obstetric emergency interventions (like a cesarean section).

#### Train the following delivery skills and techniques:

- Normal vaginal delivery
- Normal delivery of umbilical cord and placenta
- Palpation and assessment of fetal position and presentation
- Demonstration of all normal and abnormal fetal positions and presentations
- (like face, neck, or brow) to represent routine and difficult deliveries • Intrauterine manipulation of fetus
- Shoulder dystocia (adaptive birth canal and pelvic bones) demonstration
   and management
- Breech deliveries (including complete, footling or incomplete, and frank breech presentation)
- Palpation of fetal fontanelles features
- Complete and incomplete placenta birth
- Demonstration of placenta previa: total, partial, and marginal
- Prolapse of umbilical cord
- Nuchal umbilical cord
- Cesarean delivery
- Artificial rupture of membranes
- Clamping and cutting of umbilical cord
- Demonstrate suctioning of baby's mouth and nose
- Manual maneuvers (such as Leopold, Pinard's, Mauriceau, Prague, Woods and Rubin maneuver)

#### Delivery content:

- 3B Scientific® Birthing Simulator P90 PRO
- Detachable, padded stomach cover with advanced insert for caesarian section
- Inflatable uterus insert for Leopold Maneuver including cover that can be cut for caesarian section
- Realistic birth canal (portio, cervix, vulva)
- Fastening belt
- Lubricant
- Amniotic fluid and 100 inserts
- Assembly Kit
- Fully articulating fetal baby
- Umbilical cord and placenta
- M-1020333



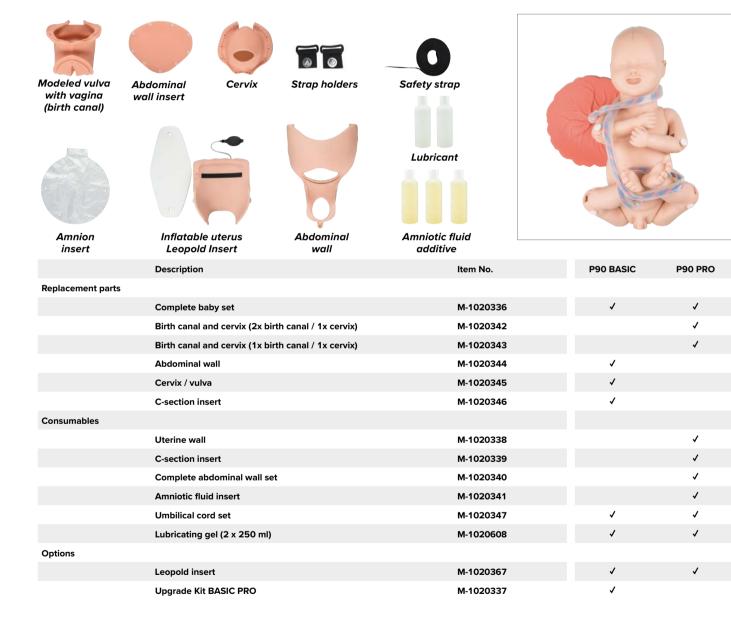
#### Upgrade Kit for 3B Scientific® Birthing Simulator P90 BASIC

With this upgrade Kit, the BASIC version of the Birthing Simulator will include all features of the PRO version.

#### Delivery content:

- Abdominal wall with Cesarean insert made of cuttable silicone
- Inflatable uterus insert (Leopold Manœuver) with cuttable and exchangeable upper uterine wall
- Anatomically shaped cervix and modeled vulva with vagina (birth canal)
- Safety strap for securing the simulator to a table or bed
- ${\boldsymbol{\cdot}}$  Amnion inserts and fluid for artificial rupture of membranes
- Lubricant Gel (2x 250 ml)

#### M-1020337



#### PPH Trainer P97- Module

Add easily to the Birthing Simulator **P90 PRO/BASIC** our new Postpartum Trainer features to enhance the competence and the confidence of the healthcare professional providing postpartum care and managing postpartum bleeding. See more information on page 124–125! **M-1021567** 





#### > NEW!

Postpartum Hemorrhage (PPH) is commonly defined by the World Health Organization as "a blood loss of 500 ml or more within 24 hours after birth, while severe PPH is defined as a blood loss of 1,000 ml or more within the same timeframe. PPH affects approximately 2% of all women who give birth: it is associated not only with nearly one quarter of all maternal deaths globally but is also the leading cause of maternal mortality in most low-income countries"<sup>1</sup>.

#### **PPH Trainer P97**

The new PPH trainer from 3B Scientific<sup>®</sup> is designed to be an affordable, versatile and realistic training tool, which will enhance the competence and the confidence of the healthcare professional providing postpartum care and managing postpartum bleeding.

# The trainer will be useful for training the following procedures:

- Delivery of placenta, also incomplete
- Identification of the blood loss nature: uterus, cervix, vagina
- Visual estimation of the blood loss volume
- Atonic uterus management
- Practice the fundal massage
- Perform bimanual compression
- Practice catheterization

<sup>1</sup> WHO recommendations on prevention and treatment of postpartum haemorrhage. 2012.



3B Scientific's goal is to provide you always solutions, which suit your needs. The PPH Trainer P97 is therefore also available as an add-on module for your 3B Scientific Birthing Simulator P90 PRO or P90 BASIC.

#### PPH Trainer P97 - Module for Birthing Simulator P90 PRO/BASIC

The PPH module P97 is easy to integrate into the Birthing Simulator P90 PRO and BASIC and will complete your obstetric suite.

#### Delivery content:

- PPH Trainer P97-Module
- Blood Reservoir
- Artificial Blood Concentrate (2 x 250 ml)
- 2 Placentas

M-1021567

#### Features:

- Adult size lower torso with accurate anatomy, including ischial spines, pubic bones and sacrum for a realistic examination
- Offers a realistic simulation of an atonic or contracting postpartum uterus
- Adjust easily uterine tone with the pump attachment
- Realistic post-delivery cervices
- Offers 3 different PPH bleeding natures: Uterus bleeding Cervix bleeding (rupture) Vaginal bleeding (lesion)
- Allows simulation of a bleeding up to 1,500 ml
- Simulation of a complete and incomplete placenta delivery
- Urethra built for catheterization with CH 14 catheter

#### Delivery content:

- PPH Trainer P97
- Blood Reservoir
- Artificial Blood Concentrate (2 x 250 ml)

2 Placentas

M-1021568



**Placenta Incomplete Simulation** Detachable placenta pieces



**Blood Loss Identification** 3 possible bleeding settings: uteral, cervical and vaginal



**Bimanual Compression** Realistic simulation of an atonic uterus

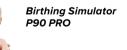


Important Bleeding Capacity Capacity of 1.5 I blood loss to practice the blood loss visual estimation

#### Additional configuration: Birthing Simulator P90 PRO + PPH Trainer P97-Module

#### Delivery content:

- PPH Trainer P97 Module
- Blood Reservoir
- Artificial Blood Concentrate (2 x 250 ml)
- 2 Placentas
- Birthing Simulator P90 PRO





- Detachable, padded stomach cover with advanced insert for caesarian section
- Inflatable uterus insert for Leopold Maneuver including cover that can be cut for caesarian section
- Realistic birth canal (portio, cervix, vulva)

Fastening belt

- Lubricant (2 x 250 ml)
- Amniotic fluid and 100 inserts
- Assembly Kit
- Fully articulating fetal baby
- Umbilical cord and placenta
- M-1021570

Consumables	Item No.
Artificial Blood Concentrate (Pack of 10 x 250 ml)	M-1021572
Blood Reservoir (5)	M-1021573
Placenta (10)	M-1021574
Replacement parts	
PPH Uterus	M-1021576
Vagina and Abdominal Cover	M-1021577
Pelvic foam	M-1021578



#### Susie® Advanced OB Simulator

This battery powered birthing simulator uses very durable materials and elements for years of usage. It comes with a birthing baby and a newborn.

#### Training features:

- Vertex or breech deliveries
- Vacuum augmentation or forceps assisted deliveries

- Replaceable vulval inserts and highly distensible cervices
- Removable abdominal and opaque covers
- Audible maternal heart sounds from 0 to 200 bpm
- Audible newborn heart sounds from 0 to 220 bpm
- Audible newborn cries, grunting, and stridor
- Fetus with elevating pillow for practicing Leopold manœuvres
- Rectum allows medication

#### M-1019303



#### **Birthing Simulator**

This life-like birthing simulator gives your trainees practice in normal vaginal delivery as well as birthing Procedures for breech and vertex presentation of the fetus. This birthing simulator contains two interchangeable abdominal overlays – one containing an additional fetus in a simulated amniotic fluid sac for practicing Leopold's manœuvre, the other

being transparent to allow viewing of the fetal position during labor. Anatomically correct female pelvis with representation of internal landmarks such as spinal column, angled birth canal, ileum, ischium, sacrum, sacro spinous ligaments and greater sciatic notch.

Includes full term fetus with fontanelles and cranial sutures and placenta with six disposable umbilical cords and clamps.

#### M-100002

Replacement parts	Item No.
Obstetrical Vulva	M-1005719
Obstetrical Transparent Overlay	M-1005720
Obstetrical Transparent Overlay with Fœtus	M-1005721
Placenta with Umbilical Cord	M-1005714
Preemie Baby	M-1017991

#### **Birthing Simulator**

Features the pelvic cavity with major anatomical landmarks and painted outline of bony pelvis. The birthing simulator allows intra-uterine manipulation and various training possibilities for prenatal, intrapartum, and postpartum skills.

Supplied with 2 stomach covers (skin-tone/transparent), 1 male and 1 female fetus with placenta, 5 umbilical cords, 2 umbilical clamps, talcum powder and carrying bag. M-1005790

Other available add-ons for M-1005790: Fetus for vacuum delivery M-1005791 Palpation Module for Leopold's Manœuvres M-1005823

#### Birthing System for M-1005790:

- Removable end-plate for insertion of birthing mechanism
- Removable cervices automatically dilate as labor Progresses
- Advance and rotation of fetus through birth canal
- Crowning of fetal head
- Manipulation of the vulva to pass the forehead, nose and ears
- Syringe mouth and nose
- Fetal rotation to enable shoulder presentation
- Birthing fetus

#### M-1013794

# Birthing Stations Insert for M-1005790: *Includes:*

- Station -5: Prior to onset of labor
- Station -4: Cervix partially effaced
- Station -3: Cervix fully effaced
- Station 0: Fetal head at plane of ischial spine
- Station +2: Cervix nearing full dilation
- Station +5: Crowning of fetal head
- Supplied with carrying case.

M-1005824



Representation of a 42 cm fetus with articulating head and neck, shoulders, elbows, hips and knees for more realistic practice of difficult delivery exercises such as Leopold's or Ritgen's manœuvres.

#### Features:

- Realistic mouth and nostrils for simulated suctioning
- Palpable fontanelles, spine, shoulders, buttocks, elbows, and knees
- Supplied with carrying bag

#### M-1005814





#### Fetus Model

This model simulates an average full-term fetus. The human fetus is made of a soft and durable cloth. The body of the fetus model is flexible to show all presentations and positions possible during birth. The amniotic membrane allows you to show the fetal model inside the sack. The snap-on umbilical cord clearly shows the vein and arteries and a convenient drawstring closes the sack. Both amniotic and chorionic membranes are detailed accurately in two colors. **Fetus** M-1005571

Placenta & Umbilical Cord M-1005573



#### **3B Scientific Birthing Stages Simulator**

Practice realistic prenatal cervical examinations: determine the labor progress using 6 inserts with various levels of cervical dilation and effacing.

The trainer consists of a set of 6 different inserts with very realistic anatomical details. The inserts can be used both as stand-alone trainers and as an extension module for the Birthing Simulator P90 (see page 120). The inserts look the same from the outside, only indicating the birthing station represented inside by a number code on the back. The following levels and birthing stages are represented:

- 1. Cervix closed (0.5 cm), level -2
- 2. Cervix open 2 cm, level -2
- 3. Cervix open 3 cm, half effaced, level -2
- 4. Cervix open 5 cm, effaced, level -1
- 5. Cervix open 7 cm, effaced, level -1
- 6. Cervix open 10 cm, effaced, level 0

#### Delivery content:

- 6 birth stage inserts
- Safety plate with 4 screws (for the optional insert in birth simulator P90, see page 122)
- Lubricant gel
  Carry bag
- M-1020628
- 1020020

Lubricant (2 x 250 ml) can also be ordered separately M-1020608



1: Cervix closed (0.5 cm), level -2



4: Cervix open 5 cm, effaced, level -1



2: Cervix open 2 cm, level -2



5: Cervix open 7 cm, effaced, level -1



3: Cervix open 3 cm, half effaced, level -2



6: Cervix open 10 cm, effaced, level 0





#### Fetal Monitoring and Labor Progress Model Set

This versatile model provides a life-like simulation for performance of vaginal examinations, application of the fetal spiral electrode and intrauterine pressure catheter, assessing dilation, palpating fetal fontanelles and suture lines, and assessing position of the vertex.

Fetal head, lower uterine segment, and cervix are made from life-like materials. The fetal model is encased in a durable plastic case which allows for easy visualization of parts. It can also be removed to practice fetal spiral electrode application while visualizing the procedure. Comes with carrying case.

#### 34 x 16 x 29 cm; 4.8 kg

#### M-1005579

Replacement Items	Item No.
Cervix (8 cm)	M-1013601
Cervix (4 cm)	M-1013903
Cervix (2 cm)	M-1014173
Replacement Box	M-1017581



#### **Birthing Station Simulator**

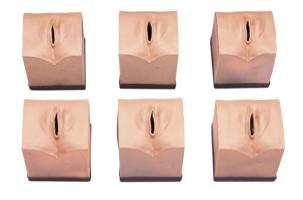
Demonstrate and practice the palpation of the birth canal. It shows the relationship between fetal head and ischial spines of the pelvic bone during birth. A simulated fetal head of the birth simulator can be locked in three different stations to demonstrate its position above, between and below the ischial spines. Delivered with storage case. **M-1005589** 



#### Internal Fetal Monitor Trainer

This life-like 3D trainer Provides realistic simulation for proper insertion of an internal electrode for fetal heart monitoring. Includes the fetal head, lower uterine segment, and cervix made from life-like materials. The fetal model is encased in a durable plastic case which allows for easy visualization of parts. The fetal head can also be removed to practice fetal spiral electrode application while visualizing the Procedure. Also includes one model of cervical dilatation depicting 4 cm of dilatation. All parts are easily removed for washing. Includes lubricant, instructions, and nylon carry case. 14 x 12.7 x 21.6 cm; 3.63 kg

**M-1017263** 

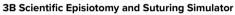


#### **Birthing Station Simulator – Cervical Examination**

Includes 6 anatomical pelvic blocks to teach, demonstrate and practice cervical examination prior to birth. Internal texture, tissue density and correct anatomical size are carefully represented to provide the most realistic female genital condition possible. The following stages of the cervix during birth are represented:

- Stage 1 (no dilation, no effacement)
- Stage 2 (2 cm dilatation, 50% effacement)
- Stage 3 (2 cm dilatation, full effacement)
- Stage 4 (5 cm dilatation, full effacement)
- **Stage 5** (7 cm dilatation, full effacement)
- Stage 6 (9 cm dilatation, full effacement)

The birthing simulator is delivered with storage case. **M-1019859** 



Life-like texture and separate skin and muscle layers for very realistic training of suturing techniques for episiotomies as well as vaginal and labial tears. Each cut can be sutured several times. The trainee will gain experience in instrument handling as well as suture techniques and tying knots.

PRODUCTS

3bscientific.com

# With this trainer, taking care of the following birth injuries can be practiced and demonstrated:

- Episiotomy, for example: Median episiotomy, Mediolateral episiotomy, Lateral episiotomy
- Vaginal tears
- Labial tears

#### To make caring for and closing these birth wounds as realistic as possible, the following muscle structures can be palpated and sutured in the perineal area:

- M. sphincter ani externus (outer anal sphincter muscle)
- M. transversus perinei superficialis
- (superficial transverse perineal muscle)
- M. bulbospongiosus (bulbospongiosus muscle)
- Muscle and skin layers can be sutured separately.

The adjustable holder for the simulated tissue stands firmly on the table without slipping. The insert can be taken out of the holder and then worked on while it is lying on the table. This value-for-money tissue insert can be bought individually or in packs of 5 in our shop.

#### Delivery content:

- Silicone insert
- Base
- Stand

Made of latex-free, silicone-based material. **M-1019639** 

Replacement PartsItem No.Suture set episiotomy and suture trainerM-1020767Replacement set for episiotomy trainerM-1019640Replacement sets for episiotomy trainer (set of 5)M-1019641Episiotomy Suturing Simulator, Set of 3M-1005627Suture Replacement (5 pk)M-1019810

130 MEDICAL SIMULATION | Obstetrics & Gynecology

# > DEMONSTRATE AND PRACTICE MULTIPLE PROCEDURES!

#### **ZOE Gynecological Simulator**

This simulator represents a female adult lower body with relevant internal anatomical landmarks and anatomically accurate fimbriae and ovaries. It combines and delivers the ability to demonstrate multiple gynecological procedures, practice laparoscopic examination and minilaparotomy, recognition of pathologies and placement of contraceptive devices.

#### Training features:

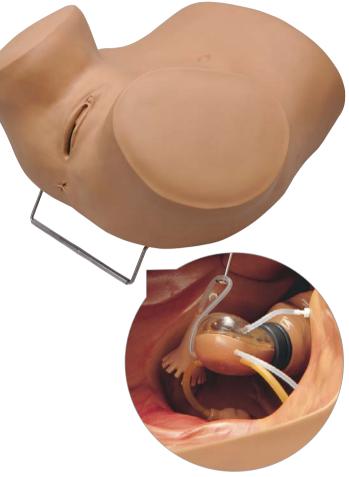
- Vaginal speculum and bimanual pelvic examination
- Uterine sounding
- Insertion and removal of contraceptive devices such as IUD, 75 mm diaphragm or female condom
- Laparoscopic visualization and occlusion of fallopian tubes
   Minilaparotomy

Includes talcum powder, lubricant and soft nylon carrying bag. 51 x 46 x 25,5 cm; 8,5 kg

#### M-1005797

Optional Equipment	Item No.
7 Uteri – Normal with External Pathologies	M-1005798
7 Uteri – Normal with Internal Pathologies	M-1005799
Postpartum Uterus, 48 hours	M-1005812
Postpartum Uterus, 10 minutes	M-1017715
2 Early Pregnant Uteri	M-1005813
Normal Cervices	M-1019247





#### **Gynecological Simulator for Pelvic Examination**

A life-like female pelvis for developing diagnostic skills in gynecological Procedures, anatomical instruction, abdominal palpation, and speculum instruction. The trainer allows the comprehensive, stress-free introduction of gynecological examinations or more advanced tactile comparisons of pelvic pathologic conditions in a classroom setting, easing the way into clinical experience.

Constructed of soft, easily cleaned, vinyl materials that approximate skin texture, Provides detailed, life-like anatomical features and references.

- Normal cervix and uterus for IUD insertion and removal
- Normal parous cervix
- Cervix with endocervical polyp
- Cervix with ectropion characteristics
- Cervix with neoplasia (carcinoma)
- Pregnant 10 week uterus
- 2 adnexal masses

Manikin comes with instruction sheet and soft nylon bag.  $30.5 \times 33 \times 33$  cm; 4 kg

M-1005723



#### > NEW!

#### **Gynecologic Skills Trainer P91**

The new Gynecologic Skills Trainer P91 is a full-sized, adult lower torso made of 3B Scientific SKINlike<sup>™</sup> high-quality silicone for a realistic look, feel and texture in addition to a life-like softness offered during palpation. It is a new versatile training tool designed to add hands-on experience for learners practicing gynecologic skills.

The P91 Gynecological Skills Trainer is an excellent tool for developing confidence and skills to provide patients with highquality, comprehensive care.

#### The trainer will be useful for demonstrating the following procedures:

Perform bimanual examinations with palpable, realistic, normal and abnormal uteri

- Perform vaginal examination with speculum
- Practice use of tenaculum
- Train vaginal examination with easily interchangeable cervices and have visual recognition of normal and abnormal anatomy variations
- Evaluate multiple conditions using the interchangeable cervices 'normal' and 'pathologic'
- Pap test for cervical screening
- Practice catheterization
- Suppository administration in the patent rectum

#### The trainer will be useful for demonstrating the following procedures:



**Bimanual Examination** Realistic, flexible vaginal canal provides ideal examination practice



Speculum Examination SKINlike<sup>™</sup> high-quality silicone offers realistic resistance and elasticity



**Tenaculum Practice** Use of real gynecologic tools



# Multiple interchangeable uteri to teach specific skills to all training levels:

- Normal uterus
- Bicornate uterus
- Stretched uterus with removable myomas
- Big size uterus (13 cm large, 11 cm high)

The normal uterus can be used to simulate an anteflexed sinistroponated uterus or a retroflexed dextroponated uterus. Ectopic pregnancy can be simulated on all the uteri.

# Set of 5 cervices for visual recognition of normal and abnormal characteristics including:

- Nulliparous or para 0
- Multiparous
- Cervical erosion (ectropion)
- Cervical dysplasia
- Carcinoma
- Barrel-shaped carcinoma

#### Features:

- Adult-sized female lower torso with accurate anatomy, including ischial spines, pubic bones and sacrum for a realistic examination
- Leg stumps already in examination position and with the gynecologic examination wedge the possibility to simulate a leaned position of the patient as in a gynecological examination chair
- Soft abdominal cover allows bimanual palpation of normal and abnormal uterus
- Offers realistic flexibility of the vaginal wall
- · Seamless, flexible skin for practice of speculum placement
- The bladder can be simulated full or empty to make the palpation of the structure possibly restricted
- Urethra built for catheterization simulation with CH 14 catheter
- Use easy interchangeable cervices for visualization with speculum
- Normal Fallopian tubes are removable and replaceable by abnormal fallopian tubes with an ectopic pregnancy

#### Delivery content:

- Gynecologic Skills Trainer P91
- Uteri Set (4)
- Cervices Set (6)
- Gynecologic examination wedge
- Lubricant (2 x 250 ml)

M-1021592

Replacement parts	Item No.
Abdominal Cover	M-1021596
Uteri Set (4)	M-1021595
Cervices Set (6)	M-1021593
Vagina Insert	M-1021600
Ectopic Pregnancies Set	M-1021656

# > HYSTEROSCOPY & LAPAROSCOPY MODULE M-1021667 SOON AVAILABLE FOR THE GYNECOLOGIC SKILLS TRAINER P91!



Visual Cervices Examination Normal and pathologic cervices easily interchangeable



Catheterization Practice didactic catheterization



Suppository Administration Present a patent rectum

#### Advanced Pelvic Examination and Gynecological Simulator

Now in one completely redesigned unit, the Advanced Pelvic Examination and Gynecological Simulator is ideal for all aspects of gynecological education, training, and competency evaluation, including the bimanual exam, speculum exam, and cytology sampling. Students will appreciate the unprecedented realism of its internal and external features; while instructors will love the interchangeable components that make up its unique modular system. You choose the scenarios you want to teach! Components can be combined in a multitude of ways. This simulator allows you the flexibility of customizing your scenarios with use of included makeup, blood, and thickener. Additional specialized modules are also available (STD, post-menopause, S.A.N.E., and pre-puberty).

#### Starter unit includes:

- Torso
- Normal genital pad
- Normal pelvic organ block with vagina and rectum
- Abdominal gel pad
- Fabric abdominal pad
- Abdominal overlay skin
- Seven uterus/cervix pieces (normal/normal with discharge option, retroverted/cervicitis, cancer/cancer, transparent IUD, trainer, post-menopause/herpes, fibroids/polyp, early pregnancy)
- Five detachable ovaries (normal polycystic, small cyst, large adnexal mass)
- Bladder insert
- Pelvic organ Prolapse insert
- Baby powder
- Injury Shades Makeup Wheel
- Primary Colors Makeup Wheel
- Blood mix
- Methyl cellulose thickener
- Syringe
- Lubricant
- Instruction manual
- Hard carrying case

#### M-1019960

#### Cervical Exam and Pap Smear Test Simulator

The Pap test is the most frequently performed cancer screening test in the world. It is essential for women's healthcare practitioners to achieve competence in this vital but highly sensitive procedure. With the Life/form® Cervical Exam and Pap Test Trainer, students can practice external and internal examinations, speculum insertion, and cytological sampling techniques on a simulator that is incredibly realistic and easy to use. Features seven cervical conditions: normal, early pregnancy, polyp, early cancer, late cancer, inflammation and dysplasia.

#### About the simulator:

- · Compact size for easy setup, storage, and transport
- · Disassembles completely for easy cleaning
- Extra-soft material and lifelike detail give extremely realistic training experience
- Fraction of the cost of a full-size simulator
- Includes materials for making realistic body fluids and secretions
- Modular design offers quick change-out for different scenarios
   Movable cervix

Includes external genital pad, vagina, seven-piece cervix set in plastic case, support blocks, baby powder, methyl cellulose, blood packet, syringe, lubricant, and instruction manual. Speculum and cytological sampling equipment not included. **M-1018643** 

#### **Gynecological Simulator**

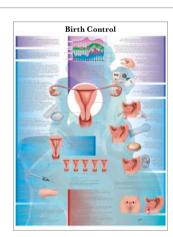
This simulator represents a female adult's lower body with soft outer skin as well as anatomically accurate fimbriae and ovaries. Various pelvic examinations including recognition of pathologies and placing of contraceptive devices can be trained.

#### Features:

- · Vaginal speculum and bimanual pelvic examination
- Uterine sounding
- Insertion and removal of contraceptive devices such as IUD, diaphragm, cervical cap, contraceptive sponge or female condom The simulator is supplied with normal and abnormal

cervices and uteri which can be easily changed.

M-1005789





The affected anatomy of urinary incontinence is illustrated in this poster along with important information about causes, treatments, and prevention. This anatomy poster is a great educational tool for human female urinary incontinence.

Female Pelvic Musculature

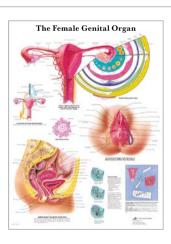
& Incontinence

Printed on premium glossy (200g) paper. Convenient Poster size 50 x 67 cm. **M-4006702** 

#### **Birth Control Chart**

This high quality colourful anatomical chart presents information about common birth control methods, from natural birth control to surgical methods. Birth control methods that are not reliable are also discussed on this poster.

Printed on premium glossy (200g) paper. Convenient Poster size 50 x 67cm. **M-4006707** 



The Female Genital Organs Chart The important anatomical structures are pictured and labeled. The microanatomy of the ovaries and other areas of the female genital organs are also displayed in this poster. Furthermore, some methods of contraception are detailed on the chart as well. Printed on premium glossy (200g) paper. Convenient Poster size 50 x 67 cm. M-4006701

#### Also available laminated:

The 75 micron lamination ensures the chart does not curl up at the edges and the UV treatment ensures the chart does not get a faded vellow colour over time.

choures the chart does not get a laded yenow colour over time.		
The Female Genital Organs Chart, laminated	M-1001568	
Birth Control Chart, laminated	M-1001580	
Female Urinary Incontinence Chart, laminated	M-1001570	



#### > NEW!

#### Hysteroscopy & Laparoscopy Trainer P92

The new Hysteroscopy & Laparoscopy Trainer P92 is a full-sized, adult lower torso made of 3B Scientific SKIN/*ike*<sup>™</sup> high-quality silicone for a realistic look, feel and texture in addition to a life-like softness offered during palpation. The trainer is designed to offer a platform of training and demonstration to healthcare professionals willing to learn with hands-on training the different methods of gynecologic examinations and treatment such as laparoscopy or hysteroscopy.

#### The trainer will be useful for demonstrating the following procedures:

- Hysteroscopy
- Ovarian cystectomy
- Salpingectomy
- Polypectomy
- Visualization of ectopic pregnancy
- Fallopian tube patency test
- · Perform bimanual examinations with palpable, realistic, uterus
- Perform vaginal examination with speculum
- Practice use of tenaculum and Hegar dilators
- Uterus sounding
- Pap test for cervical screening

#### Features:

- Adult-sized female lower torso with accurate anatomy, including ischial spines, pelvic bones and sacrum for a realistic examination
- Leg stumps already in examination position and with the gynecologic examination wedge the possibility to simulate a leaned position of the patient
- · Soft abdominal cover allows bimanual palpation of the uterus
- Abdominal cover with 3 predefined accesses:
- Access for the optic 2 accesses for instruments
- Offers realistic flexibility of the vaginal wall
- · Seamless, flexible skin for practice of speculum placement
- Soft, flexible and patent nulliparous cervix allowing hysteroscopy
- · Pap test for cervical screening
- Soft realistic hysteroscopy uterus presenting a cyst and 3 surgically removable polyps
- Uterine appendages and round ligament of uterus are represented
- Ectopic pregnancy can be simulated and visualized during the laparoscopy
- Fallopian tubes patency can be tested and 3 settings are possible: Both fallopian tubes are patent
   One fallopian tube is patent the other occluded
  - Both fallopian tubes are occluded
- Unilateral ovarian cyst can be installed in the trainer and be surgically removed
- The bladder can be simulated full or empty to make the palpation of the structure possibly restricted
- Urethra built for catheterization simulation with CH 14 catheter
- · Patent rectum for early cancer screening

#### > AVAILABLE SOON!

#### Delivery content:

- Hysteroscopy Laparoscopy Trainer
- Hysteroscopy Uterus with 3 polyps and a cyst
- Bladder System
- 1 Ectopic Pregnancy
- 2 Ovarian Cysts
- 6 Polyps
- Fallopian Tubes (spare parts)
- Gynecologic Examination Wedge
- Lubricant (2 x 250 ml)

M-1021607

Consumables	Item No.
Polyps (9) Ovarian Cysts (4) Set	M-1021657
Fallopian Tubes Set	M-1021655
Ectopic pregnancies Set	M-1021656
Replacement parts	
Laparoscopic Abdominal Cover	M-1021608
Hysteroscopy Uterus	M-1021609
Vagina Insert	M-1021600

#### Polyps in Hysteroscopy Uterus

3 polyps surgically removable





Laparoscopy Accesses 3 accesses anatomically accurate

Speculum Incertion Realistic vaginal canal resistance





**Bimanual Palpation** SKIN*like*<sup>™</sup> highquality silicone for an ideal simulation

# > ADD-ON GYNECOLOGIC OPTIONS FOR YOUR HYSTEROSCOPY & LAPAROSCOPY TRAINER P92 FOR MORE FEATURES

#### Uteri Set

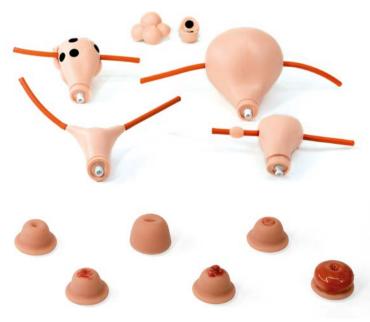
Multiple interchangeable uteri to teach specific skills to all training level. Set of 4 uteri including:

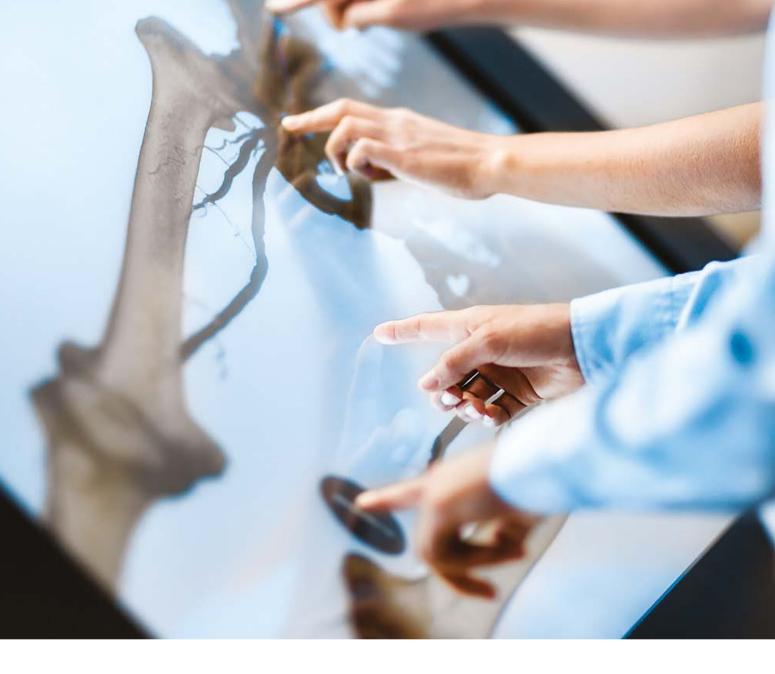
- Normal anteverted uterus
- Bicornate uterus
- Stretched uterus with removable myomas
- Big size uterus (13 cm large, 11 cm high)
- M-1021595

#### **Cervices Set**

Train vaginal examination with easily interchangeable cervices with normal and abnormal anatomy variations. (Cervices only compatible with uteri from the Uteri Set M-1021595).

- Set of 6 uteri including:
- Nulliparous or para 0
- Multiparous
- Cervical erosion (ectropion)
- Cervical dysplasia
- Carcinoma
- Barrel-shaped carcinoma
- M-1021593





# SECTRA EDUCATION - YOUR INTERACTIVE SOLUTION

# Medical Education and Clinical Training. Now at your fingertips!

**SECTRA Education** offers two different types of multi-touch screen designed for **interactive learning and teaching.** The software includes a 3D Anatomy Atlas and a library of real clinical cases. You can easily expand the library from your own DICOM data to add your own teaching cases. Through a simple subscription system users can connect to **SECTRA Education Portal**, a cloud based portal, where teachers and students have access to an extensive library of cases, providing a wide variety of clinical content from across the globe. Through SECTRA's collaborative network, institutions can share cases and knowledge with other SECTRA users from around the world online in a public space, or in a private space for the cases you do not want to share.

SECTRA 3D Trauma is an additional module available for the planning and teaching of Orthopedic Surgery and can also be used for patient demonstrations.

### First year Educational Portal Membership included free with each purchase of SECTRA Table or Board!

# Virtual Dissection from Anatomy to Histology

SECTRA is a great addition to dissection courses or to supplement other clinical based approaches to teaching. Virtual dissection with SECTRA allows teaching institutions to increase the exposure to anatomy problem based learning and hands-on practice for all students and allows them to perform dissections repeatedly without damaging a cadaver or needing supervision. Both the SECTRA Table and SECTRA Board provide great platforms for both teaching and collaborative learning. While connected to the SECTRA Education Portal, users can easily visualize a broad spectrum of clinical images (the platform is fully DICOM compatible), such as CT or MRI stacks or real-time generated 3D volume models, ultrasound, radiology or high resolution digital histology images. Using the Table and Board is intuitive and fun, something we should not lose sight of in today's high pressure learning environments.



### SECTRA Hardware: SECTRA Board or SECTRA Table – Your Choice!

The **SECTRA Table** with its 55" multi-touch screen is particularly suited to collaborative teaching and learning but can also be tilted at various angles to accommodate groups of varying sizes and configurations. It is also freely movable on wheels. The **SECTRA Board** is designed to facilitate larger audiences with an impressive 84" screen and additional whiteboard functionality. The board can be mounted on a wall or on a stand for free standing applications. Both, the table and the board, can be attached to further outputs for display on other devices.

SECTRA BOARD	SECTRA TABLE
84" InGlass <sup>™</sup> touch screen	55" touch-capacitive screen
4K resolution	Full HD resolution
PowerPoint viewer	PowerPoint viewer
Whiteboard functionality	Stand with wheels
Can be wall-mounted or stand (stand not included)	Adjustable height and screen orientation
Dimensions: 195 x 119 x 10 cm without a stand ; 118 kg	Dimensions: 79,5 x 118,5 x 90 cm; 220 kg
M-1020930	M-1019814



MORE INFORMATION NEXT PAGE

# SECTRA EDUCATION PORTAL AND MEMBERSHIP

SECTRA Education Portal is a cloud based teaching platform with a growing library of premium teaching material, to access SECTRA Education Portal, you need a membership. A free one-year membership subscription is included with each purchase of a SECTRA Table or SECTRA Board.

SECTRA Education Portal allows you to store and share real patient cases and DICOM compatible images for educational purposes with your students and medical staff. The platform is specially designed for the SECTRA Table and the SECTRA Board and is developed out of the SECTRA PACS software already used in hospitals world-wide for managing radiology and other DICOM data. SECTRA Education Portal provides the possibility to share data with other hospitals and universities around the globe or amongst other departments within your own institutions.

Users can either access SECTRA Education Portal from a SECTRA Terminal (SECTRA Table or SECTRA Board), their own laptops/desktops as well as from mobile devices such as smartphones and tablets (iOS, Android).

#### Import and visualize any DICOM data from any device



#### > Note: The software can only be purchased in combination with SECTRA Table or SECTRA Board

#### Advantages of the SECTRA Education Portal Membership

- First year membership included free with each purchase of the SECTRA Table and SECTRA Board
- Access to premium teaching content from top institutions around the globe
- Private Data Storage in the cloud for own private cases and data
- · Cloud Service to share cases across departments and locations
- Growing database of shared real-life anatomical cases contains cases from across the globe
- · Automatic and secure daily backups of your content
- Automatic upgrades to the latest software release
- Access, create, and edit Education Portal content on multiple devices
- Student accounts available for Education Portal access

#### **Purchasing Options**

Hardware	Software	Item Nr.
Sectra Table	+ 1 year Education Portal*	M-1020934
Sectra Board	+ 1 year Education Portal*	M-1020935
Sectra Table	+ 3 year Education Portal*	M-1020936
Sectra Board	+ 3 year Education Portal*	M-1020937
Sectra Table	+ 5 year Education Portal*	M-1020938
Sectra Board	+ 5 year Education Portal*	M-1020939

\* 3 and 5 year renewals terms for Education Portal Licenses. Other licensing forms available to satisfy local needs. Financing available.

#### Also included with each SECTRA Table / SECTRA Board: Terminal License

1 Terminal License to prepare teaching content, teach classes or study at a SECTRA Table or SECTRA Board

#### **Teacher Licenses**

3 Teacher Licenses to allow remote preparation of teaching content, lectures or class material (Windows PC)

#### Student Licenses

5 Student Licenses to allow students to remotely access teaching material (Android and iOS)

Additional combinations of Student and Teacher licenses are available. Kindly get in touch with our customer service to discuss your needs:

Teacher Accounts:	50
Student Accounts:	500



 First year Education Portal Membership included for free with each purchase of SECTRA Table or Board.



# OPTIONAL available on request: SECTRA 3D TRAUMA ORTHOPEDIC SURGERY PLANNING TOOL

SECTRA Table provides an optional add-on for 3D pre-operative planning. The planning system offers a set of tools aimed at clinical training and pre-operative planning of trauma cases. These tools allow users to interactively evaluate and discuss different cases and strategies, making the table ideal for surgical training.

#### Features:

- Hide Hide anatomical structures irrelevant to the damaged area that may obscure the trauma site
- Reposition Align fragments automatically by placing landmarks
- Explode Separate fragments in order to study them separately
- Template Import 3D templates from CAD drawings
- Distances Measure distances in 3D space



# Philipps-University, Marburg – First in Germany to introduce Sectra Education Table

Since 2012, students at Philipps-University in Marburg, Germany have been using SECTRA in lectures, seminars and preparation courses. Professor Weihe, head of the Institute of Anatomy and Cell Biology was immediately convinced that SECTRA could improve anatomical training. Through virtual preparation, the students get important theoretical and practical insights in preparation before their first real body autopsy.

According to Professor Kinscherf, Deputy Head of the Anatomical Institute, SECTRA would become an integral part of the anatomy courses for students of all medical and human biology disciplines. He further affirms that the comprehensive 3D View makes it possible to visually recognize and understand injuries. The interaction with virtual bodies promotes anatomical and physiological understanding and results in a better trained staff for a long-term increase in efficiency and safety in the health care system.

#### Other reference Customers:

- Karolinska Institute, Sweden
- Zürich University, Switzerland
- Edinburgh University, United Kingdom
- Linköping University, CMIV, Sweden
- Université Claude Bernard Lyon, France
- Paracelsus Medical University, Austria
- St Petersburg Oncology Hospital, Russia
- University of Virginia, Unite States
- Universidad del Valle de México Saltillo, Mexico
- Peking University People's Hospital, China
- Baghdad Medical College, Iraq
- University of British Columbia, Canada

Please contact the 3B Scientific Customer Service Team for more information and to schedule a personal product demonstration! Phone: +49 (0)40 739 66-0 • e-mail: info@3bscientific.com



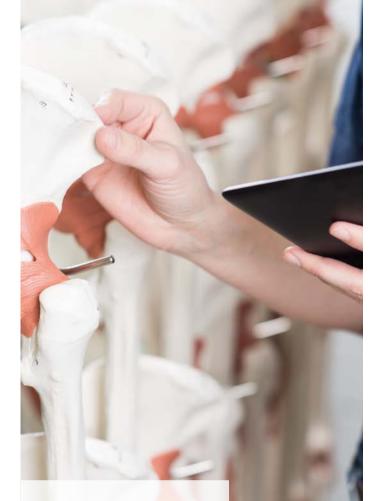
# HUMAN ANATOMY

3B Scientific has been setting quality standards in manufacturing didactic material for medical education since 1948.

Today, the brand is represented in over 120 countries worldwide with local offices in Brazil, China, France, Germany, Hungary, Italy, Japan, Russia, South Korea, Spain, Thailand, Turkey, United Kingdom and USA.



3B Scientific® Human Skull models now come with magnetic connections for easier disassembly. See page 186 for more details. Many more models come with convenient magnets – they are marked throughout the catalog with this icon.



The quality standards upheld in every 3B Scientific<sup>®</sup> product are guaranteed by permanent and uncompromising controls.



3B Scientific offers you the highest level of service and product quality that you can always depend on. The production of our 3B Scientific® anatomy models, simulators and trainers is backed by the newest findings in medical sciences and educational techniques.

#### A wide selection of products is available to fit your exact needs:

- All life-size skeletons and some soft tissue models are cast from real specimens
- Made from extremely durable materials for everyday use
- Designed and developed in Germany for medical professionals

Precise anatomical details are hand painted to show intricate structures such as muscle and nerve fibres. These allow for easy identification in our detailed product manuals and learning cards whilst encouraging effective teaching and interactive study.

Only non-toxic material is used to create models for everyday, hands-on education. The casting process, from real specimens, guarantees realistic anatomical features and life-like textures. Our production processes ensure that our exacting standards are always maintained for every single bone, skeleton, model and simulator. This is backed by the 3B Scientific warranty.

3B Scientific is a member of the Worlddidac Quality Charter and its quality management is certified according to the standards of DIN EN ISO 9001.

> Each model is hand-finished by highly trained and skilled technicians to ensure a consistently high quality.

# NEW in human anatomy

GPI Anatomicals models that cover all medical areas are the latest addition to the 3B Scientific product range. The stock models cover a wide range of specialties for both humans and veterinary models. Nearly every part of the human anatomy is represented, from skin, bones and arteries to eyes, brain, kidneys, prostate, breast, lung and teeth. Suitable for small budgets these models are invaluable in facilitating patient education. Additionally all models can be customized to meet marketing needs in the pharmaceutical area.



#### < Meniscus Knee Model with 6 Tears

Full size normal right knee model demonstrating common meniscus tears. Condition shown includes: horizontal tear, flap tear, bucket handle, degenerative tear, radial tear, longitudinal tear. 16.5 x 6 x 15.2 cm **M-1019500** 

#### > 4-Stage Osteo Knee Model Set

Set of four knee models show the stages of the Osteoarthritic knee, reduced size, illustrating: degenerative joint disease (osteoarthritis); erosion to joint articular cartilage; progression of degenerative joint disease; osteophytes (bone spurs) at the articular surfaces. Advanced stage knee is articulating for additional view of joint. 7.6 x 4.44 x 14 cm **M-1019502** 

#### < Mini Muscled Joint Set

Set of four, reduced size (approximately 50% of stock models), joint models of the hip, elbow, shoulder and knee (does not contain the structures of the hand and wrist). M-1019518

#### > Muscled Hip with Sciatic Nerve

Full size normal right hip with proximal femur and lower lumbar vertebrae including: sciatic nerve, gluteus medius, gluteus minimus, iliacus, inferior and superior gemellus, obturator internus, piriformis and psoas muscles, articular capsule ligaments, L4-L5 with sacrum. 18.4 x 12.1 x 25.4 cm **M-1019505** 











#### < 4-Stage Vertebrae Model Set

4-Stage Vertebrae Model Set of four, full size two-piece vertebrae models - one each of the following conditions: normal, "bulging" herniated disc, bone and disc degeneration, and advanced osteoporosis with marked bone compression and bone spurs. 8.9 x 7 x 7.6 cm **M-1019512** 

#### > Artery Model

Artery Model features an oversized "Y" section of artery, with cut-away, showing gradual build-up of cholesterol deposits. 15.9 x 5.1 x 10.2 cm M-1019531

#### < Foot/Ankle - Plantar Fasciitis Model

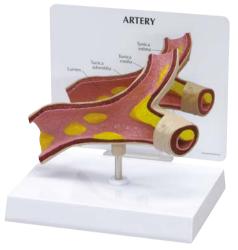
The Foot/Ankle - Plantar Fasciitis Model is a full size solid cast of ankle and foot bones features the plantar calcaneonavicular (spring) ligament with plantar fasciitis. Foot/ankle anatomy also includes: tibia, fibula, calcaneus, calcaneal (Achilles) tendon, deltoid ligament, lateral (collateral) ligament, plantar aponeurosis, cuneiform, phalanges, cuboid, navicular, and metatarsal bones. 22.9 x 7 x 10.2 cm **M-1019522** 

# > Artery sections (4) (oversized) - with Handle

Four-stage cross-section of an artery demonstrating atherosclerosis in which the narrowing of the artery is due to a build up of fatty tissue (cholesterol) and plaque. Four stages: normal artery, fatty streak, fibrous plaque, and blockage. The stages cause a decrease in blood flow, which can lead to a blood clot or thrombus. All stages rotate on hinge pin. 8.1 x 3.2 x 4.6 cm **M-1019532** 

#### < Deluxe Muscled Cervical Spine

"The Deluxe muscled Cervical Spine" is a full size model features brain stem, occipital bone, atlas and axis through C7, with herniated disc, T1 and T3. This model has a soft cerebellum and full nerve with right side brachial plexus. Muscles include suboccipital triangle, longus capitis, levator scapulae, scalenus medius posterior and anterior. The right first and second ribs are also featured and include cartilage.  $14 \times 16.5 \times 25.4$  cm **M-1019511** 

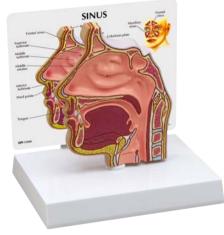


**4-PIECE ARTERY** 









#### < Skin Acne Model, 2-Sided

Enlarged two-sided skin cross-section model. The "acne" side displays three conditions: whitehead, blackhead and pustule/cyst. The reverse side illustrates normal skin anatomy. 15.2 x 5.7 x 10.2 cm **M-1019568** 

#### > TMJ Model

Temporomandibular Joint (TMJ) model, demonstrating the problematic conditions associated with the joint capsule. Emphasis on the disc, surrounding bone inflammation, and also the effects on the teeth, (cracks, chips, cavities, and characteristics of bruxism). 15.2 x 15.2 x 16.5 cm M-1019541

#### < Sinus cross section

The Sinus model is a full size cut-away normal model depicts a near median section through the nose and nasal passages. Details include nasal cavity, soft and hard palate, uvula, eustachian tube and pharyngeal tonsil. Reverse side shows ethmoid and maxillary sinus cavities. 11.4 x 1.6 x 13.3 cm

M-1019537

#### > Clear Human Jaw with teeth model

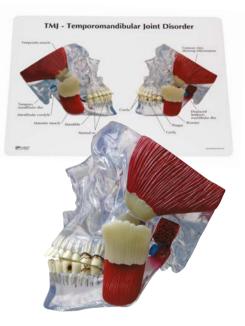
Full size hinged clear cast jaw to allow viewing of roots. Healthy side shows normal dentition and occlusion. Affected side shows multiple pathologies, including: super eruption, apical alveolar abscess with caries, periodontal disease, lateral abscess, abfraction, irregular root curvature, impacted canine, erosion, fractured tooth, horizontal impact, radicular pulpitis, root canal with crown, internal resorption, attrition, external resorption of root, implants, and fractured root. 7.1 x 6.4 x 6.4 cm

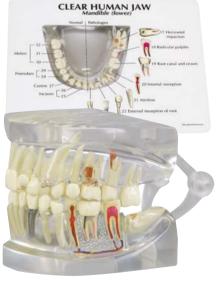
M-1019540

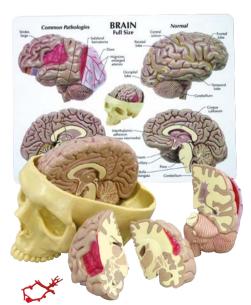
#### < Brain Model

Full size segmented brain model features half normal side and three-piece sectioned pathology half, as well as Circle of Willis with aneurism. The brain, which sits inside a partial skull, features the following pathologies which are also illustrated on a two-sided education card: alcoholism, Alzheimer's, aneurism, depression related tumor, seizure related tumor, migraine, multiple sclerosis, Parkinson's disease, stroke, and subdural hematoma.

12.7 x 17.1 x 12.7 cm **M-1019542** 













#### < Prostate Model

Complete Prostate Model includes six full size prostates. Conditions shown include: normal prostate; normal size prostate with hard nodule below right lobe surface; prostate with enlarged right lobe; enlarged prostate, symmetrical surface, slight median furrow; enlarged prostate, hard nodule below right base surface; enlarged prostate with hard irregular surface and seminal vesicle involvement. 22.2 x 13.3 x 2.5 cm **M-1019544** 

#### Rectum cross section (oversize) with pathologies

One and one half times life size cut-away model displaying ulcerative colitis, internal and external fistula, internal and external hemorrhoids, annular cancer, sessile polyp, submucosal abscess, skin tag, pedunculated polyp, supralevator abscess, ischiorectal abscess, cryptitis, diverticulum, condyloma acuminatum, fissure and condyloma latum. 14 x 6.4 x 17.8 cm

M-1019557

#### < Obesity Model

We typically think of fat in terms of how it makes us look on the outside, but this cross-sectional model of the hips cleverly turns the issue inside-out. Pear and Apple shaped bodies in two cross-sections of the hip area. The Pear shape is referred to as "lower body fat". This is mainly composed of subcutaneous fat. The Apple shape is referred to as "intra-abdominal fat". Intra-abdominal fat can be composed of visceral and subcutaneous fat. Illustrating effects from obesity such as compression from visceral fat on the colon, common iliac artery and veins, ureter, small intestine, femoral nerve, etc. The education card depicts an Apple, Pear, and a normal section of the same areas with callouts. Each half of the model is approx. 8.9 x 15.2 x 8.9 cm M-1019566

#### > 4-Piece Bronchus Model

The 4-piece Bronchus model is a four stage cross-section of the bronchus demonstrating the tissue changes occurring in asthma and chronic bronchitis. Four stages: normal bronchus, hypersecretion of the mucous gland, swelling with lymphoid aggregations and smooth-muscle spasm. The model includes: cartilage, mucous glands and plug, spiraling smooth muscles, and the fibroelastic connective tissue and epithelial layers of the bronchus. All stages rotate on hinge pin.  $9.4 \times 3.8 \times 4.4$  cm **M-1019547** 









#### < Hypertension Set

The Hypertension Set includes a miniature brain, eye, heart, kidney and artery models. Education card illustrates effects associated with hypertension: ocular pathologies, artherosclerosis, arterial plaque, kidney failure and stroke.

16.5 x 12.7 x 27.9 cm **M-1019572** 

#### > Type II Diabetes Set

The Type II Diabetes Set includes miniature brain, eye, heart, kidney, artery, pancreas, neuron, and foot models. Education card illustrates effects associated with Type II Diabetes: stroke, ocular pathology, hypertensive heart disease, hardening of the kidney, hardening of the arteries, insulin resistance, neuropathy, and foot ulcerations. Model display stands 10" tall. Models are reduced size, 22.4 x 15.9 x 24.4 cm **M-1019573** 

#### < Thyroid Model

Set of four average size thyroids and one larynx. Models show normal thyroid, Hashimoto's thyroiditis (lymphocytic thyroiditis), Graves' disease, papillary carcinoma and the following structures: hyoid bone, thyroid membrane, thyroid cartilage, cricoid cartilage, and trachea. **M-1019548** 

#### > Clear Ear Model

The Clear Ear Model is a full size model of human ear is clear to aid viewing of ear canal, tympanic membrane, stapes, incus, malleus and cochlea of the inner ear.  $7.9 \times 7.6 \times 5.8$  cm **M-1019527** 



DIABE



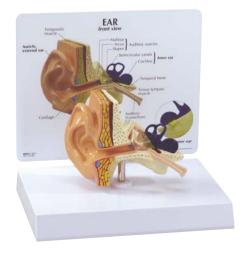


#### < Eye Model

Oversized normal Eye Model with cut-away to show inner anatomy, including optic nerve, disc, macula, retina, central retinal artery and vein. Lens and cornea are removable. 12.7 x 7.6 x 10.2 cm **M-1019533** 

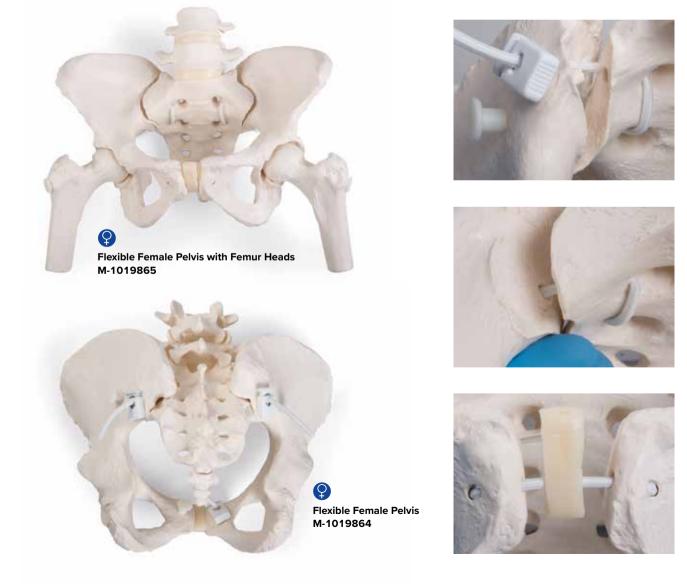
#### > Ear Model

This Ear Model is a full size normal model shows semi-circular canals and cochlea of the inner ear, auditory ossicles from the middle ear, tympanic membrane, temporal and tensor tympani muscles.  $9.5 \times 6.4 \times 7$  cm **M-1019526** 



# NEW in human anatomy

3B Scientifics new "Bungee" pelvic bone models are naturally cast from a female pelvis. All the pelvic bones are flexibly mounted and can be easily disassembled. Available with or without femur heads, these models perfectly demonstrate the articulation of the pelvic joints. Highly suitable for patient education as well as being a useful learning tool for midwives and in the areas of Obstetrics, Gynaecology and Orthopaedics.



# **SKELETON MODELS**





# Magnetic connections for easy, hands-on demonstrations

#### Stan the Classic Human Skeleton Model

The Classic Skeleton Model Stan has been the standard of quality in hospitals, schools, universities, and laboratories for over 50 years. Stan is the most affordable full-size skeleton of this quality available anywhere, ideal for active use in teaching and demonstrations. This human skeleton model is easy to handle, **anatomically correct** (cast from real specimen) and economically priced.

#### All 3B Scientific human skeleton models offer highest quality in workmanship and materials!

- Life-size and realistic weight
- Top quality cast from real specimens
- Extremely accurate in every detail, final assembly carried out by hand
- Made from a durable, unbreakable synthetic material
- 3 part assembled skull with magnetic connections
- · Limbs can be removed quickly and easily
- Movable joints for demonstration purposes
- On a stable metal stand with 5 wheels for secure transfer from room to room
- Transparent dust cover included
- Developed in Germany

# High quality human skeleton models, cast from a real specimen

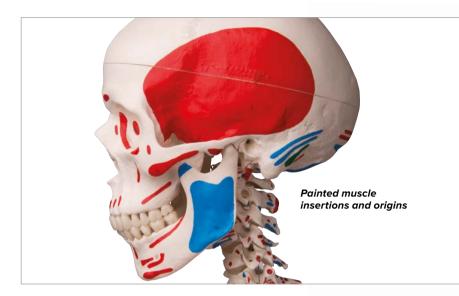
Stan on Pelvic Mounted Roller Stand 176.5 cm; 9.57 kg M-1020171

Stan on Hanging Stand (Hanging Stand shown on page 155) 192.5 cm; 8.77 kg M-1020172

Recommended: Heavy Duty Protective Cover, Black Protect your investment with our heavy-duty protective cover. Suitable for all 3B Scientific full-size skeletons. M-1020761







## Max the Classic Skeleton

with Muscle Insertions and Origins This skeleton contains all the standard benefits of a 3B Scientific® Skeleton **plus painted muscles**, to demonstrate the structural interaction between bones and muscles. It depicts over 600 structures of medical/anatomical significance including muscle origins (red) and insertions (blue) on the left side as well as hand numbered bones, fissures and foramina on the right side.



### Max got muscle!

#### All features exclusive to Max at a glance:

- Shows the structural interaction between bones and muscles
- Depicts over 600 structures of medical significance
- Painted muscle origins in red and insertions in blue
- · Hand numbered muscles, bones, fissures and foramina for easy identification



# Demonstrate the structural interaction between muscles and bones with Max

**Max on Pelvic Mounted Roller Stand** 176.5 cm; 9.57 kg **M-1020173** 

Max on Hanging Stand (Hanging Stand shown on page 155) 192.5 cm; 8.77 kg M-1020174





Magnetic connections for easy, hands-on demonstrations

# Leo the Classic Skeleton with Elasticated Ligaments

This skeleton contains all the standard benefits of a 3B Scientific<sup>®</sup> Skeleton **plus ligaments** to represent the structural interaction between bones and ligaments. The elasticated ligaments on the major appendicular joints (shoulder, elbow, hip, and knee) are mounted on the right side.



### Leo is all about ligaments!

#### All features exclusive to Leo at a glance:

- Structural representation of interaction between bones and ligaments
- All ligaments are elasticated to show movement

Leo on Pelvic Mounted Roller Stand 176.5 cm; 10 kg M-1020175

> Demonstrate the interaction between bones and ligaments and realistic movement with Leo



Sam is your all-purpose teaching tool for all levels of student or patient education



#### Sam the Classic Skeleton with Elasticated Ligaments, Labels, Muscle Insertions and Origins

This skeleton contains all the standard benefits of a 3B Scientific<sup>®</sup> Skeleton **plus a bendable vertebral column, ligaments, painted muscles and over 600 labeled and identified** 

structures. Sam's fully flexible vertebral column allows you to demonstrate all natural postures,

including the movements of the skull and head joints. The unique combination of a flexible vertebral column, muscle origins and insertions, numbered bones, flexible joint ligaments, and a disc prolapsed between the 3rd and 4th lumbar vertebrae allow you to display over 600 structures of medical/anatomical interest with this top of the line model. Comes complete with an identification guide.

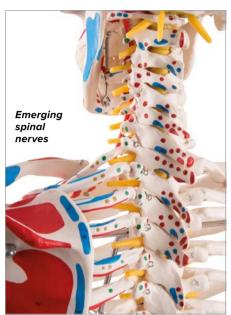
#### Sam the Super Skeleton does it all:

- Over 600 hand-numbered, labeled details, includes detailed guide for easy identification
- Hand-painted muscle origins and insertions
- Flexible spine and ligaments for natural postures (can be removed from stand)
- Slipped disc between the 3rd and 4th lumbar vertebrae
- Protruding spinal nerves and vertebral arteries
- Full flexibility of limbs on left side, right side has full flexibility of knee and hip with limited flexibility of elbow and shoulder

#### Sam on Pelvic Mounted Roller Stand

176.5 cm; 10 kg **M-1020176** 

Sam on Hanging Stand (Hanging Stand shown on page 155) 192.5 cm; 10 kg M-1020177







# Demonstrate natural movement and realistic joint mechanisms with Phil

#### Phil the Physiological Skeleton with Realistic Joint Mechanisms

Phil is unique in his near life-like realisation of the joint mechanisms. He allows you to demonstrate the inward and outward rotation of the arms and legs and the extension and flexion of the knee and elbow joints. The flexible spine allows for natural movement (lateral inclination, movement and extension, rotation). The bones of the hands are wire mounted to demonstrate their natural positions. The foot bones are mounted flexibly to enable movability.

The shoulder blades rotate along when the arms are raised. Even the restricted mobility of the iliosacral joint and the sacrococcygeal joint can be demonstrated.

# Phil moves! This skeleton has all the features of the Standard Classic Skeleton Model Stan, plus:

- The flexible spine allows for natural movement
- Near life-like realization of the joint mechanisms

Phil on Hanging Stand 192.5 cm; 9.6 kg M-1020179

# Demonstrate movement and fix any posture for detailed explanations with Fred

#### Fred the Flexible Skeleton with Extremely Bendable Spine

Fred's spine can be bent to mimic any natural human movement. Once flexed, it remains fixed in position to demonstrate correct and incorrect posture or various pathological conditions. In addition, all skull movements can be demonstrated. Spinal nerve exits and vertebral arteries are shown as well as a dorso-lateral disc prolapse between the 3rd and 4th lumbar vertebrae. Fred has all the standard benefits of a 3B Scientific Skeleton.

Fred on Pelvic Mounted Roller Stand 176.5 cm; 9.6 kg M-1020178



Magnetic connections for easy, hands-on demonstrations



# Demonstrate life-like movement unseen in any other skeleton model with Frank

#### Frank the Functional Skeleton for Life-like Movement

This unique functional Skeleton comes on a hanging stand and features a flexible assembly of all joints, allowing you to perform the individual movements in a nearly life-like way. You can even demonstrate the complex motions of the upper extremity. The shoulder blades rotate along when the arms are raised. Graphically demonstrate the position of the radial and ulnar bones during inward and outward rotation of the lower arm. The flexible spine allows for natural movement (lateral inclination, flexion and extension, rotation). Even the restricted mobility of the iliosacral joint and the sacrococcygeal joint can be demonstrated.

# Frank's moves are truly unique. This skeleton contains all the features of the Standard Classic Skeleton Stan, plus:

- The flexible assembly of all joints lets you perform life-like movement
- Complex motions of upper extremities can be demonstrated

Frank on Hanging Stand 192.5 cm; 9.6 kg M-1020180



Magnetic connections for easy, hands-on demonstrations



### > DISASSEMBLED SKELETON MODELS FOR DETAILED STUDY OF INDIVIDUAL BONES



#### Disarticulated Full Skeleton,

#### Numbered with Muscle Origins and Insertions

This disarticulated 3B Scientific<sup>®</sup> Skeleton is hand-painted and numbered to show muscle origins in red and muscle insertions in blue on the left side. The disarticulated skeleton's bones and bony structures such as fissures, foramina and processes are hand-numbered on the right side. The skull is detachable into 3 parts for detailed anatomical study. Consists of 179 pieces.

- Both hands and feet are wire mounted
- Vertebral column strung on thin, nylon wire
- Multilingual product manual to identify over 600 numbered anatomical structures
- Supplied in a sturdy partitioned cardboard storage box 48.5 x 27 x 42.5 cm; 6 kg **M-1020158**



#### Disarticulated Full Skeleton, Wire Mounted Hand/Foot

One hand and foot on wire, the others loosely articulated. Supplied in a sturdy partitioned storage box. 48.5 x 27 x 42.5 cm; 4.8 kg M-1020157

This high quality skeleton replica is great for any in-depth study of the human skeleton and scientific anatomy studies.



Disarticulated Half Skeleton, with Loose Hand/Foot Complete with 3-part skull, sternum, hyoid and spinal column. 48.5 x 27 x 42.5 cm; 4 kg M-1020156



Disarticulated Half Skeleton, with Wire Mounted Hand/Foot Complete with 3-part skull, sternum, hyoid and spinal column. 49 x 43 x 26.5 cm; 4 kg M-1020155

### > SPACE SAVING MINIATURE SKELETON MODELS

#### Shorty the Mini Skeleton

- Top of the range miniature human skeleton models
- 3-part removable skull (skullcap, base of skull, mandible)
- Removable arms and legs
- Specially mounted hip joints to demonstrate natural rotation of the hips
- Made from durable, unbreakable plastic, hand assembled
- Can be taken off of the base when required

A. Shorty the Mini Skeleton, Pelvic Mounted 88 cm, 1.5 kg M-1000039

Shorty the Mini Skeleton, Hanging Stand (not shown)
On hanging stand that can be placed on the floor or hung on the wall.
94 cm; 1.5 kg
M-1000040

B. Shorty with Painted Muscles, Pelvic Mounted
Muscle origins (red) and insertions
(blue) on the left half.
88 cm; 1.7 kg
M-1000044

#### Shorty with Painted Muscles, Hanging Stand (not shown) On hanging stand that can be placed on the floor or hung

on the wall. 94 cm; 1.7 kg M-1000045

Mini Skeletons: Incredible detail and fully articulating joints!



#### MICROanatomy<sup>™</sup> Bone Structure Model, enlarged 80 times

This model depicts a section of lamellar bone, showing the typical structure of tubular bone. Planes are shown in cross and longitudinal section

through all levels of the bone and bone marrow. Typical elements are easily identified and help in understanding the structure and function of the Haversian systems. This representation graphically illustrates the individual bone components including spongy and compact substance, endosteum, cortical substance, osteocytes, Volkmann and Haversian canals.

26 x 19 x 14.5 cm; 0.8 kg **M-1000154** 

#### **Cancellous Bone**

The model shows the spongy bone inside the bone. Its filigree architecture is determined by influences such as pressure, bending and torsion. Using innovative micro CT technology, we have managed to reconstruct an exact 3-dimensional copy of a piece of cancellous bone from an original and enlarge it 100 times. 17 x 17 x 23 cm; 0.29 kg **M-1009698** 



# SKELETON COMPARISON GUIDE

# Find the perfect skeleton model: Use this guide to compare the different features of the 3B Scientific<sup>®</sup> skeleton models.

		۶		D			Ð			
Model	Stan	Stan, hanging	Max	Max, hanging	Leo	Sam	Sam, hanging	Fred	Phil	Frank
Item No.	M-1020171	M-1020172	M-1020173	M-1020174	M-1020175	M-1020176	M-1020177	M-1020178	M-1020179	M-1020180
Page	150	150	151	151	152	153	153	154	154	155
Top quality natural casting	1	J	J	J	<b>J</b>	<b>J</b>	1	J	<b>v</b>	1
Durable, unbreakable synthetic material	1	J	J	J	<b>v</b>	√	√	1	√	√
Assembly done by hand	1	1	1	J	1	1	√	1	V	1
Life-size	1	1	1	1	1	√	1	1	1	1
Close to the actual weight of approx. 200 bones	1	J	J	J	V	~	~	J	V	V
Magnetic skull	1	1	1	1	1	✓	1	1	~	1
3 part magnetic skull that can be taken apart	1		1		V	V		1		
Transparent dust cover included	1	1	1	V	√	√	√	1	✓	✓
Metal stand with 5 wheels	1	1	1	1	√	√	√	1	√	✓
Metal hanging stand with 5 wheels		1		1			1		√	1
Rotating ulna and radius	1	1	1	1	~	✓	✓	1	~	~
Soft intervertebral discs	1	1	1	1	✓	✓	√	1	~	✓
Flexible spine						✓	✓	1	✓	~
Muscle insertions and origins, hand-painted			J	V		~	~			
Numbered bones, fissures, foramina & processes			J	V		1	~			
L3-L4 slipped disc						√	1	1		
Flexible ligaments					1	✓	✓			
Spinal nerves and vessels						✓	√	1		
Flexible assembly of all large joints									~	~
Almost natural movement of the hip									~	1
Flexible assembly of the xiphoid process									√	✓
Natural movement of the shoulder & shoulder blades										1
Natural movement of the knee cap										1
Flexible assembly of the foot bones									√	



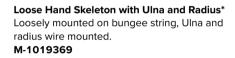
# **INDIVIDUAL BONE MODELS**



#### Benefits of flexibly mounted bone models:

The flexible bungee mounting enables the individual bones to be pulled back into their natural positioning after having been pulled apart for close up studies. The entire model will remain in its natural anatomical positioning when not pulled apart.





# Loose Foot and Ankle Skeleton (elastic bungee mounted)\*

This loose foot and ankle skeleton comes mounted with elastic bungy for a flexible effect. The foot skeleton includes portions of the tibia and fibula with incredible detail cast from a real specimen. **M-1019358** 

\*Unfortunately it is not possible to specify left or right version, you will randomly receive a left or right sided model. However this may be possible for large quantities, please call us for further details.

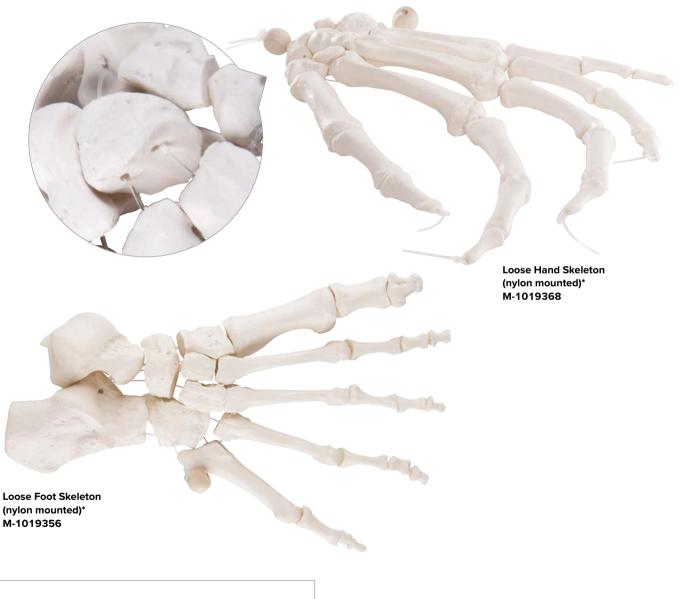


### Benefits of nylon mounted bone models:

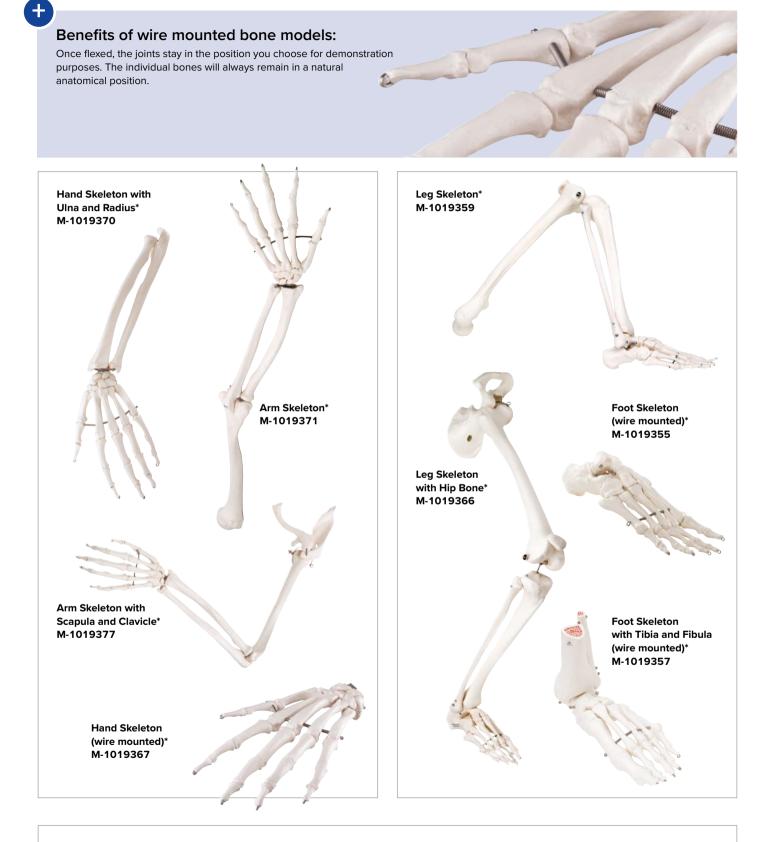
Ŧ

The individual bones hold together in their anatomically correct location, but are loosely enough mounted for individual studies.





\*Unfortunately it is not possible to specify left or right version, you will randomly receive a left or right sided model. However this may be possible for large quantities, please call us for further details.



\*Unfortunately it is not possible to specify left or right version, you will randomly receive a left or right sided model. However this may be possible for large quantities, please call us for further details.

A. Ulna\* M-1019373

B. Radius\* M-1019374

C. Humerus\* M-1019372

D. Fibula\* M-1019364

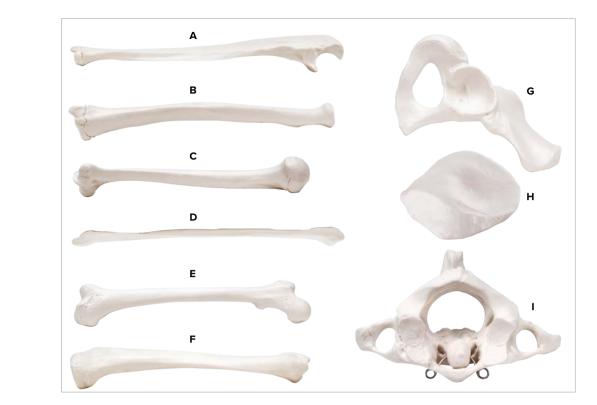
E. Femur\* M-1019360

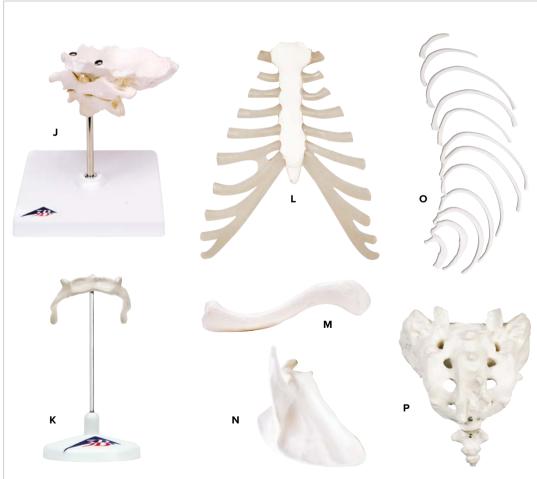
F. Tibia\* M-1019363

G. Hip Bone\* M-1019365

H. Patella\* M-1019362

I. Atlas and Axis, wire mounted M-1000140





J. Atlas and Axis, with occipital plate Elastically mounted together on removable stand. M-1000142

K. Hyoid Bone Mounted on stand. M-1000143

L. Sternum with Rib Cartilage Replica human sternum with rib cartilage. M-1000136

M. Clavicle\* M-1019376

N. Scapula\* M-1019375

O. Ribs\* 12 individual ribs of one side, unmounted. M-1000137

P. Sacrum and Coccyx Assembled M-1000139

# HAND & FOOT MODELS

### > HIGH QUALITY, DURABLE, AND AFFORDABLE!

3 levels of amazing detail!

#### Structural Anatomy of the Hand, 3-part

Right down to the fingerprints, this full-size model **shows amazing detail**. The superficial and internal structures of the hand including bones, muscles, tendons, ligaments, nerves, veins, and arteries (superficial and deep palmar arches) are all present. The palmar aponeurosis and plate of the superficial flexor tendons are removable.

#### Analyse the palmar surface through three increasingly deeper levels:

- 1st level: palmar aponeurosis
- 2nd level: exposes the flexor retinaculum, superficial palmar arch, tendons of the flexor digitorum, and lumbricales muscles
- 3rd level: uncovers the deep palmar arch, and deep layer of muscles, nerves, tendons, and ligaments

28.5 x 13 x 6.5 cm; 1.2 kg **M-1000349** 

#### Hand Skeleton Model with Ligaments and Muscles, 4-part

This high quality anatomically correct hand model with ligaments and muscles is great for detailed study of the hand and lower forearm.

# All bones, muscles, tendons, ligaments, nerves, arteries, and veins are featured:

- Dorsal side: extensor muscles and portions of the tendons at the wrist passing under the extensor retinaculum
- Palmar face is represented in three layers, removable for detailed study of the deeper anatomical layer (median nerve, superficial palmar arch)
- Deepest anatomical layer shows the intrinsic muscles and deep palmar arterial arch

33 x 12 x 12 cm; 0.4 kg **M-1000358** 





#### Hand Skeleton Model with Ligaments and Carpal Tunnel, 3-part This 3-part hand skeleton model shows the **anatomical detail of the ligaments and tendons** found in the hand, wrist, and lower forearm. The interosseous membrane between the radius and ulna is shown along with the bones of the hand.

#### Removable parts:

- Palmar side of the hand: flexor retinaculum
- Structures of the carpal tunnel: flexor retinaculum, median nerve and tendons

30 x 14 x 10 cm; 0.3 kg **M-1000357** 



#### Hand Skeleton Model with Elastic Ligaments

This single-part model shows the anatomy of the ligaments in the hand in detail. The elastic ligaments allow for the demonstration of the flexibility of wrist and fingers. The carpals (ossa carpi), the metacarpals (ossa metacarpi) and finger bones (ossa digitorum manus) are shown as osseous structures. In the distal area of the forearm, the radius and the ulna are represented. 14 x 10 x 28 cm; 0.24 kg

M-1013683



### > REMOVABLE LIGAMENTS AND MUSCLES

#### Foot Skeleton Model with Ligaments and Muscles, 6-part

This anatomically detailed model of the foot and lower leg can be disassembled into 6 parts for detailed study of the following structures: bones, muscles, tendons, ligaments, nerves, arteries, and veins. The frontal view of the foot model features the extensor muscles of the lower leg. The tendons can be followed on their passage under the transverse and crucial crural ligaments all the way to their insertion points. In addition all tendon sheaths of the foot area are visible.

#### On the dorsal portion of the foot the gastrocnemius muscle is removable to reveal deeper anatomical elements. The sole of the foot is represented in three layers:

- The first removable layer displays the flexor digitorum brevis
- The second removable layer consists of the quadratus plantae,
- the tendon of the flexor digitorum longus, and the flexor hallucis muscle • The third layer reveals even deeper anatomical details of the foot 23 x 26 x 19 cm; 1.1 kg

M-1019421

3 layers reveal the internal anatomy of the foot!

#### Foot Skeleton Model with Ligaments

High quality anatomical replica of the human foot and ankle, showing all important ligaments and tendons including the Achilles and peroneus longus tendons of the ankle. The foot skeleton consists of the foot bone and lower portions of the tibia and fibula, including the intraosseous membrane found between them. 23 x 18 x 30 cm; 0.6 kg M-1000359

### > TOOLS FOR PATIENT EDUCATION



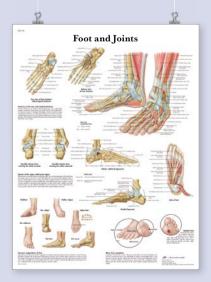
**A. Hollow Foot (Pes Cavus)** 13 x 23 x 10 cm; 0.5 kg **M-1000356**  ls. B. Normal Foot (Pes Normal)

13 x 24 x 9 cm; 0.4 kg

M-1000354

**C. Flat Foot (Pes Planus)** 12 x 24 x 10 cm; 0.4 kg **M-1000355** 

### Add a chart as a constant visual education tool! More options on page 265 or visit 3bscientific.com



Foot and Joints Anatomy Chart Laminated. 50 x 67 cm M-1001490



Hand and Wrist Anatomy Chart Laminated. 50 x 67 cm M-1001484



You might also be interested in the Diabetes Foot Models on page 261!

# JOINT MODELS



with Removable Muscles

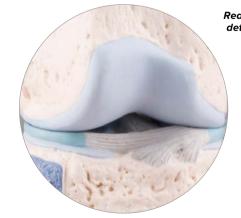
> Being part of the high quality series of deluxe joint models, the knee joint model is extremely durable and made of nonhazardous material.

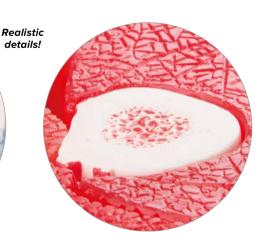
#### Knee Joint

The 12 parts can quickly be removed for easy demonstrations both in medical training and patient education. The muscles and muscle portions can be taken off for detailed study of the deeper anatomical layers. Colour-coded and raised areas indicate the muscle origin and insertion points on the femur, tibia, and fibula. Additionally, the model shows parts of the fibular and tibial collateral ligaments.  $33 \times 17 \times 17$  cm; 0.9 kg **M-1000178** 











t

# Removable muscles for advanced anatomical studies:

- + Muscles can be taken off to study origins and insertions
- + All muscles can be studied individually
- + Muscle positioning can be trained
- + Highly realistic colouring of bone and muscles
- + Muscular origins and insertions are raised and colour-coded
- + Removable parts for the study of the deeper anatomy
- + High quality, non-hazardous material for long lasting models





#### Shoulder Joint with Rotator Cuff, 5-part

This model comprises the upper half of the humerus, the clavicle and the shoulder blade. The muscles of the rotator cuff (subscapularis muscle, supraspinatus muscle, infraspinatus muscle, teres minor muscle) are displayed. By removing the four individual muscles, all movements of the shoulder joint can be performed:

- Abduction
   Inward rotation
- Adduction
   Outward rotation
- 18 x 18 x 24 cm; 0.85 kg

M-1000176

#### Hip Joint with Removable Muscles, 7-part

The model shows the right hip joint of an adult male with the individual muscles as well as the muscle origins and insertions on the femur and the hip bone. The hip muscles have been mounted on their corresponding regions of origin and insertion and are removable. The relationship of the muscular system and skeletal system are represented clearly with this human hip joint model. 18 x 32 x 18 cm; 1.9 kg

M-1000177

#### Elbow Joint

#### with Removable Muscles, 8-part

Right elbow of a male with individual muscles plus muscular origins and insertions on the humerus, radius, and ulna. The muscles can easily be attached to and removed from the corresponding areas of origin and insertion.

25 x 41 x 25 cm; 1.74 kg **M-1000179** 



#### **Deluxe Functional Joint Models**

You can use these high-quality, functional joint models to demonstrate physiological movements. Thanks to the attached ligaments you can perform the following movements: abduction, anteversion, retroversion, internal and external rotation. The color of the natural-cast bones is extremely realistic thanks to a special coloring process. The cartilage on the joint surfaces is marked in blue. All deluxe functional joint models are mounted on a base for easy display.

**A. Functional Shoulder** 22 cm; 0.41 kg **M-1000160**  **B. Functional Hip** 32 cm; 0.56 kg **M-1000162** 

R

**C. Functional Knee** 32 cm; 0.55 kg **M-1000164**  **D. Functional Elbow** 33 cm; 0.285 kg **M-1000166** 

D

### > DEMONSTRATE MOVEMENT

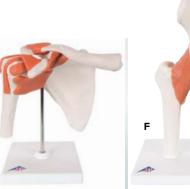
#### **Classic Flexible Joint Models**

The classic series of high quality, life-size, functional joint models features the same look and size as the deluxe models but without the natural bone coloring process and the blue paint representing cartilage.

E. Flexible Shoulder					
16 x 12 x 20 cm					
M-1000159					

**F. Flexible Hip** 17 x 12 x 33 cm **M-1000161**  **G. Flexible Knee** 12 x 12 x 34 cm **M-1000163**  **H. Flexible Elbow** 12 x 12 x 39 cm **M-1000165** 



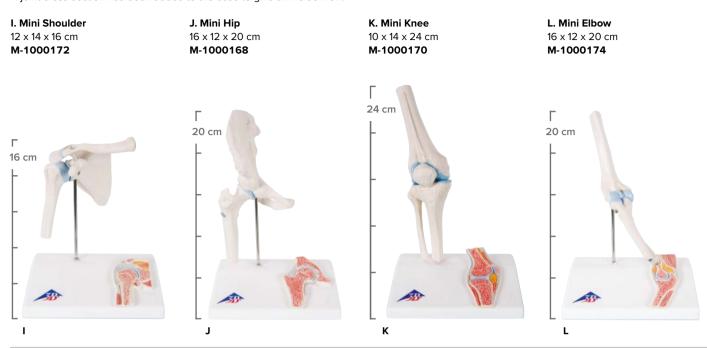




Е

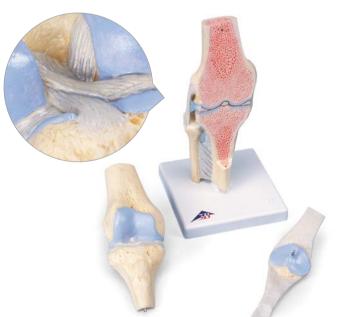
#### Mini Joint Series with Cross-Section

The mini joint series has been reduced to half the natural size while keeping all of the functionality. A joint cross-section has been added to the base to give an inside view.



### > ENHANCE PATIENT EDUCATION WITH DETAILED PATHOLOGICAL MODELS





#### Femoral Fracture and Hip Osteoarthritis

At half natural-size, this model shows the right hip joint of an elderly person. Shown are the femoral fractures that occur most commonly as well as typical wear and tear and osteoarthritis of the hip joint. Additionally, a frontal section through the femoral neck is shown in relief on the base. 14 x 10 x 22 cm: 0.3 kg

M-1000175

#### Sectional Knee Joint Model, 3-part

Demonstrate disorders of the knee joint with this full size model. Shows a healthy right knee joint with parts of femur, tibia and fibula, as well as the ligament system and the patella with parts of the femoral tendon. Can be disassembled to reveal internal structures. Mounted on base.  $12 \times 12 \times 24$  cm, 0.5 kg

M-1000180

# **VERTEBRAE MODELS**

- +
- **3B Scientific® vertebrae models are:**
- + Cast from real specimens
- + Anatomically correct
- + Highly detailed
- + Made of extremely durable material



#### 5-Stages of Vertebral Degeneration

The model illustrates degenerative changes to the vertebral bodies and intervertebral discs of the lumbar spine in various degrees. Based on the original cast of a human lumbar spine, even finest bone structures are accurately depicted. From top to bottom, the model shows the stages of degeneration starting with the healthy Lumbar vertebra (L1), stages of prolapsed discs, all the way to strong degenerative changes and bony constriction in L5. The model can be disassembled easily into vertebrae and intervertebral discs. Supplied on base.

22 cm; 0.5 kg **M-1000158** 





### > DEMONSTRATE THE LOSS OF BONE MASS!

#### Magnetic Osteoporosis Model

Compare osteoporotic to normal thoracic vertebrae. Shows reproductions of osteoporotic 11th and 12th thoracic vertebrae with narrower intervertebral disc located on the left of the stand. Two corresponding healthy vertebrae with intervertebral disc are provided on the right side. The upper vertebra is divided in the middle and can easily be opened thanks to magentic connections to show the cut surfaces to demonstrate sintering and osteophytes. A detailed illustration on the base depicts two 3D micro CT images obtained from biopsies of both a healthy and an osteoporotic bone.

14 x 9 x 10 cm; 0.2 kg **M-1000182** 

#### Osteoporosis Model (3 Vertebrae)

Consists of three medially divided lumbar vertebrae with intervertebral discs. **Top:** healthy bone structure **Middle:** osteoporotic bone structure **Bottom:** advanced osteoporotic bone structure with flattened plates, deformation and decreased mass. For detailed study the vertebrae can easily be removed from the stand. 16 cm; 0.25 kg **M-1000153** 

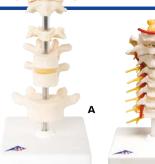


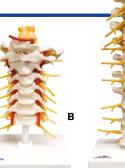
#### 4-Stage Degenerative Lumbar Set

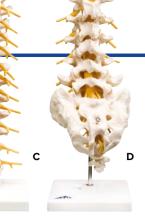
These life-size models show 4 stages of lumbar degeneration of L4 and L5:

- 1. Normal disc and bone
- 2. Facet Syndrome and a herniated disc
- 3. Thinning disc and the beginning of bone spurring
- 4. Seriously degenerated disc with bone fusing
- Mounted on wooden base.
- 8.5 cm; 0.5 kg
- M-1005866









#### **Prolapsed Lumbar Section**

The lumbar model includes a prolapsed intervertebral disc between the 3rd and 4th lumbar vertebrae. On removable stand. 34 cm; 0.55 kg M-1000150

#### A. 6 Mounted Vertebrae

Consists of atlas, axis, cervical vertebra, two thoracic vertebrae with intervertebral discs and one lumbar vertebra. On stand, removable. 22 cm; 0.46 kg M-1000147

#### B. Cervical Section

Real life replica consisting of occipital plate, the 7 vertebrae with discs, cervical nerves, vertebral arteries and spinal cord. Flexibly mounted on stand. 19 cm: 0.3 kg

M-1000144

#### 5 Mounted Vertebrae (not shown)

Consisting of atlas, axis, cervical, thoracic and lumbar vertebra. Loosely threaded on nylon. **M-1000148** 

#### **C.** Thoracic Section

Consisting of the 12 thoracic vertebrae with discs, thoracic nerves and spinal cord. Flexibly mounted on stand. 32 cm; 0.5 kg M-1000145

#### **D. Lumbar Section**

High quality model of the 5 lumbar vertebrae with discs, sacrum with flap, coccyx, spinal nerves and spinal cord. On removable stand. 34 cm; 0.6 kg

M-1000146





#### A. Lumbar Spinal Column with Prolapsed Intervertebral Disc

Natural casts of L4 and L5 lumbar vertebrae with paired spinal nerves, spinal cord and two interchangeable intervertebral discs. The discs illustrate either central or dorso-lateral prolapse. Dissects into 5 parts. On removable stand.

13 cm; 0.27 kg **M-1000149** 

#### B. 3 Lumbar Vertebrae

Flexibly mounted with spinal nerves and spinal cord. 11 cm; 0.15 kg M-1000151

#### C. 2 Lumbar Vertebrae with Prolapsed Disc

With prolapsed disc. Flexibly mounted with spinal nerves and spinal cord.  $9 \times 11 \times 9$  cm; 0.15 kg

#### M-1000152

#### Anatomical Lifting Manikin

This functional figure provides a graphic demonstration of how the human spinal column reacts when heavy objects are lifted correctly and incorrectly. If the correct posture is used, the spine is undistorted. Incorrect posture exhibits obvious stress and distortion to the lumbar spine. Anatomical illustrations of the spine are featured on the base. Includes booklet with detailed information.  $28 \times 21 \times 21.5$  cm; 1.4 kg **M-1005101** 

# 3B BONE*like*<sup>™</sup> MODELS



#### Set of 24 3B MV Vertebrae Models

This set is a worldwide unique original **anatomical replica of human vertebrae** with the most precise illustration of even the **finest anatomical structures**, exhibiting excellent quality. The vertebrae set includes the 7 cervical, 12 thoracic and 5 lumbar vertebrae.

- Made of 3B BONE/*ike*<sup>®</sup> material, feels and looks like real bones
- Realistic weight
- Excellent as a substitute for real bones for medical teaching purposes and patient consultation
- Each vertebra is labeled for identification purposes
- Supplied in transport and storage case with individual compartments for all 24 vertebrae

41 x 40 x 12 cm; 2.4 kg **M-1000156** 

An excellent way to study the detail of the anatomy of the human spine!

#### What is 3B BONE*like*™?

3B Scientific<sup>®</sup> BONE*like*<sup>™</sup> material looks and feels like real bone. Each bone is a unique original cast of natural human bone with realistic weight, feel and appearance.

- Represents even the finest anatomical structures with realistic texture, colour, and the porous characteristics of real human bone
- Makes an excellent alternative to real bone
- Great for use in medical teaching settings and in patient education

#### 3B BONE*like*<sup>™</sup> Vertebrae Sets

These realistic, high quality casts of original bones show even the finest anatomical structures in great detail. Supplied on a base.  $30 \times 21 \times 6$  cm; 0,2 kg

#### A. 3B BONE*like*<sup>™</sup> Cervical Vertebrae – Set of 7 M-1000021

#### B. 3B BONE*like*<sup>™</sup> Lumbar Vertebrae – Set of 5 M-1000155









> Excellent substitute for a real human spine!

### đ

#### 3B BONElike<sup>™</sup> Vertebral Column Model

This anatomical replica of the human spine is a flexible, mounted, **true-to-life model of the human vertebral column** in excellent 3B BONE/*ike*<sup>™</sup> quality. The spine is an original reproduction of all anatomical details with realistic weight. It consists of the male pelvis and occipital bone. Occipital bone and atlas can be detached individually from the spine for detailed study. Stand is sold separately, please see M-1000132 on page 180 to add to your order. 85 cm; 1.5 kg

M-1000157



#### 3B BONE*like*<sup>™</sup> Child's Vertebral Column Model

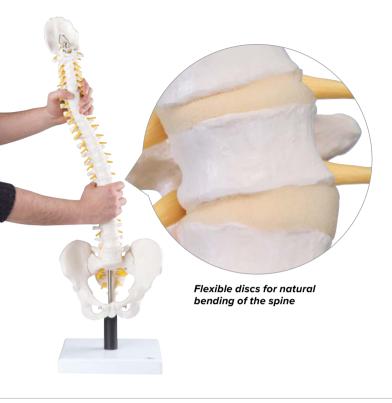
This true-to-life anatomical replica of the vertebral column of a child around 5 years of age is especially interesting for those working in the areas of anatomy, paediatrics, orthopaedics and paediatric radiology. The unique material of the spine model makes it almost visually indistinguishable from a real vertebral column.

# It is particularly useful in studying the phases of bone growth:

- Vertebrae partially incomplete development of vertebral bodies and vertebral arches
- Sacrum as yet incomplete fusion of individual sacral vertebrae. This commences at around the age of 15
- Pelvis still open Y cartilage as main growth plate of the acetabulum. The hip, pubic and ischial bone parts are not yet connected (didactically fixed with brackets in the model). These fuse around the age of 14-16.
   M-1000118

3B BONE*like*<sup>™</sup> Models | **HUMAN ANATOMY** 175

# SPINAL COLUMN MODELS



### > FLEXIBLE POSITIONING

#### Highly Bendable Spine with Soft Intervertebral Discs

This high quality spine model shows how the discs deform during normal and abnormal positioning, It is a valuable tool to demonstrate pathological conditions such as scoliosis, lordosis, kyphosis, or subluxations. Herniation of the vertebral column can also be demonstrated with compression. The model comes complete with spinal cord and spinal nerves. The special mounting allows a clear view during demonstration and display of the spine. Delivered on removable stand.  $26 \times 25 \times 90$  cm; 3 kg

M-1008545

Complete comparison guide for all spine models on page 180. Choose the right model for your individual needs.



Fully flexible spine models for hands-on demonstrations!

All models of the classic series are of the highest quality, made of an extremely durable material for everyday use. They are anatomically correct and precisely detailed, and show even the finest structures. Flexibly mounted for more realistic demonstrations.

# Other features of all spines in the Classic Series include:

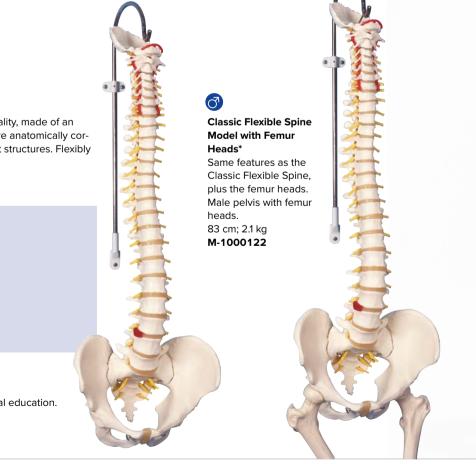
- + Full pelvis and occipital plate
- + Fully flexible mounting
- + L3-L4 disc prolapsed
- + Spinal nerve exits
- + Cervical vertebral artery

### 7

#### **Classic Flexible Spine Model\***

Affordable spine model, extremely popular in medical education. Male pelvis. 74 cm; 1.8 kg

M-1000121



# **Didactic Spines**

Coloured for simplified education – visible even from a distance in the classroom!

#### **Didactic Spine Model**

The 5 different sections of the spinal column are differentiated by colour on these models:

- 7 cervical vertebrae
- 12 thoracic vertebrae
- 5 lumbar vertebrae
- Sacrum
- Coccyx

Didactic colours help to easily follow explanation about the human spine, even from a distance. They are extremely durable models of high quality.

#### Other great features of all spines in the **Didactic Series include:**

- Full pelvis and occipital plate
- · Fully flexible mounting throughout spine
- L3-L4 disc prolapsed on spine
- Spinal nerve exits
- Cervical vertebral artery
- Didactic colouring
- Male pelvis

ð

Didactic Flexible Spine Model with Femur Heads\* Male pelvis with femur heads 82 cm; 2.1 kg M-1000129

Didactic Flexible Spine Model (not shown)\* Male pelvis 74 cm; 1.9 kg M-1000128

Painted

\*Stands sold separately. Please see page 180 for details.





#### đ

#### **Classic Flexible Spine Model with Femur Heads and Painted Muscles\***

Didactic benefit: muscle origins (red) and insertions (blue) are hand-painted on left innominate, femur and vertebrae. Otherwise same features as the Classic Flexible Spine.

- Male pelvis
- · Painted muscle origins and insertions on left innominate, femur and vertebrae

83 cm; 2.1 kg M-1000123

# Advanced Spines

### For advanced studies, includes a sacral opening and an exposed brain stem

In addition to all features of the Classic Series, the Deluxe Series has a sacral opening and exposed brain stem for advanced studies of the anatomy of the human spine.

# Other features of all spines in the Deluxe Series include:

- Sacral opening and exposed brain stem
- Extremely durable material for everyday use
- Full pelvis and occipital plate
- Fully flexible mounting throughout spine
- L3-L4 disc prolapsed on spinal column
- Spinal nerve exits
- Cervical vertebral artery
- Male pelvis

# đ

Deluxe Flexible Spine Model with Femur Heads\* Male pelvis with femur heads 83 cm; 2.1 kg M-1000126

Deluxe Flexible Spine Model (not shown)\* Male pelvis 74 cm; 1.8 kg M-1000125

# **Highly Flexible Spines**

+

Special mounting with flexible core adds stability for active hands-on use!

The spine models in the Highly Flexible Series are **specially mounted on a flexible core, adding extra stability.** This makes them ideal for active, hands-on use and demonstrations of movement, great for medical and patient education. These spines are extremely durable.

#### More features of spines in the Highly Flexible Series include:

- Complete pelvis and occipital plate
- Full flexible mounting throughout spine with added core for more stability
- L3-L4 disc prolapsed on spinal column
- Spinal nerve exits
- Cervical vertebral artery
- Male pelvis



Deluxe Flexible Spine Model with Femur Heads and Painted Muscles\*

- Male pelvis with femur heads
- Hand-painted muscle origins and insertions on left innominate, femur and vertebrae

83 cm; 2.1 kg M-1000127

đ

Highly Bendable Spine Model with Femur Heads\* Male pelvis with femur heads 83 cm; 2.3 kg M-1000131

Highly Bendable Spine Model (not shown)\* Male pelvis 74 cm; 1.4 kg M-1000130

# **Classic Spine with Ribcage**

Demonstrate the connection and interaction of the spine with individual ribs!

đ

#### **Classic Flexible Spine Model with Ribs and Femur Heads\***

Flexible spine model with ribs show the interaction of individual ribs with the spine and associated structures.

#### This model includes the following features:

- Movable mounted femur heads
- Complete ribcage with individual mounted ribs
- Full pelvis and occipital plate
- Fully flexible mounting
- L3-L4 disc prolapsed
- Spinal nerve exits
- Cervical vertebral artery

• Male pelvis

83 cm; 3 kg

M-1000120







(+

Easily demonstrate the relationship between bones and muscles

# đ

#### **Muscled Spine Model\***

This Muscled Spine Model was designed by internationally acclaimed anatomy sculptor John Mitchell. Use it to quickly and easily demonstrate the relationship between bones and muscles in the spine. The muscles are made of soft polyurethane rubber and are attached with a sturdy elastic cord to the spine with anatomically

correct positioning. 81 x 40 x 12 cm; 1,5 kg **M-1018411** 

# SPINE COMPARISON GUIDE

	Highly Bendable Spines			Classic Spines				Didactic Spines	
Item No.	M-M- 1008545	M-M- 1000130	M-M- 1000131	M-M- 1000123	M-M- 1000124	M-M- 1000121	M-M- 1000122	M-M- 1000128	M-M- 1000129
Page	176	178	178	177	177	176	176	177	177
Top quality natural casts	1	V	1	1	1	1	1	1	√
Assembled by hand	1	1	1	1	1	1	1	1	1
Durable, unbreakable plastic	1	1	1	1	1	1	1	1	1
Natural size	1	1	1	1	1	1	1	1	1
Soft intervertebral discs	1	1	1	1	1	1	1	1	1
L3-L4 prolapsed disc		V	1	1	1	1	1	1	1
Highly bendable	1	1	1						
Flexible	1	1	1	1	1	1	1	1	1
Muscle insertions and origins, hand-painted				1					
Spinal nerves and vessels	1	V	1	1	1	1	1	1	1
Realistic movement of the hip			1	1			1		1
Male pelvis	1	V	1	1		1	1	1	1
Female pelvis					1				
With Ribcage									
With Femur Heads			1	√			1		√
3B BONE <i>lik</i> e <sup>™</sup> Material									

# **Miniature Models**

### > Anatomically correct and flexible at a fraction of the size. Perfect for your desk or as a gift!

#### Mini Human Spinal Column

The miniature model includes occipital plate of the skull, intervertebral discs, and pelvis. It is mounted flexibly to demonstrate natural movements and pathological changes.

Delivered without stand. 40 cm M-1000042

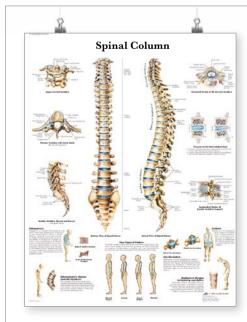
Delivered with stand. 44 cm M-1000043



The stand can be placed on the floor or desk, or mounted on a wall. Measures 86 cm tall on a 24 cm square base. 0.75 kg

#### M-1000132

Advanced Spines			Classic Spines with Ribcage	Muscled Spine	3B BONE <i>lik</i> e <sup>™</sup> Spines		Miniature Spines	
M-M- 1000126	M-M- 1000127	M-M- 1000125	M-M-1000120	M-M- 1018411	M-M- 1000118	M-M- 1000157	M-M- 1000042	M-M- 1000043
178	178	178	179	179	175	175	180	180
1	√	1	✓	√	1	1	1	1
1	1	1	✓	√	1	1	1	1
√	1	1	✓	√	1	1	1	1
√	1	1	1	√	1	1		
1	1	1	1	√	1	1	1	1
1	1	1	1	√				
~	1	1	1	√		1	1	1
	1							
1	1	1	1	√			1	1
~	1		1					
~	1	1	1	√		1	1	1
			1					
~	1		1	√				
					1	1		



#### Spinal Column Chart

The anatomy of the human spine is illustrated beautifully in this informative poster. The spinal column is depicted in detail and common pathologies are outlined, including osteoporosis, scoliosis, and disc herniation. Laminated, 50 x 67 cm **M-1001480** 

Please go online to 3bscientific.com to browse the large selection of medical charts, or see pages 264-269.



## > HIGHLY ROBUST

# **PELVIS & PELVIC SKELETON MODELS**



#### Male Pelvis with Ligaments, Vessels, Nerves, Pelvic Floor and Organs, 7-part

Extensive educational tool for a better understanding of the comprehensive anatomy of the male pelvis. For close up study, the pelvis splits into two halves and the following parts can be removed: Left half of the fifth lumbar vertebra, rectum, bladder, prostate and penis.

- · Includes bones, ligaments, vessels, nerves, pelvic floor muscles, and external sex organs
- All structures are anatomically accurate in every detail
- Can easily be taken apart using magnetic connections
- Extremely durable material, comes on sturdy base

21 x 28 x 31 cm; 3.12 kg

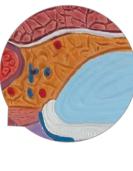
Can be taken apart

M-1013282



#### > IDEAL FOR THE CLASSROOM OR DOCTOR'S OFFICE!







Life-Size Female Pelvis, 2-part



#### Life-Size Male Pelvis, 2-part

The male pelvis anatomy model is shown in median section. One half of male genital organs with bladder, shown at the normal position in the male pelvis. The rectum is removable for a more detailed study of the male pelvic anatomy. Delivered on baseboard offering the possibility to be mounted to the wall. 41 x 31 x 17 cm; 2.5 kg

M-1000282

genital organs with bladder and removable rectum. The female pelvis is delivered on baseboard offering the possibility to be mounted to the wall for easy display. 41 x 31 x 20 cm; 2.2 kg







Like M-1013281 but without the ligaments. The left half of the fifth lumbar

vertebra is held together by magnets and can also be removed.

#### Male Pelvis with Ligaments, 2-part

This 2-part model is a natural cast of a male, bone pelvis with ligaments. It shows the following structures in great detail: both hip bones, pubic symphysis, sacrum and coccyx, and the fifth lumbar vertebra with intervertebral disc. Part of the cauda equina is visible in the vertebral canal. A median section has been placed through the fifth lumbar vertebra, the sacrum and the coccyx, so that the pelvis, which is connected by practical magnets, can be split easily into two halves.

19 x 28 x 24.5 cm; 1.66 kg M-1013281



Ģ

Female Pelvic Skeleton

ing movable symphysis.

19 x 25 x 10 cm; 0.9 kg

M-1000134

Consisting of hip bone, sacrum with

#### PELVIC SKELETON MODELS

- + Natural casts
- + Extremely detailed
- + Made of virtually unbreakable plastic



Male Pelvis, 3-part

M-1013026

19 x 28 x 24.5 cm; 1.35 kg

#### Male Pelvic Skeleton

Consisting of hip bone, sacrum with coccyx and two lumbar vertebrae. 18 x 28 x 23 cm; 0.8 kg M-1000133



#### Female Pelvic Skeleton

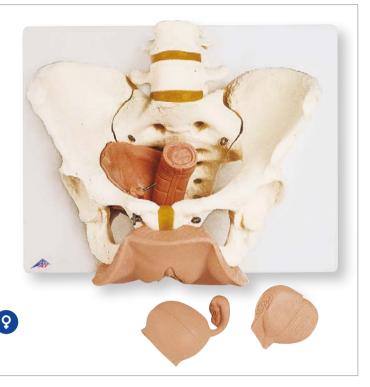
with Movable Femur Heads This realistic pelvic skeleton model consists of hip bone, sacrum with coccyx and 2 lumbar vertebrae as well as movable symphysis. 30 x 30 x 20 cm; 1.2 kg M-1000135

#### > MOULDED FROM DURABLE AND SOFT VINYL!

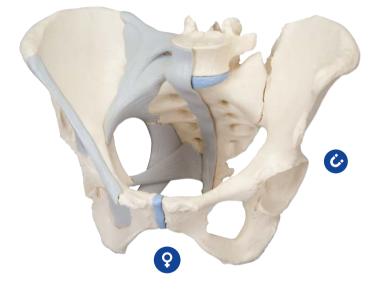
#### Female Pelvis Skeleton with Genital Organs, 3-part

This model is especially suitable for **studying the position of female genital organs in the pelvis**. It consists of a natural cast female pelvis with a movable symphysis, hip bone, sacrum, coccyx, 4th and 5th lumbar vertebrae, and a female genital insert with rectum. The bladder and a portion of the uterus with one fallopian tube and ovary can be removed. The soft tissues are moulded from durable, soft vinyl.

Delivered on base. 33 x 26 x 18 cm; 2 kg **M-1000335** 



Ċ.



#### Female Pelvis with Ligaments, 3-part

This life-size model represents an original cast of a bony female pelvis with all major ligaments on the right side and shows all the details of the hip bones, the pubic symphysis, the sacrum and the coccyx, and the fifth lumbar vertebra with intervertebral disc. A midsagittal section through the fifth lumbar vertebra, sacrum and coccyx, allow both halves of the pelvis to be disassembled revealing a part of the cauda equina in the vertebral canal. The left half of the fifth lumbar vertebra is removable. 19 x 27 x 19 cm; 1 kg

M-1000286

**Female Pelvis, 3-part** Like M-1000286 but without ligaments. 19 x 27 x 19 cm; 0.9 kg **M-1000285** 

ç

#### > THE MOST COMPREHENSIVE FEMALE PELVIS MODEL!

#### Female Pelvis with Ligaments, Vessels, Nerves, Pelvic Floor, Organs, 6-part

This original cast of a female pelvis shows the topography of bones, ligaments, vessels, nerves, pelvic muscles and female genital organs in life-size. For close up study, the following parts can be removed and disassembled into two halves: rectum, uterus with fallopian tubes, ovaries and vagina. The pelvic floor includes partially removable external anal sphincter, external urethral sphincter, deep and superficial transverse perineal and bulbospongiosus. The pelvis can be disassembled though a midsagittal section (fifth lumbar vertebra, sacrum and coccyx) to reveal a part of the cauda equina in the vertebral canal.

Magnetic connections for fast demonstrations
Study of complex anatomical areas

made easy 19 x 27 x 19 cm; 1.6 kg

M-1000288

Ċ.

The pelvic muscles are shown in great detail

#### Female Pelvis with Ligaments, Muscles and Organs, 4-part

Q

This life-size model of a female pelvis represents detailed information about the topography of bones, ligaments, pelvic floor muscles and female pelvic organs. The right half shows the bones with pelvic ligaments and left half of the pelvis contains the muscles of the pelvic floor. A partially removable bulbospongiosus demonstrates the vestibular bulb and Bartholin gland. The removable, midsagitally sectioned female pelvic organs (urinary bladder, vagina, uterus and rectum) demonstrate the relationship to the muscles of the pelvic floor within its openings for urethra, vagina and rectum. 19 x 27 x 19 cm; 1.3 kg

Ċ.

# SKULL MODELS | Classic Skull Series

+

All 3B Scientific<sup>®</sup> human skull models have been cast from real specimens, guaranteeing life-like detail and anatomical precision. You will see even the finest structures in these durable models made for everyday use!

- + Anatomical detail and precision
- + Realistically cast dentition
- + Durable, non-toxic material
- + Manufactured for everyday use

Magnetic connections for easy, hands-on demonstrations

- Other features of all skull models of the classic series include: • Highly accurate representation of the fissures, foramina,
- Highly accurate representation of the fissures, foramin processes, sutures etc.
- Mandible is mounted on a spring to easily demonstrate natural movement
- High quality original human skull cast
- Handmade from hard, unbreakable plastic

## > LIFE-LIKE DETAIL!

#### Classic Skull, 3-part

The 3-part standard version skull is an excellent choice for basic anatomical studies or an attractive medical gift. It can be disassembled easily into the skull cap, the base of skull and the mandible.

20 x 13.5 x 15.5 cm; 0.6 kg **M-1020159** 



Surface detail





#### **Classic Skull with Numbered Details, 3-part**

In addition to the features of the classic skull, this version comes with hand-painted, numbered details: the different bones and features like the suture lines of the bony plates are highlighted for ease in identifying all important anatomical structures. This skull comes complete with a guide naming all numbered parts.  $20 \times 13.5 \times 15.5$  cm; 0.7 kg **M-1020165** 

#### **Classic Skull with Painted Muscle, 3-part**

In addition to all features of the classic skull, this version is didactically hand-painted to show the insertions and origins of the muscles on the left side of the skull. The cranial bones and structures are numbered on the right side. Altogether, over 140 anatomical details can be identified utilising this top quality model. The jaw hinges with a spring to simulate realistic movement. The detail and precision make it a great anatomy teaching tool!  $20 \times 13.4 \times 15$  cm; 0.7 kg **M-1020168** 



#### **Classic Skull with 5-part Brain**

The 5-part brain is midsagitally divided and is cast from an original specimen for anatomical accuracy and detail.

#### The left side of the brain can be disassembled into the following parts:

- Frontal and parietal lobe
- Temporal and occipital lobe
- Encephalic trunk
- Cerebellum
- 20 x 13.5 x 15.5 cm; 1.1 kg **M-1020162**





#### **Classic Skull with Opened Lower Jaw, 3-part**

In addition to all features of the classic skull, this version includes an opened lower skull, making it perfect for teaching dental anatomy. It is highly detailed, and the opened part shows the dental roots with vessels and nerves. The cranial bones, bone components, fissures, foramina and other structures are numbered for educational purposes. The cranial sutures are shown in colour, as are the meningeal vessels and venous sinuses. Over 100 features are identified in the accompanying product guide.

20 x 13.5 x 15.5 cm; 0.7 kg **M-1020166** 



Demonstrate the functions of masticatory muscles!

#### Classic TMJ Skull with Masticatory Muscles, 2-part

Ideally suited for patient education, allied health instruction, anatomy studies, and as a medical-legal visual aid. In addition to all features of the classic skull model, this version includes the masticatory muscles (masseter, temporal, medial and lateral pterygoid muscles). They are made of durable, elastic bands for functional demonstrations of movement of the jaw: jaw occlusion, the initial stage of jaw opening, and the movements of the mandible to the side and front. This makes the skull a valuable tool for demonstrations about temporomandibular joint disorders both for patients and students. The skullcap is removable and the model is cast from an original specimen, guaranteeing a highly accurate anatomical representation. 20 x 13.5 x 15.5 cm; 0.7 kg

M-1020169



# To see additional images and to zoom in on details, visit 3bscientific.com!

#### Classic Skull, Painted, with Opened Lower Jaw, 3-part

This deluxe version of the classic skull series combines the different features all in one! It is an extensive educational tool concerning the anatomy of the skull and includes the following features:

- Hand-painted muscle origins
   and insertions
- Opened lower jaw exposing dental roots, vessels and nerves
- Numbered parts for easy identification
- Highlighted suture lines of bony plates
- 3-part skull can easily be disassembled
- High quality, durable material for everyday use
- Movable lower jaw 20 x 13.5 x 15.5 cm; 0.7 kg

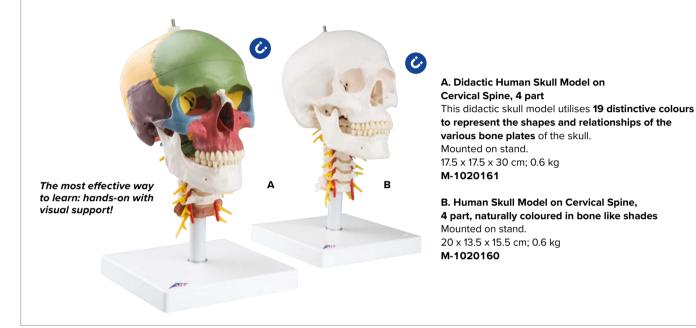


#### Human Skull Models on Cervical Spine, 4 part Flexibly Mounted on the Cervical Spine

(C1, C2 and C7 are coloured in the didactic version) to better show their relation. To complete this demonstration, the models also exhibit the hindbrain, spinal cord, spinal nerves of the cervical spine, vertebral arteries, basilar artery as well as the rear cerebral arteries.

#### Manufactured to the highest quality standards:

- · Anatomically precise cast from original human skull
- Handmade from extremely durable, non-toxic plastic
- Highly accurate representation of the fissures, foramina, processes, and sutures
- Magnetic connections: can easily be disassembled into skullcap, base of skull and mandible



#### Beauchene Adult Human Skull Models, 22 part

The human skull consists of many individual bones that gradually grow together as the development proceeds. This human skull kit is a natural cast that makes the complex anatomical structures of the skull easy to understand. The skulls can be taken apart into the following 22 bones:

- Parietal bone (left and right)
- Occipital bone Frontal bone
- Temporal bone (left and right)
- Sphenoid bone
- Ethmoid bone
- Vomer bone
- Zygomatic bone (left and right)
- Upper jaw (maxilla) with teeth (left and right)
- Palatine bone (left and right)
- Nasal concha (left and right)
- Lacrimal bone (left and right)
- Nasal bone (left and right)
- Lower jaw (mandible) with teeth



#### D. Beauchene Adult Human Skull Model – Bone Coloured, 22 part

This version of the 22-part Beauchene skull has the same features as the didactic version, but is coloured like natural bone. 21 x 14 x 16 cm; 0.7 kg M-1000068

#### **C. Beauchene Adult Human Skull Model – Didactically Coloured, 22 part** The 22 bones are depicted in 9 different didactic colours so that the individual skull bones are easy to distinguish.

21 x 14 x 16 cm; 0.7 kg

M-1000069

#### **188 HUMAN ANATOMY** | Skull Models





#### Deluxe Human Demonstration Dental Skull Model, 10 part Exceptional quality and anatomical detail!

The skullcap is removable and the base of the skull is mid-sagitally divided. The anatomy of the human skull is easy to learn and teach using this model.

## The model features the following details fitted with flaps that can be opened to view internal structures:

- Frontal sinus, perpendicular lamina and vomer can be opened to view the lateral nose wall and sphenoidal sinus
- Left side temporal bone can be removed and folded up in the area of the tympanic membrane
- Maxilla and mandible of the skull are opened to reveal the alveolar nerves
- Right side the temporal bone is opened to reveal the sigmoid sinus, the facial nerve canal and the semicircular ducts
- Right side flap at maxillary sinus and the right half of the mandible, so that the dental roots of the premolars and molars of the lower jaw can also be viewed

The natural occlusion and the individual removal and replacement of each tooth also make this skull especially interesting for dentists. This is a spectacular model whether you use it as a dental skull or for other purposes.

28 x 22.5 x 18.5 cm; 1.5 kg **M-1000059** 



#### Skull with Facial Muscles

Easily **demonstrate causes of temporo-mandibular disorders** and other dysfunctional disturbances of the masticatory muscles with this high quality skull model. It is **anatomically precise** and manufactured specifically to **withstand wear and tear from educational use**. The right half features the face and mastication muscles. They can easily be **differentiated by colour**. Cranium and m. masseter are easily detachable to reveal the structures underneath. The left side shows hand-painted muscle origins and insertions to **further clarify the structural interaction** of muscles and skull bones. The jaw is movable and due to the flexible musculature the **rudimentary chewing motion can be demonstrated**. Made in Germany and cast from an original human skull, using our highest quality material. 18 x 18 x 25 cm; 1.08 kg

M-1020181



#### Neurovascular Skull Model

This life size human adult skull comes on seven cervical vertebrae and is mounted on a sturdy stand. It is a valuable tool to demonstrate the anatomy and positioning of the arteries and the nerves on the skull. The skull cap is removable and reveals the main nerves and arteries on the floor of the cranium. With this skull, you can demonstrate the 12 cranial nerves (and their branches) that arise directly from the brain and pass through separate apertures in the skull.

17 x 16 x 30 cm; 1.3 kg **M-1005108** 



# 3B BONE*like*<sup>™</sup> material for unrivalled realism and detail!

#### 3B BONE/ike<sup>™</sup> Half Transparent Human Skull Model, 7-part

This worldwide unique and high quality didactic skull is a great tool to understand the anatomy of all structures inside the skull.

## The possibility to transfer the visible parts in the transparent half to the bony half give this skull an additional didactic value:

- Transparent side helps understand the internal anatomy of the skull
- Sinuses and arteries are marked in colour for easy identification
- Can easily be disassembled into 7 parts for close up study
- 3B BONE/ike<sup>™</sup> material looks and feels real

Through the transparent right half of the skull, you can easily locate the paranasal and the cranial sinuses, as well as the neck and face arteries, as all of these are colour-coded. Through the skullcap, the position of the brain and the course of the sinuses can be visualised. The periodontal pockets and tooth roots can be viewed through the transparent side of the jaw, which is mounted flexibly to demonstrate the masticator movements of the human skull. The skull is mounted on a cervical spine and can be disassembled into both halves of the skullcap, the left half of the base of skull, the nasal septum, the complete mandible and a brain half.

18 x 18 x 34 cm; 0.86 kg **M-1000064** 

#### 3B BONElike<sup>™</sup> Half transparent Human Skull Model, 8-part

One half of this skull is transparent and the other is bony. It offers a topographic comparison of structures that are not visible in other skull models. The teeth can be taken out and the outer masticatory muscles are represented on the bony half. Can be disassembled into both halves of the skullcap and base of skull, the nasal septum, the complete mandible and both masticator muscles.  $16 \times 14 \times 20.5$  cm; 0.54 kg

M-1000063

#### 3B BONElike<sup>™</sup> Human Bony Skull Model, 6-part

This version shows a complete skull in median-sagittal section.

#### It can be disassembled into two halves consisting of:

 the calvarium and the base of the skull
 the nasal septum and complete mandible
 For a demonstration of masticatory motion, the mandible is mounted flexibly.
 x 13.5 x 20.5 cm; 0.5 kg
 M-1000062





#### **Skull with Cleft Jaw and Palate**

This skull model depicts a male with a severe malformation of the left skull half with a cleft jaw and palate. The one-part skull has 29 teeth and is natural cast.

28 x 23 x 19.5 cm; 0.8 kg M-1000067



# Magnetic connections for easy, hands-on demonstrations



#### Foetal Skull Model

Natural cast of a foetal head in the 30th week of pregnancy showing the characteristics of prenatal development. The fontanelles, which become bone over time, are clearly visible on the skull. Sutures will form along the bony plates helping fuse the skull as the individual ages. Delivered on stand.

18.5 x 14.5 x 14 cm; 0.2 kg M-1000058

Foetal Skull Model, without stand (not shown) 14 x 9 x 9 cm; 0.15 kg M-1000057



#### Transparent Classic Human Skull Model, 3 part

A great addition to any educational collection! Use this unique transparent replica of the human skull to study internal structures!

- · High-quality original casts
- Skull is handmade of hard, unbreakable plastic
- Highly accurate representation of the fissures, foramina, processes, sutures
- Can be disassembled into Skull Cap, Base of Skull and Mandible
- A 5-part classic brain can be inserted into the skull.

See page 212 for details. 20 x 13.5 x 15.5 cm; 0.6 kg M-1020164



#### Glow in the Dark Skull Model

All anatomical details are not only true to life, but also glow in the dark! Great as a gift for those students or friends needing a flash of inspiration. 20 x 13.5 x 15.5 cm; 0.6 kg M-1020163



#### Mini Human Skull Model, 3 part

It precisely depicts the anatomical structures of the human skull in a manner that is true to detail and can be disassembled into skullcap, base of skull and mandible. 10 x 8 x 8 cm: 0.1 kg M-1000041

# MUSCULATURE

Г 180 ст



## đ

#### Life-Size Male Muscle Figure, 37-part

This **life-size** human muscular model shows the **deep and superficial musculature** of the entire body in great detail. The extraordinary accuracy of the human muscular system makes this masterpiece a unique tool for instructions even in large lecture halls. It is manufactured to precise anatomical detail, is made from a durable, non-toxic plastic and painted in didactic colours. Comes on a sturdy base, slightly raised for better visibility.

#### The following parts can be removed for close up study:

- Skull cap
- 6-part brain
- Eyeball
- Breast and abdominal wall
- Both arms
- 2-part larynx
- 2 lungs
- Diaphragm
- 180 x 110 x 50 cm; 53 kg **M-1001235**
- 2-part stomach
- Liver with gall bladder
- Kidney
- Whole intestine system
- Bladder half
- 2-part penis
- 10 muscles (Three arm and leg muscles, 2 thoracic muscles, sternocleidomastoid muscles and gluteus maximus)



Removable organs

## $\bigcirc \bigcirc$

#### 3/4 Life-Size Dual Sex Muscle Figure, 45-part

This muscle figure is the finest teaching tool available! Standing over 4 1/2 feet tall, this 3/4 life-size human replica depicts **deep and super-ficial musculature in amazing detail and realisitic colour** in addition to the body's major **nerves**, **vessels**, **tissues and organs** in exquisite detail. The internal organs are removable (45 parts in total) to reveal the **funda-mental interrelationships of human morphology**.

This **dual sex muscle figure** has interchangeable genital inserts and a female mammary gland as well as a detailed multilingual product manual identifying over 600 numbered structures, explained in the included guide. Hand-painted and mounted on a stable metal stand.

#### Includes the following features:

- 5 arm/ shoulder muscles
- 8 leg/ hip muscles
- 2-part removable heart
- 5-part head with removable brain
- 2-part removable lungs
- 2-part stomach

Removable 4-part male and 2-part female genital inserts Detachable arms, leg, head, and abdominal wall for detailed study

Hands-on anatomy education at its best: Easily remove the calvarium to view the 3-part removable brain. Look beneath the liver to reveal the gallbladder and bile duct. Peer inside the appendix, stomach lungs, heart or kidney. Remove and view the details of 13 different muscles of the arms and legs.

138 x 50 x 32 cm; 12.4 kg **M-1013881** 

## Ç

#### 3/4 Life-Size Female Muscle Figure, 23-part (not shown)

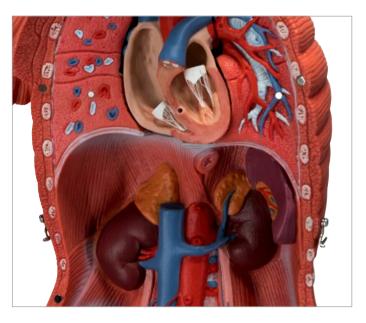
This Female Muscle Figure provides the same quality characteristics as the dual sex model above but is delivered without internal organs, brain, and male genitalia providing for unobstructed study of the human musculature.

#### The female muscle figure includes the following features:

- 5 arm/shoulder muscles
- 8 leg/hip muscles
- Detachable arms, leg, head and abdominal wall for detailed study
- 138 x 45 x 32 cm; 11.2 kg







## A space saving alternative with amazing detail at half life-size!

## 

#### 1/2 Life-Size Complete Dual Sex Muscle Figure, 33-part

This convenient and complete human musculature model is the perfect choice for thorough **demonstrations of human musculature and internal organs** where space is a concern. Exquisitely **hand-detailed and complete with 33 removable parts**, this human muscular figure represents the **finest quality at an affordable price**. Painted by hand in realistic colours, this human anatomy model comes complete with stand and detailed multilingual product manual.

#### Includes the following removable parts:

- 5 arm/shoulder muscles
- 8 leg/hip muscles
- 2-part heart
- 2-part brain
- 2 lungs
- · 2-part male and 2-part female genital inserts
- 2-part intestine system
- Detachable breast/belly covering and arms for detailed study
- Almost 400 numbered structures identified in the manual

84 x 30 x 30 cm; 4.95 kg

M-1019231

## Ç

#### 1/2 Life-Size Complete Female Muscle Figure, 21-part (not shown) Offering the same exceptional value as the dual sex version above, this version is delivered without internal organs, brain and male genitalia. $84 \times 30 \times 30$ cm; 4.1 kg

M-1019232

## > 1/2 LIFE-SIZE MODEL

## 0

#### Life-Size Dual Sex Human Figure, 39-part

This life-size, dual sex model facilitates an understanding of human anatomy like no other human anatomy model in the world! One half exposes the musculature, while the other shows the skin for a more realistic effect that puts the human touch back in. The figure can be disassembled easily to show the inner structures and organs in amazing detail.

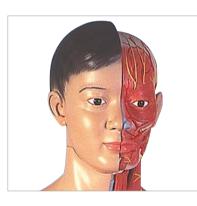
#### Altogether, 39 component parts can be removed:

- 2-part head
- Brain half
- M. Sternocleidomastoid
- M. Deltoideus
- M. Biceps brachii
- M. Triceps brachii
- M. Palmaris longus with m. Flexor carpi radialis
- M. Brachioradialis with m. Extensor carpi radialis
- Skin of the left arm
- Muscled leg, upper part
- Muscled leg, lower part
- Skin of the left le
- Abdominal cover
- Mammary gland

- 2 removable lungs
- 2-part removable heart
- Removable Liver
- 2-part removable stomach
- Removable kidney half
- 4-part removable intestines
- 3-part female genital insert with embryo
- 4-part male genital
- M. Satorius
- M. Gluteus maximus
- M. Rectus femoris
- M. Gastrocnemius
- M. Biceps femoris cap. L. with m. semitendinosus

Comes with wooden roller base and includes free anatomy software! Caucasian appearance 174 cm; 40.7 kg

M-1000209



> FITS ON YOUR DESK!

#### Life-Size Dual Sex Asian Human Figure, **39-part** Same features as M-1000209 above, but with Asian appearance. 174 cm; 40.7 kg **M-1000208**



## 

#### 1/3 Life-Size Muscle Figure, 2-part

The  $\frac{1}{3}$  life-size mini muscle figure shows the superficial musculature. It is accurately reproduced and detailed in life-like. The chest plate is removable from the muscular figure to reveal the internal organs and the right side contains a female mammary gland. 125 numbered and identified structures of the human anatomy on base.

LIFE-SIZE MODEL

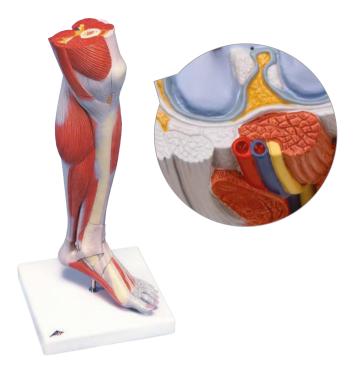
57 x 25 x 18 cm; 2.1 kg **M-1000212**  39 amazingly detailed components, plus free software!

> On wheels, easy to move

Musculature Models | HUMAN ANATOMY 195

On removable stand for closer study!





## Life-Size Lower Muscle Leg with Detachable Knee, 3-part

Life-size replica of lower leg, ankle, and foot. On removable base for close up study.

#### Features of the lower muscular leg:

- Detachable knee cross section to expose the articular surfaces
- Detachable gastrocnemius muscle 58 cm; 2.6 kg

M-1000353



Extremely detailed model, shows even the finest structures. This life-size muscular leg model can be disassembled into upper and lower leg.

#### The following muscles can be detached from the leg:

- Long head of biceps femoris muscle with semitendinous muscle
- Sartorius muscle
- Gluteus maximus muscle
- Rectus femoris muscle
- Gastrocnemius muscle

This high quality muscular leg model is supplied on a base. 100 cm; 7 kg M-1000352

#### 3/4 Life-Size Muscle Leg, 9-part

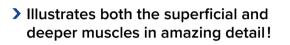
The muscular leg model illustrates both the superficial and deeper muscles, eight of which are removable. Tendons, vessels, nerves and bone components of the left leg and foot are shown in great detail. All parts are **numbered for easy identification**. Delivered on removable stand. 77 x 26 x 26 cm; 4 kg **M-1000351** 

#### Life-Size Deluxe Muscle Arm, 6-part

#### The following muscles can be detached in this life-size muscular arm model:

- Deltoid muscles
- Biceps muscle of arm
- Triceps muscle of arm
- Long palmar muscle with radial flexor muscle of wrist
- Brachioradial muscle with radial extensor muscle of wrist

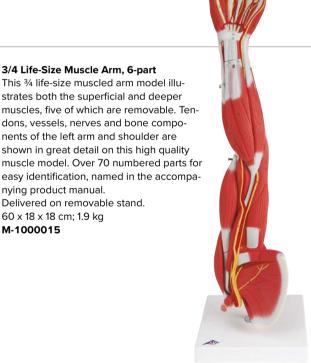
Supplied on base. 70 cm; 3 kg M-1000347

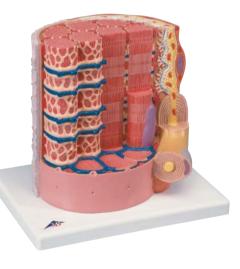


This 3/4 life-size muscled arm model illustrates both the superficial and deeper muscles, five of which are removable. Tendons, vessels, nerves and bone components of the left arm and shoulder are shown in great detail on this high guality

3/4 Life-Size Muscle Arm, 6-part

easy identification, named in the accompanying product manual. Delivered on removable stand. 60 x 18 x 18 cm; 1.9 kg M-1000015





#### 3B MICROanatomy<sup>™</sup> Muscle fibre 10,000 times magnified

Illustrates a section of a skeletal muscle fibre and its neuromuscular end plate. The muscle fibre is the basic element of the diagonally striped skeletal muscle. This high quality muscle fibre replica brings a hands-on understanding of the human muscle to any classroom. 23.5 x 26 x 18.5 cm; 1.1 kg

M-1000213



#### 3B MUSCLEtrainer™

Includes 248 high quality digital images, 241 muscles and more than 200 associated anatomical structures. Languages: English, French, Spanish, Portuguese, German, (Latin). Please see 3bscientific.com for system requirements.

# **TORSO MODELS**

## MANUFACTURED TO PRECISE ANATOMICAL DETAIL!

## High quality models at great prices! 3B Scientific\* torso models are:

- Non-toxic, extremely durable material for hands-on demonstrations
- Hand-painted to show every detail in realistic colours
- Anatomical precision for medical education on every level

## Choose from a variety of torsos with different features depending on your needs:

- Male
- Female
- Dual sex
- Different ethnicities
- Focusing on varying aspects of anatomy

Please visit 3bscientific.com for additional images and to zoom in on more detail.

## See pages 204 and 205 for a detailed feature comparison of all torso models

#### Life-Size Muscle Torso, 27-part

This life-size muscle torso shows the **deep and superficial muscles in great anatomical detail**. Its anatomical precision and realism make it an outstanding tool for **demonstration even in large lecture halls**.

## For detailed study and to reveal inner structures, the following pieces can be removed easily:

- Skull cap
- 6-part brain
- Eyeball with optic nerve
- Chest/abdominal wall
- 2-part larynx
- 2 lungs
- 2-part heart
- Diaphragm
- 2-part stomach

- Liver with gallbladder
- Complete intestinal tract
- with appendix
- Front half of kidney
- Half urinary bladder
- 4 muscles
- Delivered on sturdy base. 95 x 60 x 35 cm; 14 kg **M-1001236**



3-part head with removable brain half and eye

#### > DETAILED, INSIDE AND OUT!

#### Dual Sex Torso, 24-part

This life-size human torso model offers impressive detail with 24 removable parts. Use it to answer all questions regarding internal human anatomy. Manufactured for everyday use, extremely durable material for a long lasting demonstration model.

#### For close-up study the following parts and organs can be removed:

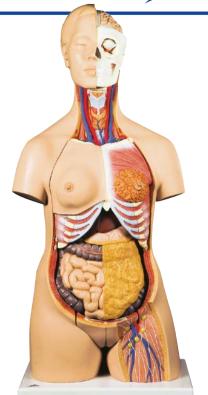
- 3-part head
- 2-part stomach
- 4-part intestinal tract
- Female chest wall
- 2 lungs
- 2-part heart
- · Liver with gall gallbladder
- Front half of kidney
- 4-part male genital insert
- 3-part female genital insert with foetus

Hand painted in realistic colours, delivered complete with the 3B Scientific® Torso Guide and mounted on sturdy base. Light skin.

87 x 38 x 25 cm; 7.5 kg M-1000196



Dual Sex Torso, Dark Skin, 24-part This life-size, deluxe human torso model comes with all features of the Dual Sex Torso, 24-part (M-1000196) but with dark skin. 87 x 38 x 25 cm; 7.5 kg M-1000202



#### Dual Sex Torso, 20-part

Detailed demonstration model for human anatomy focussing on inner organs. All parts are easy to remove and the torso can be switched from male to female easily!

#### This life-size, high quality human torso contains these removable parts and organs:

- 2-part head
- Female chest wall
- 2 lungs
- 2-part heart
- Stomach
- Liver with gallbladder
- 2-part intestinal tract
- Front half of kidney
- 4-part male genital insert

3-part female genital insert with foetus

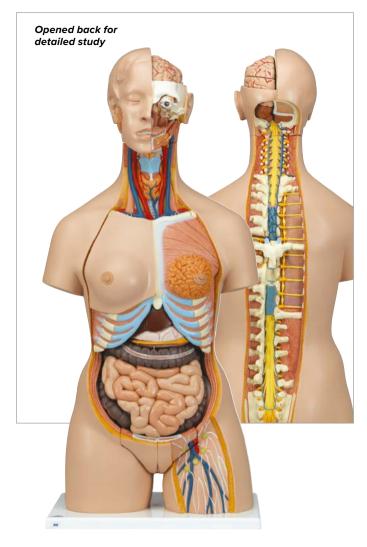
All organs are hand painted for a quality product with realistic colours. Delivered on sturdy base and complete with the 3B Scientific® Torso Guide. Light skin. 87 x 38 x 25 cm; 7.3 kg

M-1000197



#### Asian appearance, 18-part

Delivered with 1-part head and without female chest wall, all other features like the Dual Sex Torso, 20-part, M-1000197. M-1000199



#### Dual Sex Torso with Opened Back, 28-part

This life-size human torso model comes complete with removable male and female genital inserts, **opened neck and back section to study vertebrae, intervertebral discs, spinal cord, spinal nerves, vertebral arteries**, and a deluxe head with a 4-part brain.

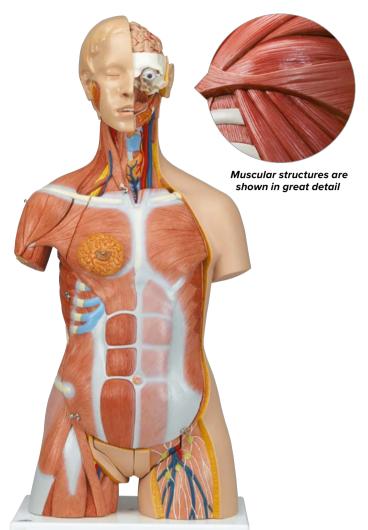
#### The following parts and organs can be removed for detailed study:

- 7th thoracic vertebra
- Female chest wall
- 6-part head (incl. 4-part brain)
- Female breast covering
- 2 lungs
- 2-part heart
- 2-part stomach
- Liver with gallbladder
- 4-part intestinal tract
- Front half of kidney
- 4-part male genital insert
- 3-part female genital insert with foetus

Comes complete with the 3B Scientific\* Torso Guide, delivered on sturdy base. Light skin.

87 x 38 x 25 cm; 7.6 kg

#### M-1000200



#### Dual Sex Muscle Torso, 31-part

This life-size torso depicts both the superficial and deep muscles in great detail. The two main muscles, the deltoid and gluteus maximus can easily be removed for closer studies. You can also study the vertebrae, the spinal cord, spinal nerves and vertebral arteries, exchange the male and female genital inserts, discover the internal structures of the brain and much more.

#### The following parts can be removed:

- 6-part head
- Chest and abdominal wall with muscles
- 7th thoracic vertebra
- Female mammary gland
- Gluteus maximus and deltoid muscle
- 2 lungs
- 2-part heart
- 2-part stomach
- Liver with gallbladder
- 4-part intestinal tract
- Front half of kidney
- 3-part female genital insert with foetus
- 4-part male genital insert

Supplied with the 3B Scientific\* Torso Guide, mounted on sturdy base. Light skin.

87 x 38 x 25 cm; 8.5 kg

## > LIFE-SIZE TORSO

#### Dual Sex Torso with Muscle Arm, 33-part

A worldwide unique feature of this life-size torso is the removable 6-part muscle arm. This top of the line model fully represents the anatomy of the complete human upper body. Its great detail makes it especially suitable for the high levels of medical education. The right half shows the skin, the left half the superficial and deeper muscles with nerves, vessels and bony structures. The versatility of this aesthetically designed model is rounded off by the exact representation of the internal organs.

0

#### The following parts can easily be removed for closer study:

- 2-part head
- Brain half
- Sternocleidomastoideus muscle
- G-part muscle arm (removable Muscles: deltoid, biceps brachii, triceps brachii, palmaris longus with flexor carpi radialis, brachioradialis with extensor carpi radialist)
- Upper leg stump
- Chest/abdominal wall with detachable mammary gland
- Torso body
- 2 lungs
- 2-part heart
- Liver with gallbladder
- 2-part stomach
- Kidney half
- 4-part intestinal tract
- 3-part female genital insert with foetus
- 4-part male genital insert

Hand-painted for great detail and realistic colours, delivered on sturdy base. Includes the 3B Scientific<sup>®</sup> Torso Guide. Light skin. 90 cm; 22.8 kg M-1000205



## Asian Dual Sex Torso with muscular arm, 33-part

This life-size human torso models comes with all features of the M-1000205 Dual Sex Torso with Muscle Arm (see right), but in

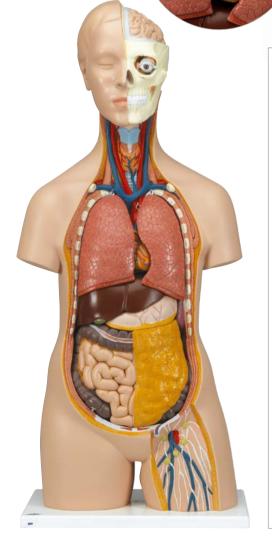
**Asian appearance**. 90 cm; 22.8 kg **M-1000204**  **Classic Gender Neutral Torso, 12-part** This **gender neutral, life-size torso** is handpainted, true to detail, and made of high-quality plastic.

## The following components are removable and reveal the inner anatomy:

- 2-part head
- 2-part removable heart
- 2 lungs
- Stomach
- · Liver with gallbladder
- 2-part intestinal tract

Front half of kidney Includes 3B Scientific<sup>®</sup> Torso Guide, mounted on sturdy base. Light skin.
87 x 38 x 25 cm; 4.6 kg
M-1000186

Parts can be removed easily for detailed study



Classic Gender Neutral Torso, 14-part

This 14-part anatomically correct human torso model is an educational tool of true quality. The gender neutral torso is hand-painted in true to life detail and made of high-quality plastic for hands-on education. It is mounted on a sturdy base so students can safely disassemble it.

#### The following parts can be removed:

- 3-part head
- 2 lungs
- 2-part heart
- Stomach
- Liver with gallbladder
- 2-part intestinal tract
- Front half of kidney
- Front half of urinary bladder Includes 3B Scientific\* Torso Guide. Light skin.
  87 x 38 x 25 cm; 5.9 kg
  M-1000190

#### Classic Gender Neutral Torso, 16-part

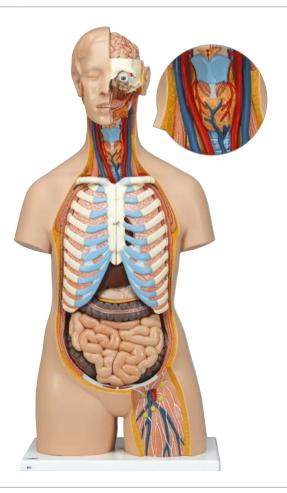
This life-size human torso model comes with 16 removable parts, each handpainted for amazingly realistic details.

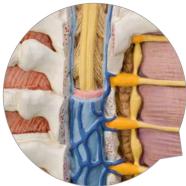
- Hand-painted for realistic colours and amazing detail
- Made of durable, high quality plastic
- 16 removable parts for closer study

## The torso model contains the following removable parts:

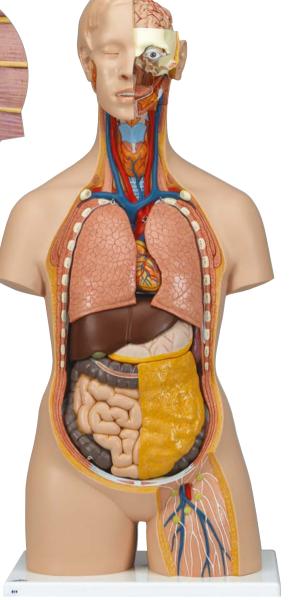
- 3-part head
- 2 lungs with sternum and rib attachments
- 2-part heart
- Stomach
- Liver with gallbladder
- 4-part intestinal tract
- Front half of kidney

• Front half of urinary bladder Includes 3B Scientific<sup>®</sup> Torso Guide. Mounted on sturdy base for hands-on education. Light skin. 87 x 38 x 25 cm; 6.8 kg **M-1000188** 





Opened back reveals the anatomy of the spine from cerebellum to coccyx



#### Classic Gender Neutral Torso with Opened Neck and Back, 18-part

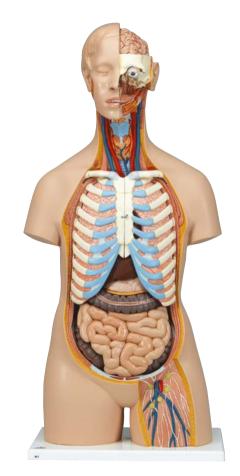
This human gender neutral torso model has the unique feature of an **open neck and back section going from the cerebellum to the coccyx** (see image on page 200). Vertebrae, intervertebral discs, spinal cord, spinal nerves, vertebral arteries, and many other features are represented in detail in this hand-painted and highly detailed model.

#### Includes the following removable parts and organs:

- Th thoracic vertebra removable
- 6-part head
- 2 lungs
- 2-part heart
- Stomach
- Liver with gallbladder
- 2-part intestinal tract
- Front half of kidney
- Front half of urinary bladder

Includes 3B Scientific\* Torso Guide. Mounted on sturdy base for hands-on education. Light skin. 87 x 38 x 25 cm; 5.8 kg

#### M-1000193



#### Classic Gender Neutral Torso with Open Back, 21-part

This top of the line gender neutral torso comes with additional removable parts and an opened back section going from the cerebellum to the coccyx. Vertebrae, intervertebral discs, spinal cord, spinal nerves, vertebral arteries, and many other features are represented in detail is this detailed replica of the human anatomy. It is mounted on a sturdy base for safe anatomical demonstrations.

## The following parts and organs can easily be removed:

- 7th thoracic vertebra removable
- 6-part head
- 2-part stomach
- Lungs
- 2-part heart
- Liver with gallbladder
- 4-part intestinal tract
- Kidney half
- Bladder half
- Open back
- Brain

Includes 3B Scientific\* Torso Guide. Light skin. 87 x 38 x 25 cm: 6.5 kg

#### > You will find a learning card for every disc inside the product manual.



#### MRI Torso, 15 Transverse Sections

This unique MRI torso is horizontally sectioned into 15 slices, giving a distinctive view of human anatomy. The topographical relationships of the torso are represented as coloured reliefs on the individual sectional planes. For a closer study of the internal anatomy of the torso, each disc can be shifted horizontally and rotated around its sagittal axis. Each disc within the MRI torso can be individually removed. The results are a brand new understanding of human anatomy that is both interesting and engaging for students. This MRI torso is a great addition to any medical classroom!

130 x 40 x 35 cm; 19 kg **M-1001237** 

#### Heavy Duty Protective Cover for Torsos

Protect your investment with this heavy duty protective cover for your torso models. Suitable for all full-size torsos. Zippered with reinforced easycarry handle. Black. M-1020762



#### TORSO COMPARISON GUIDE

Item No.	M-1000186	M-1000190	M-1000188	M-1000193	M-1000192
Page	202	202	202	203	203
Individual Parts	12	14	16	18	21
Open Back, revealing spine	_	-	-	1	1
Head can be disassembled into	2-part	3-part	3-part	6-part	6-part
Lung can be opened to reveal internal anatomy	~	1	1	1	1
Rib Cage shown	-	-	1	-	1
Heart can be disassembled into	2-part	2-part	2-part	2-part	2-part
Stomach can be disassembled into	1-part	1-part	1-part	1-part	2-part
Liver / Gallbladder can be taken out	~	✓	✓	✓	√
Intestinal Tract can be disassembled into	2-part	2-part	4-part	2-part	4-part
Half Kidney can be opened to reveal internal anatomy	~	✓	✓	1	~
Half Urinary Bladder can be opened to reveal internal anatomy	-	✓	✓	1	~
Muscular Arm included	_	-	-	_	-
Female Breast Covering can be taken apart	-	-	-	-	_
Gender Neutral	1	✓	1	1	~
Dual Sex	-	-	-	-	-
Male Genitals can be disassembled into	_	-	-	_	-
Female Genitals can be disassembled into	-	-	-	-	-
Skin Tone	Light	Light	Light	Light	Light
Includes 3B Scientific® Torso Guide	✓	✓	1	1	1
Life-Size	√	1	1	1	V

204 HUMAN ANATOMY | Torso Models

## > Looking for a smaller alternative for your desk?

#### Mini-Torso, 12-part

At approximately half life-size, this mini human torso model still shows great detail!

#### The following parts can be removed:

- 2-head halves
- Brain half
- 2 lungs
- 2-part heart
- Stomach
- Liver with gallbladder
- 2-part intestinal tract

If you want quality on a budget this mini torso model is for you! All parts are numbered and identified in the included product manual.

54 x 24 x 18 cm; 1.89 kg

#### M-1000195

#### 3B Scientific® Torso Guide (not shown)

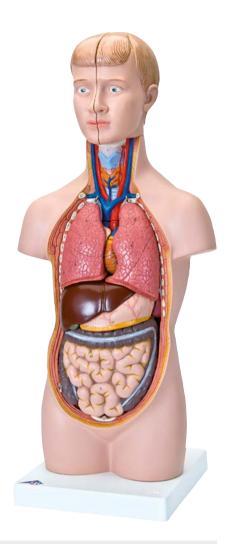
Already included with most torso model purchases.

- Brilliantly coloured pictures of each part of the torso, explaining even the smallest structures
- Includes teaching tips to create even more interesting lessons
- Complete in 7 different languages (Latin, English, German, Spanish, Portuguese, French, Japanese)
- Includes CD-ROM in pdf-format to assist in creating tests or preparing lessons
- M-1000183

#### 3B Scientific® Torso-Classroom Set (not shown)

Includes 33 brilliant overhead-transparencies with coloured pictures of each part of the torso. M-1000184

See 3bscientific.com for more details.



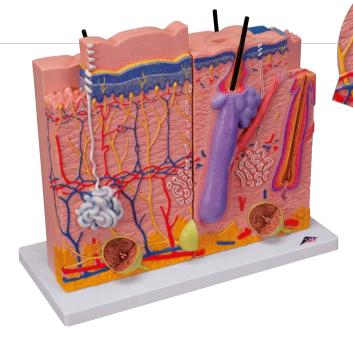
M-1000196	M-1000197	M-1000199	M-1000200	M-1000202	M-1000203	M-1000204	M-1000205	M-1000195
199	199	199	200	199	200	201	201	205
24	20	18	28	24	31	33	33	12
-	-	-	~	-	~	-	-	-
3-part	2-part	1-part	6-part	3-part	6-part	3-part	3-part	3-part
√	1	~	~	~	1	~	~	1
1	✓	1	1	1	1	1	1	-
2-part								
2-part	1-part	1-part	2-part	2-part	2-part	2-part	2-part	1-part
1	✓	~	~	~	~	~	~	1
4-part	2-part	2-part	4-part	4-part	4-part	4-part	4-part	2-part
1	1	1	1	1	1	1	~	-
-	-	_	_	_	_	6-part	6-part	-
1-part	1-part	1-part	1-part	1-part	2-part	2-part	2-part	-
-	-	-	-	-	_	-	-	1
1	~	1	1	1	1	1	1	-
4-part	-							
3-part	-							
Light	Light	Asian	Light	Dark	Light	Asian	Light	Light
1	√	1	1	1	1	1	1	-
1	1	1	1	1	1	1	1	1/2

# **SKIN MODELS**

#### Skin Model, 70 times Full-Size

This distinctive model shows a section of human skin in three dimensional form. Individual skin layers are differentiated and important structures such as hair, sebaceous and sweat glands, receptors, nerves, erector pili muscles and vessels are shown in great detail.

Mounted on baseboard. 44 x 24 x 23 cm; 3.6 kg **M-1000291** 



#### > 3 MODELS IN 1!

#### Skin Model, 3-part

The skin is shown 80 times magnified, so even the smallest structures can be seen in detail. It can be taken apart easily thanks to magnetic connections for better demonstration, and represents the three most important sections of skin:

- Palm of the hand
- Back of the hand
- Scalp

34 x 39 x 15.5 cm; 2.05 kg **M-1000294** 





#### Skin, Hair and Nail Microscopic Structures

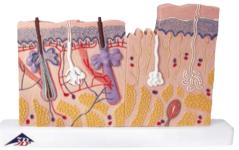
This model shows the microscopic structure of the skin in great detail. Both hairless and hairy skin structure are shown as well as the different cell layers of the skin, embedded sweat glands, touch receptors, blood vessels, nerves, erector pili muscle, and a hair follicle. Additionally, it includes a section of nail depicting the nail plate, bed, and root, as well as a representation of a hair root with all of its cellular layers.  $10 \times 12.5 \times 14 \text{ cm}; 0.35 \text{ kg}$ 

M-1000292

#### Skin Section, 40 times Full-Size

The two halves of this relief model show the three layers of hairy and hairless skin in order to make the differences clear. Detailed with hair follicles, sebaceous glands, sweat glands,

receptor, nerves, erector pili muscles and vessels. Mounted on a base. 24 x 15 x 3.5 cm; 0.2 kg **M-1000290** 



#### Skin Section, 70 times Life-Size

This relief model shows a section through the three layers of the hair-covered skin of the head:

- Sweat glands
- Vessels
- Receptors
- Nerves
- Representation of hair follicles with sebaceous glands

Delivered on base. 10.2 x 13.0 x 2.0 in; 1 kg **M-1000289** 

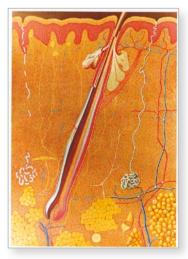


#### Skin Cancer Model

In the top view of the skin cancer model, the individual stages of externally visible skin changes are shown, allowing for an assessment according to the ABCDE criteria. The sides of the skin cancer model show the various levels of invasion into the skin layers according to

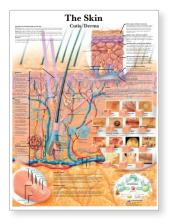


Clark (I-V) and the tumour thickness according to Breslow (in mm). Five original colour illustrations on the base of the skin cancer model show various types of malignant melanomas. Comes mounted on a base.  $14 \times 10 \times 11.5$  cm; 0.2 kg **M-1000293** 



#### 3B Scientific® Wall Chart – Skin

The poster displays the microanatomy of the skin in such a colorful and large way that it is easy to understand and study. 84 x 200 cm **M-1001177** 



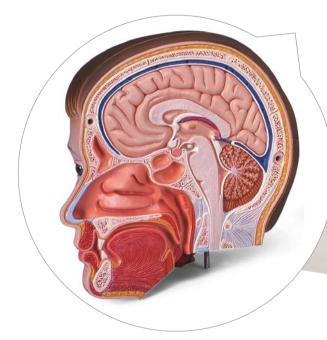
3B Scientific<sup>®</sup> Chart – The Skin The anatomy of the human skin, including all skin layers, as well as some common skin pathologies are displayed. Laminated. 50 x 67 cm M-1001512

# **HEAD & BRAIN MODELS**

+

You can depend on 3B Scientific<sup>®</sup> anatomical models:

- + Carefully cast and hand-painted by skilled craftsmen
- + Manufactured to precise anatomical details
- + Extremely durable thanks to high quality material
- + Non-toxic for everyday hands-on use



#### Head with Neck, 4-part

This **life-size and detailed** head model is midsagittally sectioned, and while the right size shows a realistic looking face, the left side **reveals the muscles, nerves, vessels, and bony structures** of the head. For in depth study, the model contains a removable brain half. The neck detachable and sectioned both horizontally and diagonally. Caucasian appearance, supplied on baseboard. 26 cm; 2.2 kg **M-1000216** 



#### Asian Head with Neck, 4-part Same features and details like the M-1000216 but with Asian appearance. Supplied on

baseboard. 26 cm; 2.2 kg **M-1000215** 



С

#### A. Median Section of the Head

Relief median section of the head shows all relevant structures of the human head in great detail. Delivered on a baseboard.  $26 \times 33 \times 5$  cm; 1 kg **M-1000219** 

#### **B. Head Section Model**

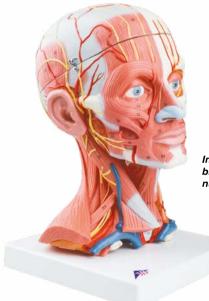
Frontal section through the human paranasal sinuses covered with mucous membrane. Signs of sinusitis (paranasal sinus inflammation) on the right, with normal ventilation of the left side. Delivered on baseboard. 41 x 31 x 5 cm; 1.45 kg **M-1012789** 

#### C. Median and Frontal Section of the Head

The two relief models show the median and frontal section of the head. The two views of this high quality model show all important anatomical structures of the head in full detail. They include cross sections of the brain, spinal cord, and sinuses of the human head. Delivered on baseboard.

41 x 31 x 5 cm; 1.45 kg

M-1000220

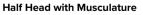


Includes 3-part brain and numbered details!

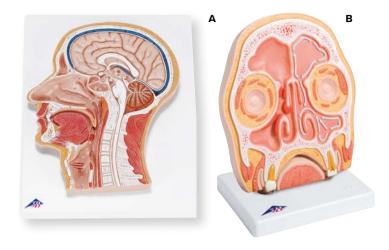
#### Head and Neck Musculature, 5-part

This model shows a realistic representation of the superficial musculature and deep muscles, nerves and vessels of a human head and neck in life-size. It can easily be disassembled into skull cap and 3-part brain. Anatomical details are painted on the model for easy identification with the help of the product manual. On base.  $36 \times 18 \times 18$  cm: 1.8 kg

M-1000214

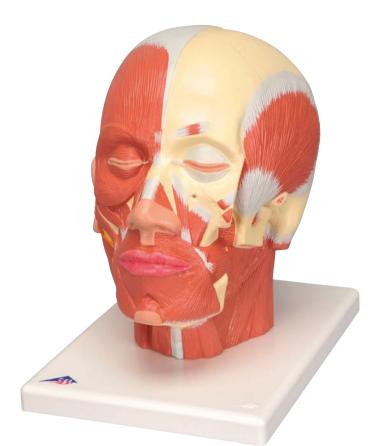


This high quality model represents the outer, superficial and the internal (median section) structures of head and neck. The half head with musculature is delivered on removable stand for easy display in a classroom or doctor's office. Presents the important anatomical structures.  $22 \times 18 \times 46$  cm; 1.1 kg **M-1000221** 









#### Head Musculature with Blood Vessels

In addition to the features of the classic head musculature model, this version also shows the blood vessels on the head. Mounted on base.  $24 \times 18 \times 24$  cm; 1.2 kg **M-1001240** 

## > GREAT TOOLS FOR EDUCATION ON THE HUMAN NERVOUS SYSTEM AND ANATOMY OF THE BRAIN!

#### Head Musculature

This head model represents the superficial musculature of head and neck, showing:

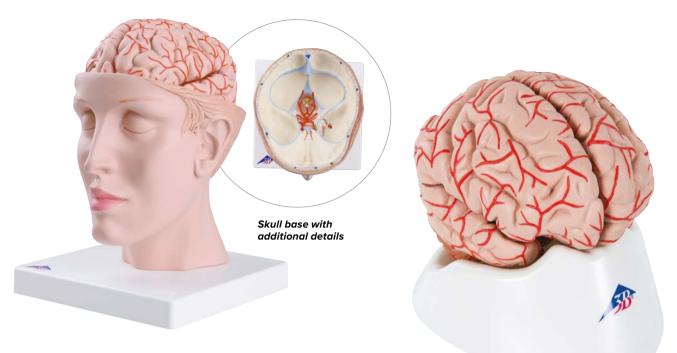
- Parotid gland
- Submandibular gland
- Deep musculature
- Lower jaw partially exposed
- Mounted on base.

24 x 18 x 24 cm; 1.2 kg

M-1001239



Head Musculature with Nerves
In addition to the classic head musculature model, this version also shows the nerves on the head. Mounted on base.
24 x 18 x 24 cm; 1.2 kg
M-1008543



#### A. Brain with Arteries on Base of Head, 8-part

This deluxe brain comes with an opened head to allow detailed study of the brain's position in the skull. The head is horizontally divided above the skull base. The brain is divided medially, with a removable basilar artery.

#### Both halves can be divided into:

- Frontal parietal lobes
- Temporal with occipital lobes
- Half of brain stem

Half of cerebellum

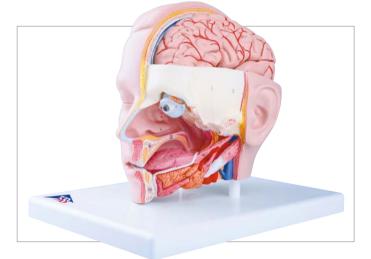
On base.

15 x 15 x 23 cm; 1.6 kg **M-1017869** 

#### B. Brain with Arteries, 9-part

This brain model is a great tool for education on the human nervous system and anatomy of the brain. Delivered on a removable base for easy display in the classroom. 15 x 14 x 16 cm; 0.9 kg

M-1017868



#### C. Head Model, 6-part

## This head model meets the highest standard requirements of medical education!

It is life-size, comes with 6 removable parts and is mounted on a base. Included is a removable 4-part brain half with arteries. The eyeball with optic nerve is also removable for detailed study. One side exposes the nose, mouth cavity, pharynx, occiput, and skull base.

19 x 23 x 22 cm; 1 kg **M-1000217** 



#### D. Head and Neck, 5-part

This model shows a medially divided representation of the head. The skin and facial muscles of the right outer half are removed to show the deeper structures. The eyeball, the bone cover over the sinus maxillaries and the right tongue half are removable for detailed study. The parts are differentiated in colour.

38 x 36 x 25 cm; 3 kg **M-1005536**  )

**3B** Scientific<sup>®</sup> brain models have been cast from real specimens and accurately represent even the finest structural details.

- + Magnetic connections for easy demonstrations
- + Highest quality material for long lasting models
- + Hand-painted and manufactured to precise anatomical detail

To see additional images and to zoom in on details, please visit 3bscientific.com.

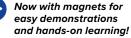


**Classic Brain, 5-part** This midsagittally sectioned model is an original anatomical cast of a real human brain.

#### The components of the brain's left half are:

- Frontal and parietal lobe
- Temporal and occipital lobe
- Encephalic trunk
- Cerebellum
- Delivered on removable stand. 13 x 14 x 17.5 cm; 0.9 kg









#### Brain Model, 4-part

This 4-part brain is medially divided. All structures of the brain are hand-painted, numbered and identified in a product manual.

#### The brain's right half can be disassembled into:

- Frontal with parietal lobes
- Brain stem with temporal and occipital lobes
- Half of cerebellum

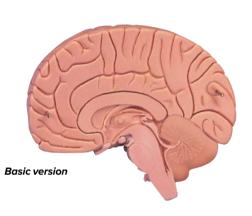
Delivered on a removable base.  $14 \times 14 \times 17.5$  cm; 0.9 kg

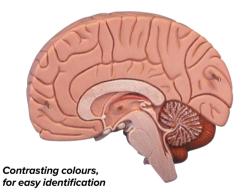
M-1000224

#### Introductory Brain Model, 2-part

This basic brain is medially divided, anatomically accurate, and life-size! The structures of the brain are shown in one colour, providing an introduction to the human nervous system and anatomy of the brain. Structures of the brain are not labelled or numbered. This introductory brain is delivered on removable base.

15 x 14 x 17.5 cm; 0.7 kg **M-1000223** 





#### Brain Model, 2-part

**Contrasting colours** are used to indicate various anatomic structures in this medially divided human brain, making this high quality model perfect for beginning anatomy studies of the human brain. On removable base.

15 x 14 x 17.5 cm; 0.7 kg **M-1000222** 

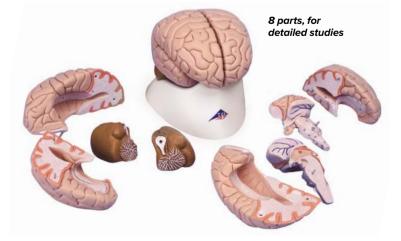
#### Brain Model, 8-part

A very detailed model of the human brain which is medially divided.

#### Both halves of this brain can be disassembled into:

- Frontal with parietal lobes
- Temporal with occipital lobes
- Half of brain stem
- Half of cerebellum
- Delivered on a removable base.

14 x 14 x 17.5 cm; 0.9 kg





#### Neuro-Anatomical Brain, 8-part

This deluxe brain is medially divided. On the right half of this brain, you will find a systematically coloured grouping and representation of the cerebral lobe.

#### The left half of the brain shows:

- Pre- and post-central region
- Broca and Wernicke areas
- Heschl's gyrus
- Brain nerves
- Ventricles

## Both halves of this brain can easily be disassembled into:

- Frontal with parietal lobes
- Temporal with occipital lobes
- Half of brain stem
- Half of cerebellum
- Delivered on a removable base.
- 14 x 14 x 17.5 cm; 0.95 kg
- M-1000228

# Take the model apart to see more details

#### **Brain Section Model**

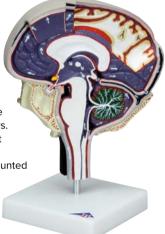
An enlarged and very detailed section through the right half of the brain, including a portion of the skull. The pia mater has been removed. This model is double sided and finely coloured. One surface is on the median line, including a section of the falx cerebri. A sagittal cut on the reverse side exposes the lateral ventricle. There are 49 references on the model, identified in English in an accompanying product manual. Mounted on a stand. 25 x 18 x 12 cm; 0.9 kg

**M-1005113** 

#### **Cerebrospinal Fluid Circulation**

Enlarged, detailed model of a section through the right half of the brain showing the cut pia mater, arachnoid and dura mater. The model has the cerebrospinal fluid areas clearly identified and the direction of flow indicated by arrows. Bright colours distinguish important features; identified in English in an accompanying product manual. Mounted on stand.

25 x 18 x 12 cm; 0.9 kg **M-1005114** 



#### **Brain Ventricle**

This model shows both side ventricles of the brain, the 3rd and 4th ventricle and the Aquaeductus cerebri (Sylvius). The brain ventricles are life-size and the model is delivered on stand.  $14 \times 11 \times 14 \text{ cm}$ ; 0.6 kg





#### TRUE HANDS-ON EDUCATION WITH THIS OVERSIZED BRAIN MODEL!

#### Giant Brain, 2.5 times Full-Size, 14-part

At 2.5 times life-size this comprehensive brain model is a very useful teaching aid, especially **for large groups of students**. All structures of the brain and the ventricles are visible through median, frontal, and horizontal divisions. Delivered with a removable base.

- Unbreakable Natural cast made from durable vinyl
- 14 removable segments secured with pins
- ${\scriptstyle \bullet}$  Ideal for 3D study of brain structures
- Includes removable base and detailed product manual
- 34 x 30 x 37 cm; 5.6 kg

M-1001261





#### **Giant Functional-Centre Brain, 4-part**

This popular brain model reproduces the **brain of a right-handed person**. It employs contrasting colours and hand-painted captions to identify motor and sensory functional centres. In addition to focussing on the intellectual role of the dominant left brain, and the creative role of the right, the model **highlights the emotional, sexual, memory, and learning functions** of the limbic system.

- Distinguishment of sensory regions and centres receptive to 20 specific body regions
- Distinguishment of motor centres controlling 19 body regions
- More than 120 hand-numbered features identified in accompanying manual

#### **Rat Brain Comparative Anatomy**

Enlarged roughly six times, and medially sectioned, the rat brain model can be disassembled into two halves. The right half of the **colour-coded model** shows the structures of the cerebrum, cerebellum, and brainstem. The left half is mostly transparent to reveal the left lateral ventricle and hippocampus in the median section. For comparison, a natural cast of a rat brain and a didactic, small-scale illustration of a human brain in median section are shown on the base. Each has the same colour coding used for the various regions.

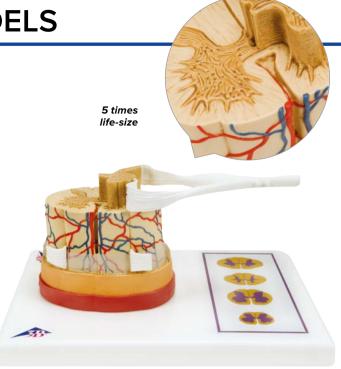
14 x 10 x 16 cm; 0.24 kg **M-1000230** 

# **NERVOUS SYSTEM MODELS**



#### Nervous System, 1/2 Life-Size

An excellent model to study the structure of the human nervous system. This 3D relief model shows schematic representation of the central and peripheral nervous system, numbered and identified in the accompanying manual. Delivered on baseboard.  $80 \times 33 \times 6$  cm; 3.5 kg **M-1000231** 



#### Spinal Cord Model, 5 times Life-Size

The model illustrates the composition of the spinal cord with nerve endings. For easier study, the model is 5 times life-size. The spinal cord is formed by a central channel surrounded by "grey matter" with an outer layer of "white matter". The base of the model features illustrations of the various cross-sections of the spinal cord through the white and grey matter at the neck, torso and lumbar and sacral regions. Supplied on a base.  $26 \times 19 \times 13$  cm; 0.4 kg

M-1000238



#### Spinal Cord Model

This spinal cord model shows a segment of the upper thoracic spinal cord and is laterally and longitudinally divided showing spinal nerve roots. It is approximately 6 times life size and comes on a baseboard.  $35.5 \times 27 \times 27$  cm; 0.75 kg **M-1005530** 







Unique five model series for education about the human nervous system. Interchangeable sections can be assembled to illustrate the features of typical neurons found in vertebrates. All sections depict the neural components in vivid colours and attach magnetically to the illustrated metal base.

# The set contains the following sections, which are also available individually:

- Neuron Cell Body
- Myelin Sheaths of the CNS
- Schwann Cells of the PNS
- Motor End Plate
- Synapse
- 68 x 51 x 3 cm; 4.2 kg

M-1000232





### **INDIVIDUAL SECTIONS:**



**Neuron Cell Body** Typical neuron body with cell organelles. 12.2 x 11.7 x 6.2 cm; 0.2 kg **M-1000233** 



Myelin Sheaths of the CNS Glial cells which build the insulating layer around the axons of the central nervous system. 12.2 × 11.7 × 3.6 cm; 0.2 kg M-1000234



Schwann Cells of the PNS Schwann cell with sectioned core. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000235



Motor End Plate Depicts the neuromuscular junction with striated muscle fibre. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000236



Synapse Features the endoplasmic reticulum, mitochondria and the membranes of the synaptic gap. 12.2 x 11.7 x 6.2 cm; 0.2 kg M-1000237

### > MAGNIFIED OVER 2,500 TIMES!

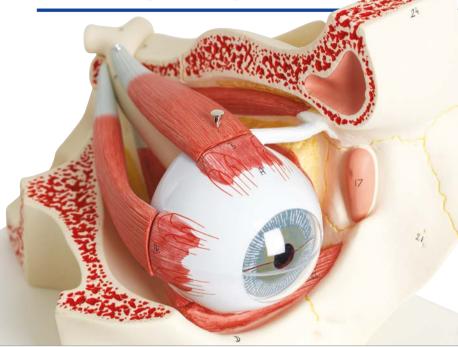
#### Motor Neuron Diorama

This colour-coded, 3D reproduction shows a motor nerve cell situated within a milieu of interacting neurons and a skeletal muscle fibre. The membranous envelope is cut away from the neuron to expose the cytological ultrastructure, organelles, and inclusions within the cell body. A section of the axon lifts off to let you view the tightly wound layers of the enveloping myelin sheath and neurolemma, as well as the Schwann cell which formed them. Via a cutaway view, you can observe synaptic vesicles, carrying neurotransmitters, about to stimulate the muscle fibre to action. Mounted on a wooden base.

**M-1005553** 



# **EYE MODELS**



#### Eye in Orbit, 3 times Life-Size, 7-part

This large anatomical human eye model shows the optic nerve in its natural position in the bony orbit of the eye (floor and medial wall).

# For closer study, it can be disassembled into:

- Includes the extraocular muscles
- Both halves of the choroid with iris and retina
- Eye lens
- Vitreous humour
- Bony orbit
- 18 x 26 x 19 cm; 1.1 kg
- M-1000258



#### A. Eye, 3 times Life-Size, 6-part

- Can be disassembled into the following parts:
- Both halves of the sclera with cornea
- and eye muscle attachments
- Both halves of the choroid with iris and retina
- Eye lens
- Vitreous humour
- 9 x 9 x 15 cm; 0.1 kg

M-1000259

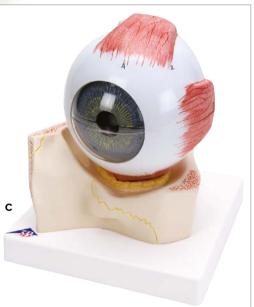


#### B. Eye, 5 times Life-Size, 6-part

This advanced eye model comes on a base, the following parts are removable:

- Upper half of the sclera with cornea and eye muscle attachments
- ${\scriptstyle \bullet}$  Both halves of the choroid with iris
- and retina
- Lens
- Vitreous humour
- 13 x 14 x 21 cm; 0.6 kg

M-1000255



C. Eye in Orbit, 5 times Life-Size, 7-part

- Upper half of the sclera with cornea and eye muscle attachments
- Both halves of choroid with iris and retina
- Lens
- Vitreous humour
- Shown in bony orbit
- 18 x 18 x 20 cm; 1 kg
- M-1000256



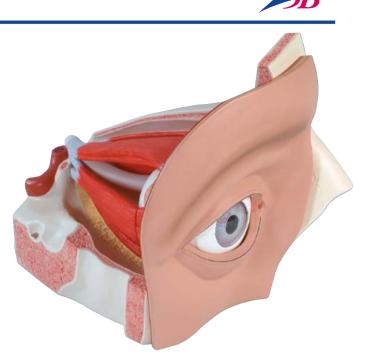
#### Eye with Eyelid, 5 times Life-Size, 8-part

This larger than life eye model is great for studying the anatomy of the human eye!

#### Features:

- Upper half of the sclera with cornea and eye muscle attachments
- Both halves of choroid with iris and retina
- Eye lens
- Vitreous humour
- Eyelid
- Lachrymal system
- Anatomical features around the eyeball
- 20 x 18 x 21 cm; 1.2 kg

#### M-1000257



#### Eye with Partial Face, 5 times Life-Size, 12-part

This 3B Scientific eye model shows the eyeball with optic nerve in its natural position in the bony orbit (floor and medial wall). Additionally, this eye model shows the relation between eye, bones, muscles, and outer structures of the eye.

#### Dissects into:

- Two halves of the sclera
- Optic nerve
- M. rectus superior
- M. rectus lateralis
- Cornea half

33 x 30 x 38 cm; 4.9 kg **M-1001264** 

- Eye lens
- Lachrymal system
- Vitreous humour
- Tear gland
- Associated structures

Inner nuclear layer and outer nuclear layer

#### 3B MICROanatomy<sup>™</sup> Eye

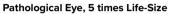
The model illustrates the microscopic structure of the retina with choroid and sclera:

Left block: 850-times enlarged view of retina including supplying vascular layer and parts of the sclera

 $\bullet$  Right block: 3800-times enlarged view of photoreceptors and cells of the pigmented layer 25 x 23 x 18.5 cm; 1.2 kg

#### M-1000260





The easy to use switchable and didactically simplified representations of the retina and lens make it possible to clearly explain the typical changes that occur in a healthy eye due to the following diseases:

- Subcapsular cataract
- Cortical cataract
- Nuclear cataract

VI

1

- Diabetic retinopathy
- Hypertensive retinopathy
- Papillary changes of glaucoma
- Age-related macular degeneration
- Papilloedema
- Central retinal arterial occlusion
- Central retinal venous occlusion
- Rhegmatogenous retinal detachment 26 x 26 x 21 cm; 0.73 kg

M-1017230

Retina and lens can be switched easily

#### Physical Eye Model

Use to demonstrate the optical functions of the eye, e.g. representation of an object on the retina, accommodation, short-sightedness and far-sightedness.

- Half eyeball with adjustable iris diaphragm, lens holder and 2 convex lenses (f = 65 mm and 80 mm), on a rod
- Half eyeball with retina (transparent screen), on a rod
- Lens holder with one concave and one convex corrective lens, on a rod
- ${\scriptstyle \bullet}$  Candle holder with 2 candles, on a rod
- Aluminium rail, 50 cm long, with 4 clamp slides • Includes case
- 49 x 5.5 x 18 cm; 2 kg
- M-1003806



# EAR, NOSE & THROAT MODELS

#### Ear Model, 5 times Life-Size, 3-part

This high quality human ear model represents outer, middle and inner ear.

- Removable eardrum with hammer, anvil and stirrup
- 2-part labyrinth with cochlea and auditory / balance nerve

Includes detail of two removable bone sections to close the middle and inner ear. On base.  $25 \times 41 \times 25$  cm; 3 kg

M-1008553

Removable parts for detailed study of the anatomy of the human ear



#### Ear Model, 3 times Life-Size, 4-part

At approximately 3 times life-size, the model represents the outer, middle, and inner ear. Removable eardrum with hammer, anvil, and stirrup, as well as 2-part labyrinth with cochlea, and auditory / balance nerve. On base.

34 x 16 x 19 cm; 1.25 kg **M-1000250** 



#### Ear Model, 3 times Life-Size, 6-part

This high quality human ear model represents outer, middle and inner ear.

Includes:

- Removable eardrum with hammer, anvil and stirrup
- 2-part labyrinth with cochlea and auditory / balance nerve

The detail of two removable bone sections to close the middle and inner ear. On base.

34 x 16 x 19 cm; 1.55 kg **M-1000251** 





**Desktop Ear Model, 1.5 times Life-Size** Specifically designed for those on a budget, the model shows the outer, middle, and inner ear with no compromise in quality. On base.  $14 \times 10 \times 14.7$  cm; 0.35 kg **M-1000252** 

#### Functional Ear Model

This highly detailed model shows how the tympanic membrane, ossicles, the complex internal ear with the cochlea, and the oscillations of the Basilar hearing membrane operate and interact. The enclosed mirror enables operation of the model while studying various ear-functions from different angles. Includes a color explanatory chart. 30 × 20x15 cm;1 kg

M-1005052



## > EASY VIEWING FROM ANYWHERE IN THE CLASSROOM!

#### World's Largest Ear Model, 15 times Life-Size, 3-part

The giant ear model is suitable for museums and special collections as well as large lecture halls and conferences. Representation of outer, middle and inner ear. The auditory ossicles and the labyrinth with cochlea and vestibulocochlear nerve can be removed and studied in detail. On base.  $130 \times 120 \times 60$  cm; 72 kg **M-1001266** 

Removable auditory ossicles and labyrinth



### > LIFE-SIZE

#### Ossicle Model – Life-Size

Cast from natural specimen, these human auditory ossicles are presented in their natural position and embedded in transparent acrylic. **M-1000253** 

#### Organ of Corti

The model shows a three dimensional section through the organ of Corti, the site of the sense of hearing in the inner ear in humans. Special attention has been given to the detailed representation of the individual cellular components and membranes. The overview model in the foreground also shows the exact location of the organ in the cochlea. 26 x 19 x 26 cm **M-1010005** 



#### Ossicle Model, 20 times Life-Size 3B BONE*like*™

The three smallest bones that are joined to each other in the human body are located in the middle ear and are referred to as the auditory ossicles: malleus (hammer), incus (anvil) and stapes (stirrup). Using a micro CT technique, an original cast was used to build this 20 times life-size model.

In 3B BONE*like*<sup>™</sup> quality. 17 x 12 x 21 cm; 0.39 kg **M-1009697** 

**Ossicle Model – 20 times Life-Size** (not shown) 17 x 12 x 21 cm; 0.29 kg **M-1012786** 

#### Functional Larynx Model, 4 times Full-Size

Functional replica of the human larynx, hyoid bone and epiglottis. The right half of the larynx model shows cartilaginous structures, the left half the musculature. Vocal cords, arytenoid cartilage and epi-

glottis are movable from the functional larynx. On base. 41 x 18 x 18 cm; 1.6 kg M-1005528



#### Nose Model with Paranasal Sinuses, 5-part

The upper right half of the face is enlarged 1.5 times to illustrate the structure of the nose with paranasal sinuses.

# The following structures are differentiated by color and visible through the transparent removable skin:

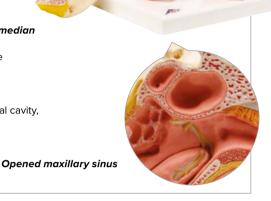
- Outer nasal cartilages
- Nasal, maxillary, frontal, and sphenoidal sinuses
- Opened maxillary sinus when the zygomatic arch is removed

# The following structures are shown in median section:

- Nasal cavity, lined with mucosa, with the (removable) nasal conchae
- Arteries of the mucous membrane
- Olfactory nerves
- Innervation of the lateral wall of the nasal cavity, the nasal conchae and the palate

26 x 19 x 24 cm; 0.8 kg

M-1000254





#### Functional Larynx Model, 3 times Full-Size The functional model is a great tool for speech therapy!

This functional larynx depicts the epiglottis, vocal cords and arytenoid cartilage. These parts are movable for demonstration purposes.

32 x 13 x 15 cm; 0.97 kg M-1001242

#### Larynx Model, 2 times Life-Size, 2-part This detailed larynx model is divided into two halves.

It is medially sectioned and shows:

- Larynx
- Hyoid bone
- Windpipe
- Ligaments
- Muscles
- Vessels
- Nerves
- Thyroid gland 14 x 14 x 28 cm; 0.29 kg
- M-1000273

#### Functional Larynx Model, 2.5 times Full-Size

The epiglottis, vocal cords and arytenoid cartilage are movable in the functional larynx. *Additionally the following structures of the human larynx are represented:* 

- Hyoid bone
- Cricoid cartilage
- Thyroid cartilage
- Thyroid
- Parathyroid glands

9 x 9 x 14 cm; 0.66 kg **M-1013870** 



Larynx Model, 2 times Life-Size, 7-part This medially sectioned model shows:

- Larynx
- Hyoid bone
- Windpipe
- Ligaments
- Muscles
- Vessels
- Nerves
- Thyroid gland

Thyroid cartilage, 2 muscles and 2 thyroid gland halves are removable from larynx. On stand. 12 x 12 x 23 cm; 0.87 kg **M-1000272** 

# **DENTITION MODELS**

# Dental Disease, magnified 2 times, 21-parts *Magnified for easier demonstrations!*

The model is based on a lower jaw with soft gums and 16 removable teeth. One half shows eight healthy teeth and healthy gums for comparison.

#### The other half shows the following dental diseases:

- Dental plaque
- Dental calculus (tartar)
- Periodontitis
- Inflammation of the root
- Fissure, approximal and smooth surface cavities

One part of the front bone section can be removed from the dental disease model to view the roots, vessels and nerves. Two molars are sectioned along the length to show the inside of the tooth. Delivered on a base. 17.5 x 26 x 18.5 cm; 0.6 kg M-1000016



 Teach proper cleaning techniques – giant toothbrush included



#### Dental Morphology Series, 10 times Life-Size, 7-part – English

At ten times life-size, this dental morphology series has removable lateral incisor, canine, first premolar, a bridge made of artificial first molar with gold colored crown and second molar. All relevant dental morphology structures are labeled. Dental morphology on transparent, jawshaped stand. Key card included. 70 x 25.5 x 15 cm; 2.1 kg

M-1005540

#### Giant Dental Care Model, 3 times Life-Size

Teach proper teeth cleaning techniques with this giant dental care model! At 3 times life-size, it shows the upper and lower half of an adult's dentition. A flexible joint between the jaws allows easy movement. 35.5 cm toothbrush included. 18 x 23 x 12 cm; 1.5 kg M-1000246



#### A. Half Lower Jaw, 3 times Life-Size, 6-part

The model represents half of the left lower jaw of a young person. One section of bone is removable from the half lower jaw to expose the tooth roots, spongiosa, vessels and nerves. The canine and first molar are removable from the half lower jaw and are longitudinally sectioned.

35 x 18 x 36 cm; 1.2 kg **M-1000249** 

# B. Advanced Half Lower Jaw with 8 Diseased Teeth, 19-part

These diseased teeth show various stages of cavities from a small and easy-to treat example on an incisor, through to an advanced degradation of a molar, showing the exposed root. The front section of the bone and all the teeth are removable from the half lower jaw, one incisor is longitudinally sectioned. Nerves, blood vessels, the sublingual and submandibular glands are shown.

22 x 32 x 9 cm; 1.1 kg **M-1001250** 

#### **C. Dentition Development**

Cast from natural specimens, these four upper and lower jaw halves show four different stages of development:

- Newborn
- Approx. 5-year old child
- Approx. 9-year old child
- Young adult

33 x 10 x 20 cm; 0.5 kg **M-1000248** 

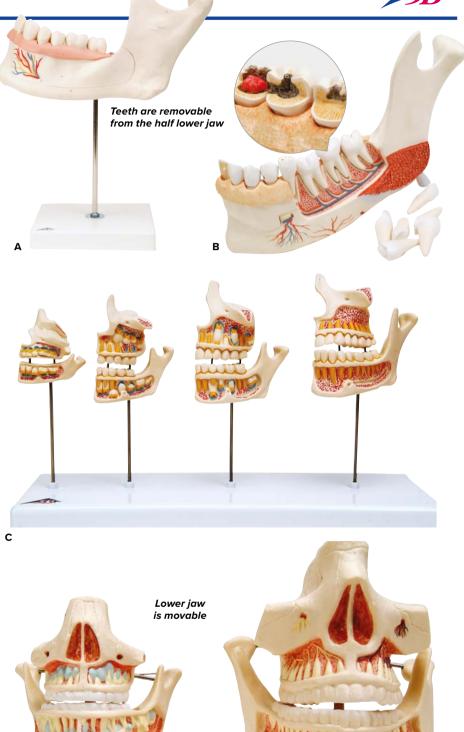
#### **D. Milk Dentures**

Upper and lower jaw are opened to show the arrangement of the remaining teeth. On base.  $13 \times 12 \times 13$  cm; 0.6 kg **M-1001248** 

#### E. Adult Dentures

Tooth roots, spongiosa, vessels, and nerves are exposed for detailed study. The lower jaw is movable. On base. 16 x 12 x 13 cm; 0.9 kg **M-1001247** 

D



F

#### Giant Molar with Dental Cavities, 15 times Life-Size, 5 part

This giant molar model depicts an upper triple-root molar and separates into 5 parts. The molar features a longitudinal section through the crown, two roots and the pulp cavity. The giant molar contains removable pulp and three tooth inserts with different stages of advanced cavities. Delivered on stand.

24 x 12 x 13 cm; 1.5 kg M-1013215

#### Easily switched between 3 stages of cavities

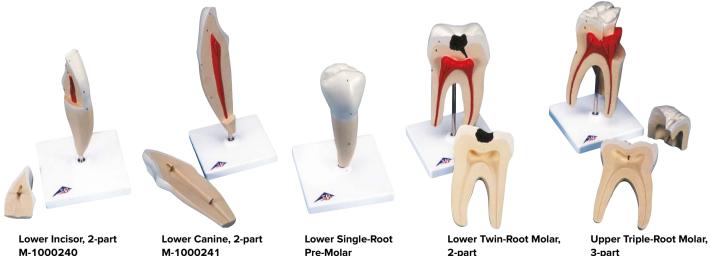
## > Each tooth model in this set is also available individually

#### **Classic Tooth Models**

This classic tooth series shows 5 representative types of adult dentition individually mounted on removable stands:

- 2-part lower incisor with longitudinal section
- · 2-part lower canine with longitudinal section
- Lower single-root pre-molar
- 2-part lower twin-root molar with longitudinal section showing caries attack
- · 3-part upper triple-root molar with longitudinal section and caries insert

The series ranges from 23-29 cm high. Each tooth delivered on a base. M-1017588



M-1000242

226 HUMAN ANATOMY | Dentition Models

2-part M-1000243

M-1017580



#### 3B MICROanatomy<sup>™</sup> Tongue

This highly detailed model comprises a macroscopic view of the tongue (dorsal view) and microscopic views of the various papillae of the tongue (10-20x life-size) and of a taste bud (approx. 450x life-size). All views are mounted on a base that also features an overview of the sensory and sensitive innervations of the tongue.  $14.5 \times 32.5 \times 20$  cm; 0.8 kg **M-1000247** 

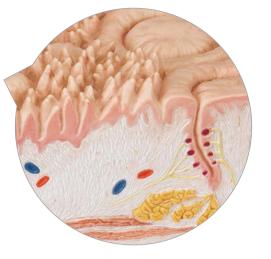




#### Tongue Model, 2.5 times Life-Size, 4-part

This model shows the lower jaw up to the second molar, the tongue with mouth floor musculature in median section and the right sublingual and submandibular gland. On removable base.

23 x 17 x 16 cm; 0.8 kg **M-1002502**  Highly detailed model showing the various papillae of the tongue and taste buds





#### Skull Model with Teeth for Extraction, 4-part

This anatomical human skull is a great tool for students. The teeth of the upper and lower jaw can be extracted from the skull and replaced individually with their fully formed roots. A bone flap on the right mandible of the skull can be opened to view the dental roots, spongiosa, nerve canal and an impacted wisdom tooth.

- Features individual teeth with roots
- Practise extraction time and again
- Naturally articulating jaw
- 22 x 13.5 x 17 cm; 0.8 kg

M-1003625

## > LIFE-SIZE MODEL CAST FROM REAL SPECIMEN

#### Magnetic Heart Model, Life-Size, 5-part with Diastole and Systole

Now, in one detailed model, the study of diastole and systole is finally made straightforward and convenient. This unique dissection makes the viewing of the cardiac valves during diastole with closed pulmonary aortic valves and opened mitral tricuspid valves easier than ever before. In addition to this the closed mitral tricuspid valves and opened pulmonary aortic valves during systole are represented in a second model located on the base.

- Easy to open, magnetic connections
- Extremely detailed, life-size model
- Cast from real specimen
- Shows both diastolic and systolic state
- 25 x 21 x 13 cm; 1.52 kg

M-1010006

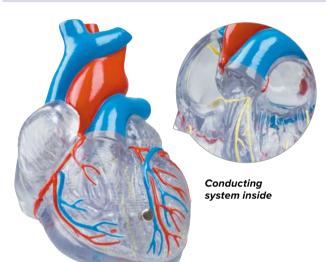
### Hand-painted in life-like colors

Didactically Painted Heart Model, Magnetic, Life-Size, 5-part Invest in quality with this uniquely sectioned 5-part heart model by 3B Scientific. Cast from a real human heart and didactically prepared to facilitate a better understanding of the anatomy and blood flow of the heart. A dissection through the median plane makes an easy demonstration possible. Color scheme and disassembly of the heart model in a didactical manner. The chambers of the heart and vessels (including coronary vessels) in which oxygen-rich blood is transported have been displayed in red. Heart chambers and vessels which con-

tain blood low in oxygen have been reproduced in blue. 13 x 19 cm; 0.6 kg **M-1010007** 

## **Classic Heart Model Series**

- + Removable parts for closer study
- + Ideal for student and patient education
- + Durable and virtually unbreakable material

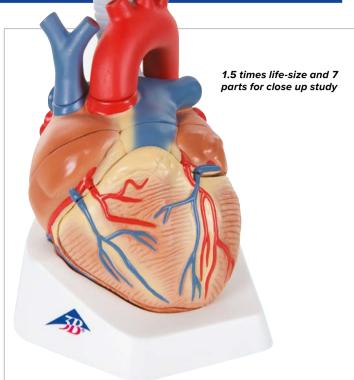


#### **Classic Heart with Conducting System, 2-part**

This unique transparent model shows the anatomy of the heart complete with its conducting system represented in color. The front heart wall is removable and the entire heart can be removed from the stand. 19 x 12 x 12 cm; 0.2 kg **M-1019311** 

#### **Classic Heart, 2-part**

The 2-part classic heart is highly detailed and at a price you will love. Just slightly smaller than life-size with exquisite detail throughout including ventricles, atria, valves, veins, and the aorta. The front heart wall is detachable to reveal the chambers and valves inside. On removable stand. 19 x 12 x 12 cm; 0.3 kg M-1017800



#### Heart, 1.5 times Life-Size, 7-part

This high quality model clearly shows over 30 different anatomical regions in the heart. Comes with product manual for easy identification of anatomical features. The model is horizontally sectioned at the level of the valve plane.

#### The following parts can be removed for detailed study:

- Oesophagus
- Trachea
- Superior vena cava
- Aorta
- Front heart wall
- Upper half of the heart
- On base.

20 x 15 x 17 cm; 1.1 kg **M-1008548** 





# > Removable parts for detailed study!

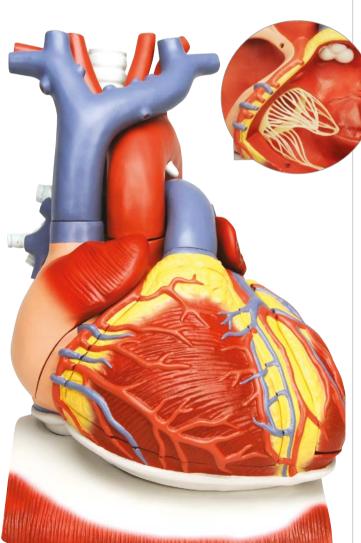
#### Heart on Diaphragm, 3 times Life-Size, 10-part

This unique model depicts the structures of the heart while detailing how the heart relates to the thoracic diaphragm at 3 times life-size. Easily show how the diaphragm separates the thoracic cavity from the abdominal cavity.

# The following parts of the heart can be removed for detailed study:

- Oesophagus
- Trachea
- Superior vena cava
- Aorta Pulmonary artery stem
- Both atrium walls
- Both ventricle walls
- Non-removable base, includes multilingual product manual.
- 41 x 33 x 28 cm; 3.6 kg

#### M-1008547

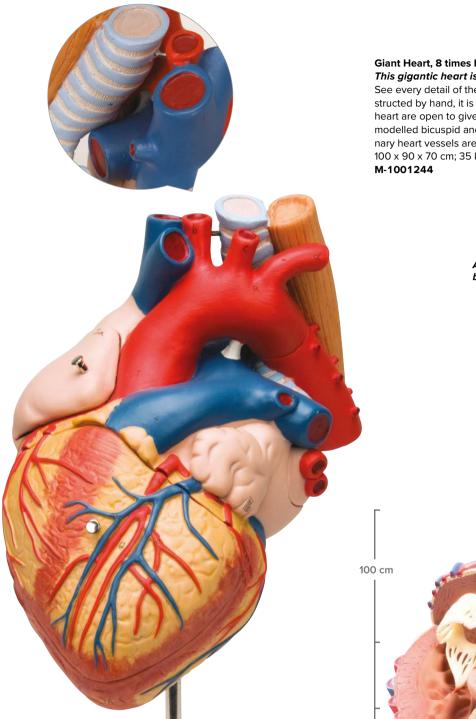


Magnified models for easy identification of all anatomical structures in the human heart



#### Heart, 2 times Life-Size, 4 part

This 2 times life-size heart model allows very easy identification of all structures and is a perfect aid for lessons in big classrooms or lecture halls. The anatomy of the human heart is shown in great detail with ventricles, atria, valves, veins, and the aorta. The front heart wall can be removed to reveal the chambers and valves inside. Comes with a removable base and a multilingual product manual.  $32 \times 18 \times 18$  cm; 1.3 kg **M-1000268** 



#### Heart with Oesophagus and Trachea, 2 times Life-Size, 5-part

This 2-times life-size heart model allows a very easy identification of all structures in the human heart. The atrium walls and the front heart wall are removable to reveal the inside. Additionally, the upper section of the oesophagus, the upper bronchi and the ascending aorta and the front heart wall and the atrium walls can be removed. Hand-painted in life-like colors! On removable stand.

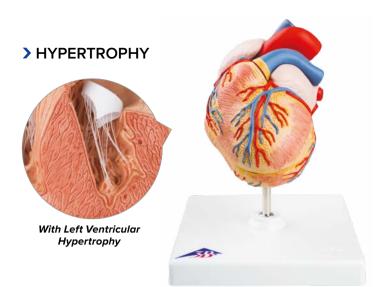
32 x 18 x 18 cm; 1.3 kg

M-1000269

#### Giant Heart. 8 times Life-Size This gigantic heart is one of a kind!

See every detail of the heart with this giant 8 times life-size model. Constructed by hand, it is of great quality. The atria and ventricles of the heart are open to give a view of the interior, and show the accurately modelled bicuspid and major vessels adjacent to the heart. The coronary heart vessels are also shown in amazing detail. On stand. 100 x 90 x 70 cm; 35 kg

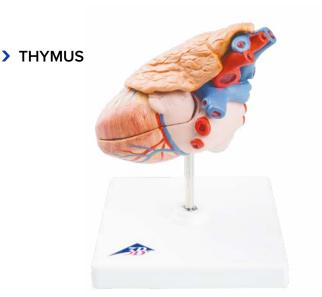




#### Classic Heart with Left Ventricular Hypertrophy (LVH), 2-part

In addition to all the features of the 2-part classic heart, this unique model shows the long-term effects of increased heart activity due to high blood pressure. The muscular wall of the left heart ventricle is considerably thickened and the tip of the heart is visibly rounded off. The front heart wall is detachable to reveal the chambers and valves inside. On removable stand.

12 x 12 x 14 cm; 0.45 kg **M-1000261** 



#### **Classic Heart with Thymus, 3-part**

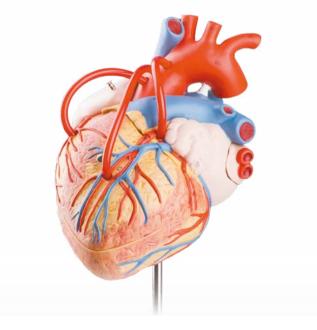
In addition to the features of the 2-part classic heart, this model also shows the location and relative size of the thymus.  $20 \times 12 \times 12$  cm; 0.3 kg **M-1000265** 

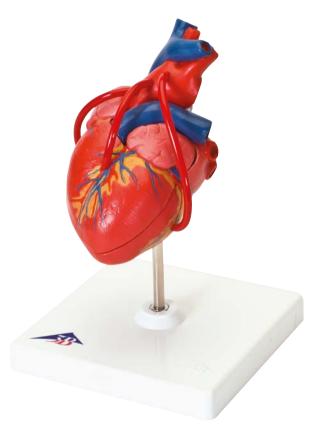
### **>** BYPASSES

#### Heart with Bypass, 2 times Life-Size, 4-part

This 2 times life-size heart is great for large lecture halls or classrooms. The front heart wall can be removed to view the inner chambers. In addition, this model shows a venous bypass to the ramus postero-lateralis of the right coronary artery, to the ramus interventricularis ant. of the left coronary artery with branching to the ramus diagonalis as well as a bypass to the ramus circumflexus of the left coronary artery. On removable stand.

32 x 18 x 18 cm; 1.1 kg **M-1000263** 





#### **Classic Heart with Bypass, 2-part**

With all the features of the 2-part classic heart, but also **includes venal** bypasses to the right coronary artery, to the ramus interventricularis anterior, and also to the ramus circumflexus of the left coronary artery, which are shown in color. This model is a great aid in explaining coronary heart disease. On removable stand. 19 x 12 x 12 cm; 0.35 kg **M-1017837** 

#### 3B MICRO*anatomy*<sup>™</sup> Artery and Vein, 14 times Life-Size

This model, enlarged 14 times, shows a medium-sized muscular artery with two adjacent veins from the antebrachial area with adjoining fat tissue and muscle.

- Illustrates reciprocal anatomical relationship of artery and vein and basic functional techniques of venous valves
- Left vein and middle artery are fenestrated in upper anterior segment, revealing various layers of wall structure in cross and longitudinal section and top view
- Right vein is opened throughout in anterior segment, revealing orifice of a feeder vein and two venous valves formed by a duplication of the tunica intima

On the back of the model, a relief of two veins illustrates the functional aspect of the venous valves. Supplied on base.

26 x 19 x 18.5 cm; 0.9 kg **M-1000279** 

# Accurate teaching aids of the circulatory system





#### Arteriosclerosis Model,

#### with Cross Section of Artery, 2-part

With the help of this artery model doctors can explain changes in the blood vessels due to arteriosclerosis. A horizontally dissected artery fork is depicted with arteriosclerotic changes in four different stages, from slightly sedimented to a completely clogged blood vessel. On stand.  $14 \times 10 \times 7$  cm; 0.2 kg

#### M-1000278

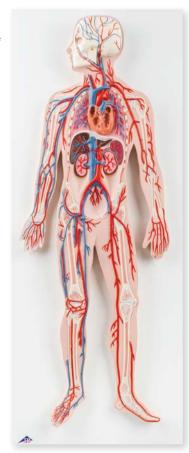
#### Circulatory System, 1/2 Life-Size

This half life-size relief model of the human circulatory system details the following anatomical structures:

- The arterial/venous system
- Heart
- Lung
- Liver
- Spleen
- Kidneys
- Partial skeleton

A colorful and anatomically accurate teaching aid of the human circulatory system. Delivered on baseboard for easy display in a classroom or doctor's office.

80 x 30 x 6 cm; 3.6 kg **M-1000276** 



# LUNG MODELS

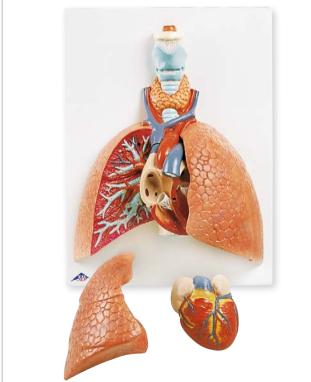


Ċ

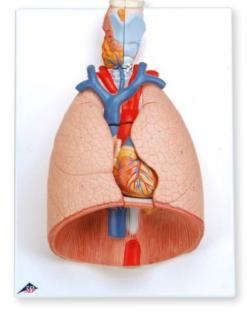
#### Segmented Lung, Magnetic, 20-part

This high quality lung model is detachable into two lobes and single segments. The segments are color-coded and their position can be easily identified in the bronchial tree. The bronchial tree contains the lobar bronchi and segmental bronchi. All segments are connected by magnets which allow a safe and easy handling.

25 x 25 x 35 cm; 4.1 kg **M-1008494** 



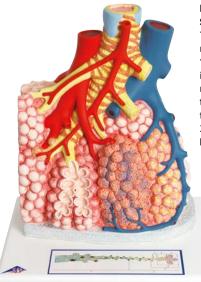
Lung Model with Larynx, 5-part This high quality lung model comes on a baseboard and can be disassembled into 5 parts, lung and heart are removable. 12 x 28 x 37 cm; 1.25 kg M-1001243



Lung Model with Larynx, 7-part The lung model with larynx comes on a baseboard for easy display. It is of highest quality, and contains removable parts. 31 x 41 x 12 cm; 2.2 kg M-1000270



# CT Bronchial Tree with Larynx and Transparent Lungs This unique model was created on the basis of computer tomography data of a human male. The larynx is detachable at the level of the second tracheal cartilage and divisible in the median plane. The epiglottis is mounted flexibly. The various segmental bronchi are made of elastic material and depicted in various transparent colors so that they are easier to distinguish visually. The transparent lungs are detachable. 22 x 18 x 37 cm; 1.23 kg M-1000275 **CT Bronchial Tree** without Lungs 22 x 18 x 37 cm; 0.43 kg M-1000274



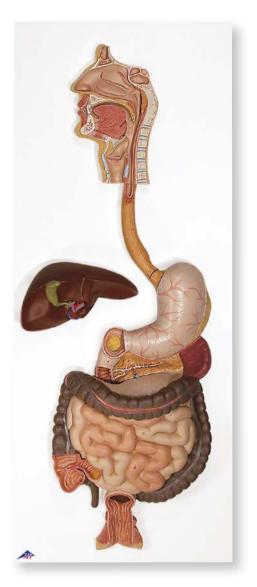
Pulmonary Lobule with Surrounding Blood Vessels The model shows an external pulmonary lobule at 130 times life-size. A graphic image on the stand of the model shows the structure of the airway in the lungs up to the alveolus. 26 x 33 x 19 cm; 1.35 kg M-1008493



#### COPD Model

Shows changes to the bronchial tissue from normal to permanent damage and after administration of medication.  $15 \times 11 \times 8 \text{ cm}; 0.18 \text{ kg}$ **M-1012788** 

# **DIGESTIVE & URINARY SYSTEM MODELS**



#### Digestive System, 3-part

This life-size model demonstrates the entire digestive system in graphic relief.

The following parts are shown, painted in realistic colors:

- Nose
- Mouth cavity and Pharynx
- Oesophagus
- GI tract
- Liver with gallbladder
- Pancreas
- Spleen

The duodenum, caecum and rectum of the digestive system are opened. The transverse colon and front stomach wall are removable from the digestive system for detailed study of the anatomy. The liver, stomach, and transverse colon are removable.

81 x 33 x 10 cm; 4.4 kg

M-1000307

## > HIGHLY MAGNIFIED VIEWS



**3B MICRO***anatomy*<sup>™</sup> **Digestive System – 20 times magnified** This model illustrates the structure of the fine tissues of four characteristic sections of the digestive system 20 times magnified:

- Oesophagus
- Stomach
- Small intestine
- Large intestine

The front of the model, from top to bottom, shows a magnified view, in histological section, of the individual sections of the digestive system and their fine tissue structures. The back of the model has highly magnified views of didactically interesting areas of each section shown on the front.

29.5 x 26 x 18.5 cm; 1.5 kg M-1000311

#### Digestive System, 2-part (not shown)

Same features as the 3-part model, but without the removable stomach half. **M-1000306** 

Chart – The Gastrointestinal System Laminated M-1001542 Paper M-4006688

Please go online to 3bscientific.com to browse the large selection of charts or see pages 264 - 269.



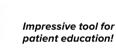




#### Gastric Band Model

This model was developed based on the twopart stomach model with the addition of an SAGB Quick Close<sup>®</sup> gastric band. A gastric band is inserted surgically to treat morbid obesity if conservative treatments are unsuccessful. This model is highly suitable as a tool for explaining the device to patients.  $3 \times 3 \times 4$  cm; 0.5 kg

M-1012787



#### Stomach, 3-part

Shows the layers of the stomach wall from cardia to pylorus. The front stomach half and the opened duodenum with pancreas are removable.

#### Shown are:

- The lower oesophagus
- Vessels
- Duodenum
- Pancreas
- Nerves

25 x 22 x 12 cm; 0.8 kg **M-1000303** 

#### Stomach, 2-part (not shown)

Like the one above but the Duodenum and Pancreas are not present. The front half of the stomach is removable for detailed study. It shows the lower oesophagus, vessels, and nerves.

25 x 22 x 12 cm; 0.6 kg **M-1000302** 

#### Stomach with Ulcers

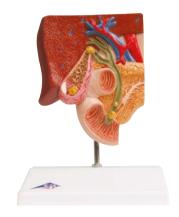
The  $\frac{1}{2}$  life-size stomach pathology model demonstrates various stages of gastritis from a light gastric ulcer to a perforation. Correspondingly, the base shows an enlarged stomach wall to further demonstrate these changes. 14 x 10 x 17 cm; 0.3 kg **M-1000304** 



#### Diseases of the Œsophagus

Reaching from the lower part of the  $\infty$  sophagus to the upper part of the stomach, this vivid, life-size frontal section shows many common conditions like ulcer, reflux  $\infty$  sophagus, and hiatal hernia. Mounted on base. 14 x 10 x 19 cm; 0.194 kg

M-1000305



#### **Gallstone Model**

The anatomy of the biliary system and its surroundings are shown at 1/2 natural size in this graphic model for education. Both acute inflammation and the tissue changes caused by chronic inflammation can be identified in the gallbladder wall. Mounted on base. 14  $\times$  10  $\times$  19 cm; 0.2 kg **M-1000314** 



#### Haemorrhoid Model

The model is a life-size frontal section of the rectum as well as a smaller relief on a pedestal. In addition to the anatomical structures of the rectum (sphincter, mucous membrane, venous plexus), the model shows internal haemor-rhoids during stage I and II as well as external haemorrhoids. The relief exhibit shows haemorrhoids during stage III and IV. Mounted on base.

14 x 10 x 14 cm; 0.2 kg **M-1000315** 





#### **Intestinal diseases**

This model shows the usual benign and malignant changes in the colon and rectum. These include diverticula, polyps, haemorrhoids, fistulae, fissures, chronic inflammatory diseases (Crohn's disease and ulcerative colitis), as well as intestinal cancer in various stages. Mounted on base.  $21 \times 17 \times 27$  cm; 0.957 kg **M-1008496** 

### MAGNIFIED 100 TIMES!

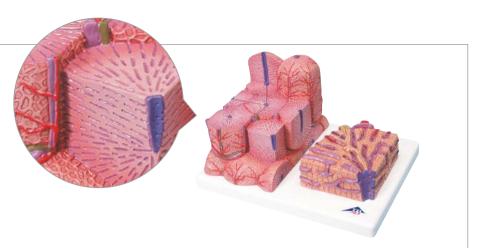
#### Intestinal Villi, 100 times Life-Size

This intestinal villi model consists of one entire villus, one longitudinally sectioned villus showing the arterioles and venules, and one sectioned villus to show the lymphatic vessels. Also includes a longitudinal section of Lieberkühn's crypt. Mounted on base. 43 x 28 x 10 cm **M-1005532** 

#### 3B MICROanatomy™ Liver

This 2-part model shows a highly magnified view of a section of the liver. It illustrates the functional and structural components with two different enlargements. The left part shows a section of the liver that comprises several liver lobules. The right part of the model is a highly magnified view of the sectioned liver lobule on the left. Mounted on base.  $15 \times 26 \times 18.5$  cm; 0.7 kg

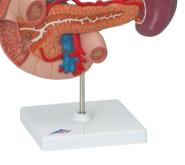
M-1000312





#### Kidneys with Vessels – 2-part

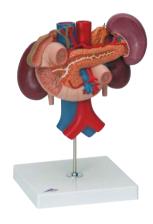
**Life-size** model presenting the kidneys with suprarenal glands, the outgoing ureters, the renal vessels, and the large vessels situated close to the kidneys. The front half of the right kidney can be removed to reveal the renal pelvis, the renal calices, the renal cortex, and the renal medulla. Comes on stand. 21 x 18 x 28 cm; 1 kg **M-1000308** 



#### Rear Organs of the Upper Abdomen

Representing the duodenum, which is partially opened, along with opened gallbladder and bile ducts. The model also includes the pancreas, revealing large ducts, the spleen, and the surrounding vessels, all in natural size. Comes on stand.

23 x 12 x 20 cm; 0.55 kg **M-1000308** 



#### Kidneys with Rear Organs of the Upper Abdomen – 3-part

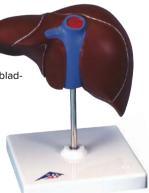
This model combines the rear organs of the upper abdomen and the kidneys with vessels in one. The upper abdominal organs are attached in their natural positions and are removable from the kidneys. Comes on stand.  $24 \times 18 \times 29$  cm; 1.4 kg **M-1000310** 

### Liver with

Gallbladder This realistic model shows the anatomy of the liver and gallbladder. Mounted on base.

#### It shows:

4 lobes with gallbladder
Extrahepatic ducts
Hilus vessels
18 x 18 x 12 cm; 0.5 kg
M-1014209

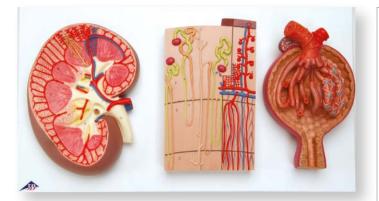


#### Liver with Gallbladder, Pancreas and Duodenum This highly-detailed relief model provides a detailed look at the liver with:

- Ducts
- Gallbladder
- Pancreas
- Duodenum
- Vessels
- Extrahepatic ducts with gallbladder

 Main pancreatic duct and their orifices Delivered on baseboard. 4 x 20 x 18 cm; 0.8 kg M-1008550





#### Kidney Section, Nephrons, Blood Vessels and Renal Corpuscle

These 3 kidney models create a complete series to study the anatomy of the kidney and the different structures of the kidney in great detail. All important structures are numbered and identified in the product guide.

Together the human kidney models show:

- A longitudinal section of the right kidney, 3 times life-size
- A kidney nephron depicting a section through renal cortex and medulla. Nephron features the renal corpuscles with proximal and distal convoluted tubules, loops of Henle, collecting tubules and blood vessels, 120 times full-size
- The third kidney section shows an opened Malpighian corpuscle with glomerulus and Bowman's capsule, 700 times life-size of the human kidney

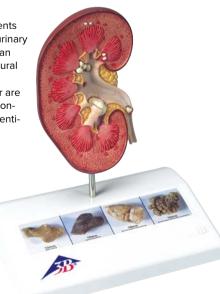
Mounted on baseboard. 29 x 52 x 9 cm; 2.8 kg **M-1000299** 

## Individual models:

Kidney M-1000296 Nephrons and Blood Vessels M-1000297 Malpighian Corpuscle of Kidney M-1000298

#### **Kidney Stone Model**

A great tool to inform patients about kidney stones and urinary stones. The model shows an opened right kidney in natural size. The renal calices, the renal pelvis, and the ureter are opened as well enabling concretions or stones to be identified in typical positions. Mounted on base. 14 x 10 x 16.5 cm; 0.18 kg **M-1000316** 



Six zones illustrate fine-tissue structures of the human kidney



#### 3B MICROanatomy<sup>™</sup> Kidney

This extremely detailed model shows the functional units of the kidney greatly magnified.

Six model zones illustrate the following fine-tissue structures: • Longitudinal section of a kidney

- Section of renal cortex and renal medulla of the kidney
- Wedge-shaped section of a kidney lobe with a diagrammatic depiction of three nephrons with varying lengths of loop of Henle and diagrammatic depiction of the vascular supply
- Diagrammatic illustration of a kidney nephron with a short of loop of Henle and didactic/diagrammatic illustration of the vascular supply
- Diagrammatic illustration of an opened kidney renal corpuscle with nephron and light-microscopic transverse sections of the proximal, attenuated and distal segments of a renal tubule
- Diagrammatic/didactic illustration of an opened kidney renal corpuscle

Mounted on base.

23.5 x 25.5 x 19 cm; 1.3 kg **M-1000301** 

#### Kidney with Adrenal Gland, 2-part

The front half of the kidney is removable to enable demonstration of cortex medulla and vessels. The renal pelvis of the kidney is also displayed. 20 important structures are included in the anatomy key. • Kidney with adrenal gland

- Renal and adrenal vessels of the kidney
- Upper portion of ureter for the human kidney On stand. 8.5 x 19 x 26 cm; 0.9 kg

M-1014211



 Numbered parts for easy identification



**Urinary System – Male – 3/4 Life-Size** This urinary system model shows the structures of the retroperitoneal cavity in high detail.

The right kidney of the model is opened, other details represented are: • Inferior vena cava

- Renal veins
- Aorta with its branches
- Iliacal vessels
- Ureter
- Urinary bladder
- Prostate
- Adrenal gland
- Rectum
- Musculature

Urinary system model is not delivered on base. 10 x 18 x 26 cm; 1 kg **M-1008551** 

#### Dual Sex Urinary System, 6-part

All-in-one model of the human urinary system. One front half kidney is removable; easy to change male insert (bladder and prostate, front and rear half) and female insert (bladder, womb and ovaries, 2 lateral halves).

For detailed study, the following is shown:

- Structures of retroperitoneal cavity
- Large and small pelvis with bones and muscles
- Inferior vena cava
- Aorta with its branches including iliac vessels
- Upper urinary tract
- Rectum
- Kidney with adrenal gland On baseboard. 41 x 31 x 15 cm; 2.3 kg **M-1000317**



Basic Kidney Section, 3 times Life-Size

This colourful and anatomically accurate model depicts a longitudinal section of the human right kidney. All important structures of the human kidney are shown. No baseboard included. 20 x 12 x 12 cm; 0.3 kg **M-1000295** 

#### Prostate Model, 1/2 Life-Size

This prostate model provides a cross section of the male genital organs showing a healthy prostate with bladder, urethra, testicle, symphysis and rectum. The narrowing of the urethra due to the change of the prostate is made clear via the 4 cross sectional views on the base of the prostate model. Mounted on base. 13.5 x 10 x 14 cm; 0.24 kg **M-1000319** 





# **3B ORTHObones**

**3B Scientific® ORTHO***bones* are artificial workshop bones and test material specifically developed for teaching orthopedic and surgical procedures, for surgery workshops, and medical engineers. They offer a cost-effective alternative to real human bones for the training of orthopedic techniques in fracture repair like plate osteosynthesis or screw fixation, and for implant training and demonstrations.

- High quality, economical workshop bones
- Bio-mechanically accurate
- Anatomically realistic surfaces
- Ready for imaging procedures without pre-processing
- Short delivery times



# +

## **3B ORTHO**bones Standard

- + Economically priced, hands-on workshop bones
- + Realistically simulated characteristics of human bone with defined cortical shell and spongiosa
- + Train surgical manipulations on anatomically correct workshop bones

3B ORTHObones Standard	Item No.
Humerus, right	M-1019604
Humerus, left	M-1019609
Elbow, right	M-1019616
Elbow, left	M-1019617
Radius, right	M-1019605
Radius, left	M-1019610
Ulna, right	M-1019606
Ulna, left	M-1019611
Hand	M-1019618
Hand with Wrist	M-1019619
Femur, right	M-1019601
Femur, left	M-1019607
Knee, left	M-1019621
Knee, right	M-1019622
Tibia, right	M-1019602
Tibia, left	M-1019608
Foot with Hammer Toes	M-1019620
Male Half Pelvis, right	M-1019603
Male Half Pelvis, left	M-1019612
Full Pelvis with Sacrum	M-1019613
Cervical Vertebrae	M-1019614
Thoracic Vertebrae	M-1019615
Lumbar Spine	M-1019700
Lumbar Spine with Sacrum	M-1019701
Femur Teen, right	M-1019702
Paediatric Tibia, right	M-1019703
Paediatric Femur, right	M-1019704
Paediatric Hollow Skull with Support Block	M-1019705



Paediatric Skull



The multilayered construction simulates the hard cortical and the softer cancellous bone. Mechanical manipulations (i.e. with screws, plates, or implants) can be practised on these highly realistic workshop bones.



# **3B ORTHObones PREMIUM**

## +

### **3B ORTHObones Premium**

- + Biomechanical characteristics of the bones of a young adult (20-30 yrs.)
- + Realistic bone surface structure and weight
- + For advanced training of surgical manipulations
- + Especially suited for high contrast X-ray results without extra preparations

Latex bands simulate joint movement and leave no trace on the X-ray

3B ORTHObones Premium	Item No.
Humerus, right	M-1005121
Humerus, left	M-1016670
Elbow, Ulna, Radius, Humerus, flexibly mounted	M-1018335
Radius, right	M-1005122
Radius, left	M-1016671
Ulna, right	M-1005123
Ulna, left	M-1016672
Hand	M-1018336
Hand with Forearm, left	M-1018337
Male Half Pelvis, right	M-1005119
Male Half Pelvis, left	M-1016702
Full Pelvis with Femurs	M-1018342
Right Pelvis with Femur	M-1018344
Left Pelvis with Femur	M-1018343
Full Pelvis with Sacrum	M-1018096
Sacrum	M-1005120
Femur, right	M-1005117
Femur, left	M-1016668
Knee, right	M-1018341
Knee, left	M-1018340
Tibia, right	M-1005118
Tibia, left	M-1016669
Foot with Hammer Toes, Bunions and Heel	M-1018339
Mandible with Teeth	M-1005116
Edentulous Mandible with Gum	M-1018330
Scapula, right	M-1018517
Scapula, left	M-1017629

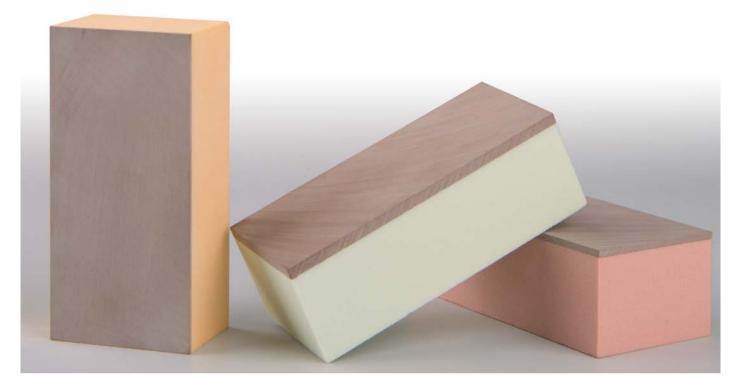
#### Elbow, Ulna, Radius, Humerus, flexibly mounted

Flexibly mounted elbow, comprised of the humerus, ulna, and radius. Thanks to latex bands, the joint is flexible and can be moved. Latex band is glued so it does not interfere with imaging procedures. **M-1018335** 



High contrast X-ray taken with 3B ORTHObones

# **3B BIOMECHANICAL TEST BLOCKS**





Test cylinder, shown with sagittal cut

## 3B Biomechanical Test Blocks are used to:

- + Test implants and devices
- + Train the evaluation of bone density
- + Simulate different sets of characteristics, i.e. bone density and cortical thickness

3B Biomechanical Test Blocks	Bone density	Cortical Thickness	Item No.
Test Block	10 PCF	CP1	M-1019708
Test Block	10 PCF	CP2	M-1019875
Test Block	10 PCF	CP3	M-1019876
Test Block	15 PCF	CP1	M-1019707
Test Block	15 PCF	CP2	M-1019877
Test Block	15 PCF	СРЗ	M-1019878
Test Block	20 PCF	CP1	M-1019706
Test Block	20 PCF	CP2	M-1019879
Test Block	20 PCF	СРЗ	M-1019880
Test Block	30 PCF	CP1	M-1019881
Test Block	30 PCF	CP2	M-1019882
Test Block	30 PCF	СРЗ	M-1019883

#### Bone density: 10 – 30 PCF (Pounds per Cubic Foot)

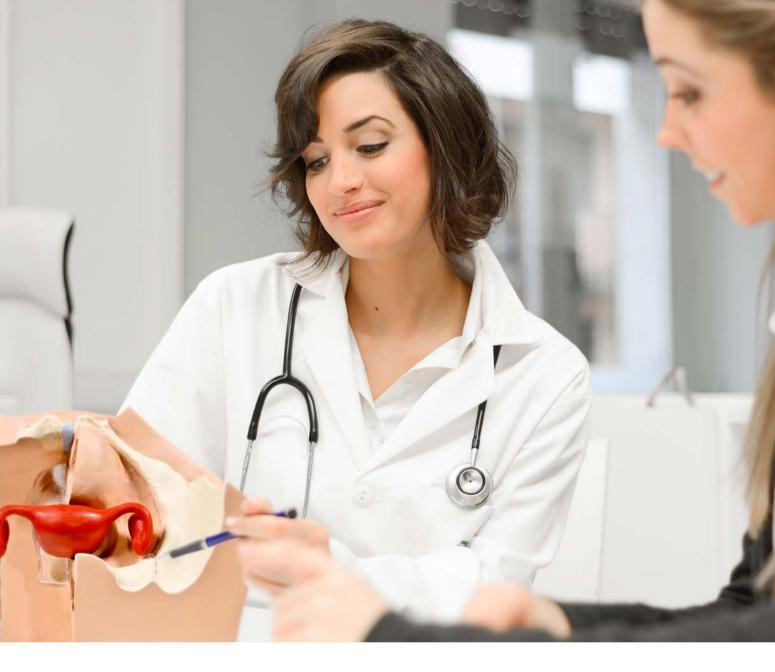
The solid rigid polyurethane foam is available in 4 different densities: 10, 15, 20 and 30 PCF.

#### Cortical thickness: 1 – 3 mm

The cortical shell is simulated by a dense plate on top of each block. Its density is 30 PCF and three different thicknesses (1, 2 or 3 mm) are available for each foam density option.

#### Dimensions:

CP1: 1 mm cortical thickness:  $9.5 \times 4.5 \times 3.1$  cm CP2: 2 mm cortical thickness:  $9.5 \times 4.5 \times 3.2$  cm CP3: 3 mm cortical thickness:  $9.5 \times 4.5 \times 3.3$  cm



# HEALTH EDUCATION

High quality and functional products to educate about common health risks and diseases. Ideal for educating patients and for student training.

Please see page **248** to find out more about the product featured in the image: Model for Gynaecological Patient Education M-1013705



#### Wearable Breast Self Examination Model

Demonstrate realistic self-examination with this natural casting of a female upper body with C-cup breasts. It can easily be worn, in order to better train and practise breast self-examination.

- Made of 3B Scientific SKIN/ike<sup>™</sup> high-quality silicone for a realistic feel
- Breast examination is possible in both upright and lying positions
- Benign and malignant tumours in different stages of development create an understanding of what to feel for

*Includes:* Multilingual product manual, "Female Breast" chart M-1001576, talcum powder, harness and stand.

Model with Aluminium Carrying CaseM-1000342Model without CaseM-1000343





#### **Model of Female Breast**

This model is an extremely valuable tool to demonstrate the differences between healthy and unhealthy breast tissue. Shown are a lactating right breast and a non-lactating left breast. Both parts of the model have a sagittal cut showing the tissue of the breast gland as well as the deeper-lying anatomical structures such as the muscles, ribs, costal pleura, pulmonary pleura and lungs. A breast gland inflammation (mastitis) is represented on the right breast and various other diseases on the left breast including a benign tumour, two malignant tumours, and two cysts. The models are fixed together via magnets for easy demonstrations. 36.5 x 23 x 20 cm; 1.4 kg M-1008497

#### Breast Self Examination Model, 3 Single Breasts on Base

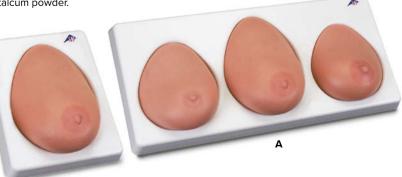
Very realistic natural casting of three different female breasts in C and D cups to train and practise breast examination. Supplied with base and talcum powder. • Made of **3B SKIN/ike**<sup>™</sup> high-quality silicone for a realistic feel

в

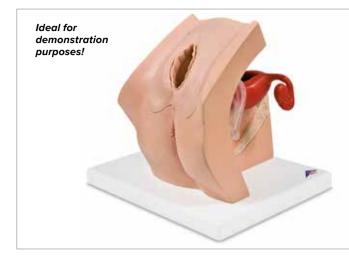
- Benign and malignant tumours in different stages of development are featured in two breasts
- The third breast is healthy for comparison

**A. Set of Three** 52 x 24.5 x 9.5 cm; 2.3 kg **M-1000344** 

B. Single Breast with Benign Tumour M-1000345



# CONTRACEPTIVE EDUCATION



#### Model for Gynaecological Patient Education

Ideal for demonstration purposes and for practising insertion of female barrier contraceptive devices, including the femidom, cervical cap, vaginal ring, diaphragm and IUD. It is possible to insert various types of pessaries such as ring, bowl or cube which are used in the event of a prolapse or incontinence. Transparent part allows for clear inside view. 26 x 19 x 22 cm; 1.5 kg

M-1013705

Optional Kits:	
Contraception Kit	M-1017130
Pessary Kit	M-1017131

#### **Family Planning Educator**

Desktop simulator for training and demonstration of proper introduction and removal of a diaphragm, IUD or sponge contraception devices. This trainer demonstrates both normal and abnormal uterine positions and is ideal for training Bi-manual examination techniques.

#### The family planning educator is supplied with:

- One anteverted uterus with clear upper half to illustrate correct position of IUD
- One uterus to illustrate normal anteversion and retroversion
- · Cervix with patent os attaches to uterus suspended within pelvic cavity
- Soft plastic stomach cover
- · Carrying bag included
- 25.4 x 25.4 x 25.4 cm; 2.3 kg M-1005784





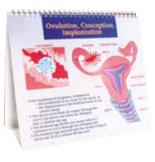
#### I.U.D. Trainer

The hand-held trainer is a suitable aid for understanding correct positioning of I.U.D. (Intrauterine Device) in the uterus. Made of durable plastic, a transparent cover for easy visualisation. I.U.D. not included. 6 x 40 x 45 cm M-1005766



#### Why PAP Tests Can Save Your Life, Easel Display

Easy-to-understand text combined with six handpainted, realistic cervix models make teaching the importance of regular PAP tests easy. This 3D display is perfect for one-on-one presentations. Comes with a protective felt cover. 23 x 30.5 cm M-1018296



#### **Understanding Birth Control** A great tool for healthcare providers or educators, this flip chart discusses male and female reproductive anatomy, menstruation, conception, and the most current methods of contraception. Provides student information on one side and a teaching script on the other. 21 panels. 35.5 x 30.5 cm M-1018279



#### Woman's Monthly **Carousel Chart**

Ideal visual aid for a complex process, this chart explains a 28-day menstrual cycle. Discusses function of hormones, changes in the uterine lining, the development and release of the ovum, body temperature, and much more. 84 x 40.5 cm M-1018345



#### The Consequences of STDS **3D Display**

This 3D display shows how organs and body parts can be affected by sexually transmitted diseases. The durable carrying case and easy set-up make this display ideal for clinics and sex education programs.

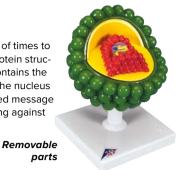
71 x 69 cm opened. M-1018280



#### Human Immunodeficiency Virus (HIV) Model

This model has been enlarged millions of times to show the outer lipid membrane with protein structures and the internal nucleus which contains the viral hereditary matter (RNA). Remove the nucleus and you'll find space to place a targetted message regarding measures to take in protecting against HIV. Mounted on base.

18 x 13 x 13 cm: 0.70 ka M-1000336





#### The Consequences of **HIV/AIDS 3D Display**

This 3D display helps viewers to understand what HIV/AIDS can do to the body. Contained within a convenient carrying case for storage or transport. 71 x 69.75 cm opened

M-1018281



#### **Sexually Transmitted Diseases Flip Chart**

Presents straightforward facts about STDs, making it easy to educate about HIV, syphilis, gonorrhea, herpes, hepatitis B, and HPV, and how to avoid them. Six-panel flip chart with presentation notes on the backside of each panel. 30.5 x 43.2 cm

M-1020780

#### **Condom Training Set**

This economy set has 20 styrofoam penis models and provides a means of practising the correct use of condoms, even in large groups. The reusable models can be fixed to the desk with adhesive tape. Delivered without condoms. 14.5 cm

#### M-1005115



#### Female Condom Model

Represents an anteverted uterus in a simulated pelvic cavity with soft vulva and vagina and a soft plastic stomach

cover. A perfect tool to demonstrate the use of a female condom, contraceptive sponge and cervical cap. Supplied with carrying bag. 17.5 x 24 x 14 cm

M-1005826



#### **Condom Training Kit**

Use this model to quickly teach how to use a condom safely. Realistic anatomical structures and firmness. Supplied with 12 lubricated training condoms and a carrying bag. 7.5 x 7.5 x 19.5 cm; 0.35 kg

Light Skin Tone M-1000340 **Dark Skin Tone** M-1000341

#### **Condom Training Model**

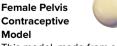
Demonstrate the proper use of condoms by using this realistic model. Includes 12 condoms, syringe, and artificial semen to simulate ejaculation. Mounted on a stand with suction cups and delivered with carrying bag. 35.5 x 15 x 16.5 cm; 2.30 kg M-1005560

#### **Optional Equipment: UV-Fluorescent Artificial Semen** M-1005561



#### **Training Model for a Female Condom**

This model shows the labia and vagina up to the cervix and is designed to demonstrate and teach the insertion of a female condom. Condoms not included. 12 cm; 0.15 kg **Dark Skin Tone** M-1000338 **Light Skin Tone** M-1000339



This model, made from soft BIOLIKE<sup>™</sup> material, provides a cross-section of a female pelvis for demonstrating proper contraceptive insertion. The side cutout lets viewers see and understand contraceptive placement and removal. Contraceptives not included. 15 x 8 x 9 cm

M-1017935

Model

# **PREGNANCY & BIRTH**



#### **Embryonic Development Model in 12 Stages**

Represents development of the human germ cells from fertilisation until the end of the 2nd month of pregnancy in 12 stages. Each stage can be removed from the base individually:

- 1. Ovum at time of fertilisation (conception) with male gamete (sperm)
- 2. Zygote at 2-cell stage, approx. 30 hours after fertilisation
- 3. Zygote at 4-cell stage, after around 40 50 hours
- 4. Zygote at 8-cell stage, after around 55 hours
- 5. Morula
- 6. Blastocyst after around 4 days
- 7. Blastocyst after around 5 days
- 8. Blastocyst after around 8-9 days
- 9. Germ cells at approx. 11th day
- 10. Germ cells at approx. 20th day
- 11. Embryo at around the end of the 1st month of pregnancy
- 12. Embryo at around the end of the 2nd month of pregnancy

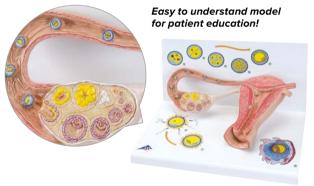
M-1001257

#### Reproductive System Model Sets Set of all 9 Activity Sets

Full-color models clarify the functions of male and female reproductive systems. This master set includes all nine Human Reproductive System Model Activity Sets. Each model activity set consists of a markable model of durable vinyl and an activity guide which includes background information, basic understandings, activities, a glossary, and a key to model structures. Also included are color transparencies and a black line master in a three ring binder. In English. **M-1005480** 

#### Available Activity Sets:

Menstrual Cycle	M-1005481
Birth	M-1018406
Meiosis	M-1005485
Mitosis	M-1005484
Cell to Embryo	M-1018403
Full Term Foetus	M-1018405
Female Reproductive System	M-1005483
Male Reproductive System	M-1005482

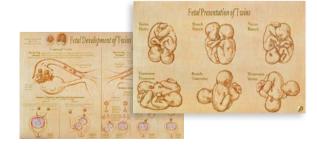


#### Stages of Fertilisation of the Embryo – 2 times Life-Size

This model illustrates schematically how the ovum matures, how ovulation and fertilisation occur and how the fertilised ovum develops to the stage where it embeds itself in the womb wall to begin the growth into an embryo. The various stages are shown in larger-than-life model form in an ovary, fallopian tube and womb. An even more enlarged illustration of each is also printed on the base.  $35 \times 21 \times 20$  cm; 1.20 kg

M-1000320





Foetal Development & Presentation of Twins Chart English, laminated. 89 x 58.5 cm. M-1018282



### Human Embryo Model – 25 times Life-Size

This human embryo model shows the anatomy of an embryo at approximately 4 weeks old and includes numbered details. 12 x 12 x 23 cm: 0.30 kg

Numbered



#### **Basic Pregnancy Series – 5 Models**

This series consists of five models mounted on one base to show the most important stages of development: 1st month, 2nd month, 3rd month, 5th month, 7th month. The 5th and 7th month stages have detachable foetuses.

M-1014207





Models are also sold individually!

#### **Deluxe Pregnancy Series, 8 Models**

Study human development from the 4th week through the 7th month. Our most popular series includes eight models to show the complete stages of development. All embryo or foetus models are shown in different typical positions in the uterus and each is mounted separately on an individual stand. The five later stages of development allow the foetus to be removed. M-1018627

#### Deluxe Pregnancy Series + Embryo Model

Includes all models above plus the model of an embryo of approx. 4 weeks old, at 25 times life-size. M-1018628

#### The Complete Deluxe Pregnancy Series includes:

1st Month Embryo	M-1000322
2nd Month Embryo	M-1000323
3rd Month Embryo	M-1000324
4th Month Foetus (Transverse Lie)	M-1000325
5th Month Foetus (Breech Position)	M-1000326
5th Month Foetus (Transverse Lie)	M-1000327
5th Month Twin Foetuses	
(Normal Position)	M-1000328
7th Month Foetus	M-1000329

### > REALISTIC AND HIGH QUALITY

#### **Pregnancy Pelvis, 3-part**

This anatomy model is a representation of a median section through the female pelvis at 40 weeks pregnant with a removable foetus. Study or demonstrate the normal position of baby before birth with this model plus the human reproductive and urinary systems. A uterus with embryo in 3rd month of pregnancy is mounted on base for added detail and comparison. The realistic and high quality female pelvis includes the female genital organs and other important anatomical details. 38 x 25 x 40 cm; 3.80 kg M-1000333



#### **Childbirth Demonstration Pelvis**

This model demonstrates the progress of a full-term foetal head through the pelvis during birth. The simulator consists of a female pelvic skeleton with a movable symphysis, hip bone, sacrum, coccyx, and 2 lumbar vertebrae. It is articulated to accommodate passage of a foetal skull which is mounted on an omni-positioning flexible gooseneck support. Delivered on baseboard. 33 x 26 x 18 cm: 1.81 kg

M-1000334

#### Labour Stages Model

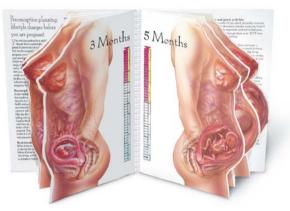
At ½ the size of M-1001258, these models are an anatomically detailed representation of human birth. The birth models are supplied on one baseboard, included stages:

- Foetus in womb, cervix closed
- Foetus in womb, cervix open
- Foetus in womb, start of headpassage

Foetus in womb and pelvis, finish of head passagePlacenta in the womb

40 x 31 x 13 cm; 1.36 kg **M-1001259** 





#### "With Child" Display

This life-size, standing childbirth display with overlapping images shows the childbearing cycle from preconception planning through six-weeks postpartum. In English.

45.5 x 61 cm **M-1018275** 

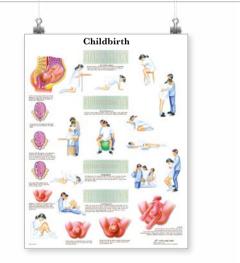


#### **Birthing Process, 5 Stages**

Anatomical representation of human birth. 5 stages of the birthing process, mounted individually on bases.

- Foetus in womb, cervix closed; 2-part
- Foetus in womb, cervix open
- Foetus in womb, start of head passage
- Foetus in womb and pelvis, finish of head passage
- Placenta in womb

17 x 28 x 46 cm; 8.62 kg **M-1001258** 



#### **Childbirth Chart**

The stages of childbirth are discussed as well as the anatomical details of human labour.  $51 \times 66$  cm; printed on premium glossy paper. Different languages are available online. **M-4006704** 

More charts for patient education also online at 3bscientific.com

## PARENT EDUCATION



The original manikin that simulates a baby's varying needs!

### Ready-or-Not Tot® Manikins

The perfect tool to educate soon-to-be parents and to demonstrate the reality of parenthood. Ready-or-Not Tot<sup>®</sup> manikins use set programs, and the response can easily be tracked using the template provided.

- Three different tending programs typical of most babies
- Tots cry, coo, and burp in response to appropriate care
- Programs are 48 hours in length and run continuously with 25-27 tending occurrences

Comes complete with one set of student keys, one set of teacher keys, reproducible parental consent form/permission slip, reproducible student response sheet, teacher correction template, nappy, and instructions. Anatomically correct newborn-size, representing a baby of a teen mum – 2.49 kg, 51 cm long.

Light Skin Tone Male	M-1017931
Light Skin Tone Female	M-1017932
Dark Skin Tone Male	M-1018137
Dark Skin Tone Female	M-1018138

### **Baby Care Models**

Ideal model for training the main principles of baby care at school and in preparation courses for young parents. It allows dressing, undressing, washing, changing nappies, and many other procedures. Realistic newborn size with movable joints and can be dressed in ordinary baby clothes.

### Dark Skin Tone Baby Male M-1005092

Female M-1005093 Asian Baby

 Male
 M-1005090

 Female
 M-1005091

Light Skin Tone Baby Male M-1005088 Female M-1005089



### Progression of Baby Bottle Tooth Decay Display

This model serves as a graphic reminder to parents of the damaging tooth decay that can occur if a baby or young child is put to bed with a bottle of juice, breastmilk, formula, or any other liquid containing sugar. Mounted on plastic base.

26.5 x 9 x 9 cm **M-1018298** 





### Baby Bottle Tooth Decay Model

Cast from a child's mouth, this hinged model shows that the sugars that coat a baby's mouth while sleeping with a bottle can cause dental disease. Model measures  $5.5 \times 4.5 \times 5$  cm. Comes with a co-ordinating tear pad. The  $21.5 \times 28$  cm tear pad is English on one side and Spanish on the other and has 100 sheets per pad. **M-1018302** 



### Shaken Baby Syndrome Demonstration Model

An infant's vulnerability to **Shaken Baby Syndrome (SBS)** is powerfully demonstrated with this model. Helps teach prevention of SBS, which can have devastating consequences including permanent brain damage, blindness, and death. It also emphasises the importance of supporting an infant's neck. 48.5 cm long **M-1017928** 

### Shaken Baby Syndrome Tear Pad

Explains the effects and symptoms of SBS and how best to respond to crying. English on one side and Spanish on the other. 100 sheets per pad.



## **MEN'S HEALTH**





### Testicle Self-Exam Model

By using 3B Scientific<sup>®</sup> SKINI*ke*<sup>\*</sup> high-quality silicone, learning and practising self-examination of the testicles becomes even more realistic. The scrotum contains two movable testicles, the epididymi, and the spermatic cords for palpation. Two pathological findings can be felt in the left testicle. Supplied with detailed instructions for self-examination and a carrying bag.

9 x 8 x 4 cm; 0.19 kg **M-1000346** 

### Teen BSE/TSE Training Set

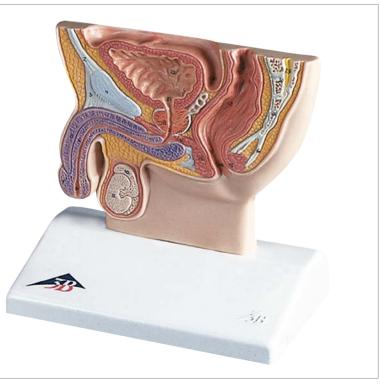
This kit contains a teen BSE model and a TSE model to teach teens the importance of the early detection of cancer. Teen BSE model contains lumps in a variety of sizes. TSE model contains two lumps in each testicle. Each model is made of soft, durable BIOLIKE<sup>™</sup> synthetic tissue and comes with slipcover and carrying case.

26 x 23 x 18.5 cm Beige Skin Tone M-1017933 Brown Skin Tone M-1017934

### > REALISTIC REPLICA!

#### Male Pelvis Section, 1/2 Life-Size

This cross section of the male genital organs shows all structures in detail. It is a great replica of the anatomy of the male pelvis.  $13.5 \times 10 \times 14$  cm; 0.24 kg **M-1000283** 







### **Testicle Self Examination Model**

Self-examination of the testicles is just as important as self-examination of the female breasts for early detection of tumours. Providing exceptional realism, this simulator features soft, thin outer skin with delicate underlying structures and four embedded, simulated tumours. Ideal for teaching proper palpation techniques. To maintain the life-like feeling of the skin, baby powder (included) should be applied from time to time. **M-1005640** 

*TESTICUL* 

**Testicular Health Tabletop Display** Offering detailed information in an easy-to-follow format, this two-panel display is ideal for teaching young men about a variety of testicular conditions. Covers noncancerous conditions, possible warning signs of testicular cancer, and instructions for self-examination. 30.5 x 43 cm

M-1018412



### > NOW AVAILABLE IN DIFFERENT LANGUAGES!

#### Why Prostate Exams Can Save Your Life, Easel Display

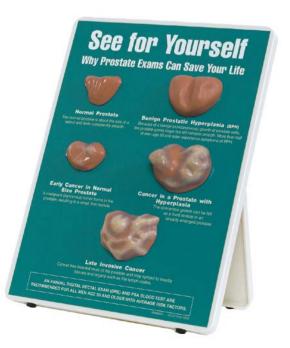
Handpainted to simulate the appearance of actual tissue, these five 3D prostate models represent a normal prostate, benign prostatic hyperplasia, early cancer, cancer in a hyperplastic prostate, and late invasive cancer. Comes with protective felt cover. 23 x 30.5 cm

Language Versions	Item No.
English	M-1020880
German	M-1020881
French	M-1020883
Spanish	M-1020885
Italian	M-1020886
Japanese	M-1020884

#### Facts About Testicular and Prostate Cancer Display

This folding display explores testicular and prostate cancer by identifying the risk factors, symptoms, and treatment of each condition. Emphasises the importance of testicular self-examination and prostate cancer screening.

M-1018413



## NUTRITION

### Visualize Your Portion Size Display

For dinner last night, I had a deck of cards, two light bulbs, and a tennis ball! Featuring clever mash-ups of common foods and house-hold objects, this display trains viewers' eyes to recognize portion sizes by relating them to everyday things. For example: a CD/pan-cake representing 1 oz of grains, a deck of cards/steak representing 3 oz of meat, and a tennis ball/orange representing a medium fruit. Carrying case measures.

ca. 50.8 x 35.6 x 8.9 cm **M-1020781** 





### Fat Chance: A Closer Look at Fast Food Display

A combination of ten tempting food models and corresponding fat-filled test tubes provides a graphic representation of the saturated and unsaturated fat content of common fast foods. Also includes ten food cards with nutritional information, carrying case, and reproducible handout.

M-1020785



### Fat Chunks and Mighty Muscles Set

Start a spirited debate with your students: the sleek-shaped muscles quickly remind everyone that their "chunky" counterparts take up twice the space even though they weigh the same. Set comes with tent cards and carrying cases.

M-1020782



### Blood Glucose and A1C Levels Model

One half represents healthy blood glucose and A1C levels. In contrast, the model's other half shows a red blood cell containing excess glucose particles which floats through simulated plasma full of glucose particles, representing high A1C and blood glucose levels. Includes informative, bilingual (English/Spanish) tear pad with 100 sheets. 29.21 x 6.35 cm.

M-1020784



### Vat of Fat

Explaining how calorie intake translates into weight gain is simplified with this graphic and informative display. The plastic jar contains approx. 0.45 kg of gooey simulated fat, which represents the amount of weight a person could gain in one week by consuming an extra 500 calories each day. 12.5 x 16.5 cm

M-1018309



### **Healthy Eating Out Flip Chart**

By outlining ways to make healthy choices from restaurant menus, this flip chart helps to solve the "eating-out dilemma". Features presenter's notes on reverse panels. 6 panels. 30.5 x 43.5 cm **M-1018408** 



# 3B

### > IMPRESSIVE, HANDS-ON EDUCATIONAL TOOL!

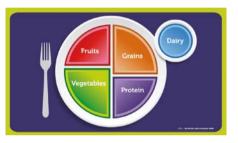
### Complete MyPlate Kit

This kit combines five plates, the display rack, and the food kit for your complete MyPlate educational teaching kit. The 42-piece food kit includes grains, protein, fruit and vegetables Life/ form food replicas. With the included durable plastic plates featuring the USDA healthy eating graphic, you can easily explain the principles of well balanced meals. Your students and patients can fill the plate and learn what to do differently.

M-1018318

More MyPlate products for healthy eating featuring the USDA healthy eating graphic:





### MyPlate Cling Place Mats

These plastic place mats, which are also food clings, are an engaging nutrition teaching tool. Participants can easily create many suggested meals using these guidelines. Set of five place mats with easy cling and peel material. 48.5 x 28 cm

M-1018317

### MyPlate Plate

Also available individually! Made of FDA approved ABS plastic safe for food use. Dishwasher safe, not recommended for microwave oven. Outside diameter 27.5 cm. M-1018316



### MyPlate Tear Pad with Food Group Tips, Small

The tear pad front shows the MyPlate image while the back gives tips for eating wisely in all five food groups. A simple concise tool to use in nutrition education and send home with each participant. Pad of 50 sheets, each 21.5 x 28 cm.

M-1018321

### MyPlate CD-ROM PowerPoint®

Viewers learn an easy way to eat healthily at every meal and the answer is right on their plate. Includes one 30 slide express presentation, one more in depth 50 slide full presentation and printable speaker's notes and handouts.

### M-1018320

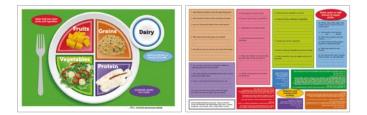




### **MyPlate Poster with Key Phrases**

Unique MyPlate poster shows 13 key phrases providing clear messages about what to eat and how using the MyPlate technique will make you healthier. 45.72 x 60.96 cm. Laminated.

M-1018319



### MyPlate Tear Pads, Large

The tear pad front shows the MyPlate image with appropriate food choices in each spot on the plate, while the back has simple fill-in-theblank questions to use as a study guide or reminder for those learning good nutrition. Pad of 50 sheets, each 43 x 28 cm, can be used as place mats as well. **M-1018322** 

# HEALTHY LIFESTYLE

### NOW AVAILABLE IN DIFFERENT LANGUAGES!





Why Blood Pressure Checks Can Save Your Life Easel Display

Patients and students learn the importance of blood pressure checks

### **Death of An Artery Easel Display**

Language Versions

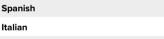
English

German French

Japanese

These handpainted, cross-sectional, 3D models of arteries show patients and students the various stages of plaque build up. The interior size of each vessel diminishes, making it easy to eventually result in death. Comes with pro-23 x 30.5 cm

le build up. The interior size of o explain a process that can rotective felt cover.	when they see these handpainted, 3D models of arteries and this cross section of the brain. Demonstrates the way high blood pressure can silently lead to heart attacks or strokes. Comes with protective felt cover. 23 x 30.5 cm	
Item No.	Language Versions	Item No.
M-1018290	English	M-1018289
M-1020875	German	M-1020894
M-1020876	French	M-1020895
M-1020878	Spanish	M-1020897







### **Cholesterol Flip Chart**

Many people do not know what steps they can take to maintain healthy cholesterol levels. This flip chart explains the facts about "good" and "bad" cholesterol and the health risks associated with high cholesterol levels. Features presenter's notes on reverse panels. Flip chart is 6 panels.

30.5 x 43.5 cm M-1018306

### **Occluded Artery Model**

M-1020879

M-1020877

The potentially deadly effects of high cholesterol are demonstrated with this persuasive

model. The tube represents an artery constricted by plaque, which forms on artery walls when there is excess cholesterol in the blood. When the model is turned over, the blood in the artery slows or stops completely. 7 x 17.5 cm

M-1018304





### **Blood Cholesterol & Triglycerides Packet**

The need for a healthy diet is emphasised by the four blood viscosity samples in this pack. The samples show the exaggerated differences seen when analysing blood serum for lipid and glucose concentrations. M-1018315





### **Consequences of High Blood Pressure, 3D Display**

Life-size, 3D, hand-painted models illustrate the various organs that can be affected by high blood pressure. Great for health fairs and health education promotions. Contained in a convenient, sturdy wooden carrying case.

71 x 68.5 cm (opened). **M-1018277** 



### Consequences of An Inactive Lifestyle, 3D Display

This 3D display graphically shows many of the negative health consequences of an inactive lifestyle. Each permanently mounted, handpainted model has a brief description of the consequences it represents. Display is contained within its own sturdy carrying case. 71 x 68.5 cm (opened).

M-1018300

### Can be wall mounted or displayed on a table



### Benefits of Physical Activity, 3D Display

The four swiveling panels show rewards of an active lifestyle on one side (strong muscles, healthy arteries, healthy joints, and reduced body fat) contrasted with consequences of a sedentary lifestyle on the other side (muscle loss, diseased arteries, osteoarthritis, and increased body fat). Can be mounted on a wall. 67.5 x 33 x 13.5 cm

M-1018301



### Preventing Cardiovascular Disease, Folding Display

With practical information and vivid illustrations, this display explains cardiovascular disease and identifies risk factors, including those that can be controlled through lifestyle changes and medication. 147.5 x 57 cm (opened). **M-1018305** 



### Exercise Facts, Folding Display

A combination of colourful art and clear explanations about the advantages of aerobic exercise and strength training make this folding display an ideal teaching tool. Also included are ways to work exercise into daily life, a discussion of exercise benefits for all ages, and information on exercise safety. 147.5 x 57 cm (opened).

M-1018299

## DIABETES



### **Diabetic Injection Practice Kit**

Made from realistic BIOLIKE<sup>™</sup> material, these teaching models facilitate technique practice on both an injection skin and a finger stick apparatus. The skin model may be strapped to the user's arm or leg to simulate a needle injection site and the finger stick model may be held by the attached grip for lancet practice. Both can be punctured repeatedly. Comes with powder and carrying case. Skin model is 15.5 x 11.5 x 4 cm; and finger stick model is 2.5 x 11.5 x 2.5 cm.

 Beige
 M-1018139

 Brown
 M-1018140



### **Diabetic Injection Pad**

This pad looks and feels like human skin and is ideal for diabetic instruction and injection practise. May be worn on the body (stomach, thigh, upper arm) to allow patients to inject fluid into the pad to practise giving themselves injections. Pad is thick enough to accept all insulin needles. For safety purposes, the pad has a

hard plastic backing to prevent the needle from poking through and into the wearer's skin. 16 x 10.5 x 1 cm

M-1013057



### **Consequences of Diabetes Display**

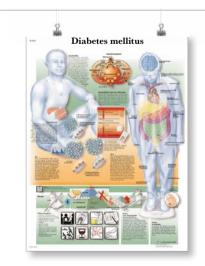
Handpainted, 3D models and straightforward text explain the negative effects diabetes can have on the body. A great tool for promoting awareness of this potentially devastating disease. Contained within its own sturdy carrying case. 71.1 x 68.6 cm when opened. English. **M-1020794** 



### **Injection Belly**

This soft stomach replica is an invaluable tool for teaching patients how to properly insert and rotate the infusion set for insulin pumps, as well as giving self-injections. The trainer has life-like skin with what feels like real stomach tissue underneath. There is a soft plastic backing to keep needles from going through and holes to allow the material to breathe and dry, should you choose to inject water.

25 x 15 x 3 cm **M-1013056** 



### **Diabetes mellitus Chart**

51 x 66 cm; printed on premium glossy paper. Different languages are available online. **M-1001554** 

More charts for patient education also online at 3bscientific.com



### Diabetic Foot Model

This life-size diabetic foot model can be used for both patient education and student training. Made from life-like BIO*like™* material, the model contains three ulcers in various stages of development as well as the features commonly associated with diabetes. Comes with carrying case and instruction card.

9 x 24 x 10 cm **M-1017936** 



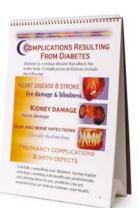
Consequences of diabetes can be seen on the bottom and top

### Severe Diabetic Foot Model

This life-size, BIO*like*<sup>™</sup> replica complements the original Diabetic Foot Model by showing additional, more severe consequences of diabetes, including an amputated toe, Charcot foot deformity, and severe infection and gangrene. Comes with a carrying case and instruction card.

s Nutriti

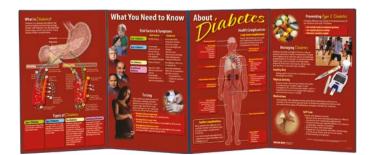
9.5 x 23 x 11.5 cm **M-1017937** 



#### **Diabetes Flip Chart**

Explains type 1, type 2, and gestational diabetes as well as the risk factors and warning signs of each one. Information on pre-diabetes, testing, complications resulting from diabetes, and managing diabetes is also included. Features presenter's notes on reverse panels. Flip Chart is 6 panels.

30.5 x 43 cm **M-1018307** 



#### **Diabetes Nutrition Kit**

This teaching kit explains the different types of diabetes. The 30-page resource book (English) defines diabetes mellitus and provides menu guides, exercise suggestions, and seven blackline masters. The 11 Life/form® replicas include: Skim milk, brownie, salmon, French dressing, whole wheat bread, sirloin steak, cheese cubes, bacon, apple, chicken breast, margarine.

### M-1020779

### What You Need to Know About Diabetes, Folding Display

With information about risk factors, symptoms, and complications of diabetes, this folding display is a valuable resource for health educators. Explains the different types of diabetes and describes how the disease can be treated. 147.3 x 57.2 cm (opened). M-1018308

Diabetes | HEALTH EDUCATION 261

## **DRUGS & SUBSTANCE ABUSE**



### **Goggles for Simulating Drunk Driving**

The state of being drunk and how that affects vision and co-ordination can be extremely effectively, realistically and intensely simulated by wearing these goggles. Young people in particular will unavoidably become aware of the danger that comes from drinking and driving. Supplied with case. M-1005576

### NOW AVAILABLE IN DIFFERENT LANGUAGES!

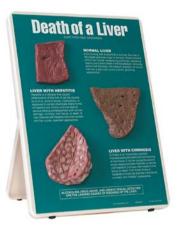
### Consequences of Alcoholism, 3D Display

Detailed boards with hand-painted models clearly showing the consequences of alcohol abuse on our organs. The brief explanations are ideal for lessons. In carrying case.

Dimensions when opened: approx. 71 x 68 cm

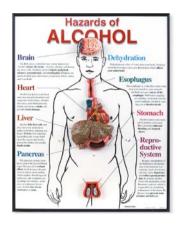
Language Versions	Item No.
English	M-1005582
German	M-1020888
French	M-1020889
Spanish	M-1020891
Italian	M-1020892
Japanese	M-1020890





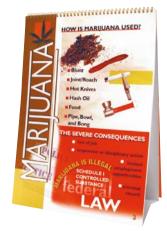
### **Death of a Liver Display**

Emphasizing alcohol's role in liver disease, this easel display features cross-sectional, 3D, hand-painted models that represent a normal liver, a liver with hepatitis, and a cirrhotic liver. Comes with protective felt cover. 23 x 30.5 cm **M-1020786** 



### Hazards of Alcohol 3D Framed Chart

Anatomically accurate, hand-painted, 3D models illustrate the risks associated with alcohol use in this dramatic chart. Alcohol-damaged organs are highlighted and concise, explicit text explains each hazard. Framed, 52.1 x 66 cm M-1020787



### Marijuana Flip Chart

Describes marijuana, reveals its harmful effects, and lists possible signs of marijuana use. Perfect for teaching that marijuana is not a harmless drug. Flip chart includes presenter's notes on reverse panels. 6 panels. 30.5 x 17.8 cm **M-1020788** 





### Smokey Sue Smokes For Two

As Smokey Sue smokes a cigarette, tar collects around the lifelike model of a 7-month-old fetus, graphically showing the pollutants that can reach a developing baby. Jar and fetus are easy to clean. 15 x 35.5 x 16.5 cm **M-1020793** 



### A Year's Worth of Tar

This graphic, sealed exhibit, containing a pack of cigarettes and cigarette butts submerged in gooey tar, represents the amount of carcinogenic liquid a one-pack-a-day smoker puts into his/her lungs over the course of a year. M-1005578



#### Consequences of Drug Abuse, 3D Display

Detailed boards with hand-painted models clearly showing the consequences of drug abuse on the organs. The brief explanations in English are ideal for lessons. In carry-case, dimensions when opened approx. 71 x 68 cm.

M-1005583



### **Tobacco Ingredients Display**

The toxic chemicals found in tobacco smoke are more easily remembered by associating them with common – and grossly unappealing – substances. This eye-catching, plexiglas, 3D display resembles a cigarette yet allows viewers to see what is really inside tobacco smoke. Comes with a two-sided tent card in English.

62.9 x 8.9 cm **M-1020791** 



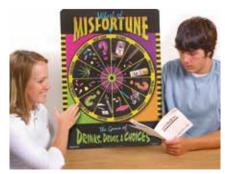
### **Clem's Phlegm Display**

Graphically demonstrating one of the nasty consequences of smoking, this attention-getting sealed jar contains about 2 weeks of the phlegm that would be coughed up by a smoker with COPD. Great discussion starter for any anti-smoking lesson or program. 9.5 x 15.2 cm

M-1020792

#### Wheel of Misfortune

Start the discussions on drug abuse: the game includes questions about the identification and effects of various substances. Multiple-choice questions that call for value judgements are also included. A reproduci-



ble teacher's text (English) contains questions designed for use with grades 1 – 5 and grades 6 – 12. 52 x 71.1 cm **M-1020789** 

### Lou-Wheeze

Students get a shocking picture of smoking-related lung damage with this interactive display. Lou-Wheeze has two flexible latex lung models. One representing a healthy lung, the other showing the damage done by emphysema and cancer. Students quickly get a sense of

the smothering feeling victims of emphysema experience being unable to inhale fresh air because their lungs are overinflated. Comes with bellows pump and instructions.

M-1020790



## **MEDICAL CHARTS**

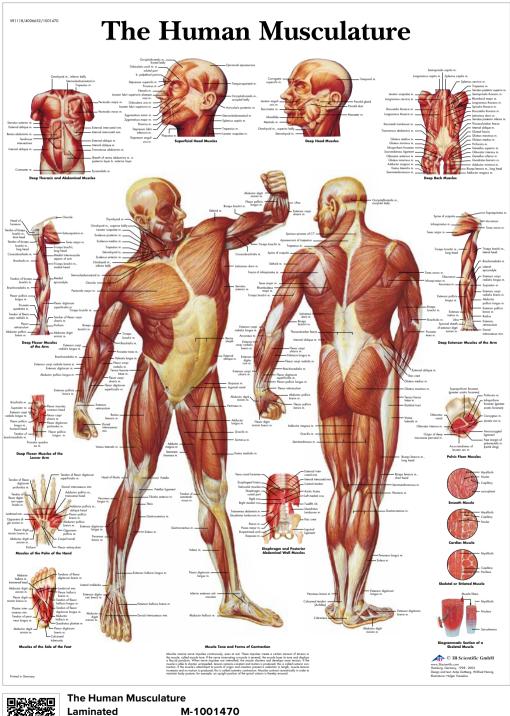
Anatomical wall charts and posters from 3B Scientific are ideal for teaching human anatomy and for patient education.



Please go online to 3bscientific.com or scan the QR code. There you will find our wide range of charts and posters for various areas.



> For everyone the right choice - low-priced paper versions or valuable laminated luxury versions

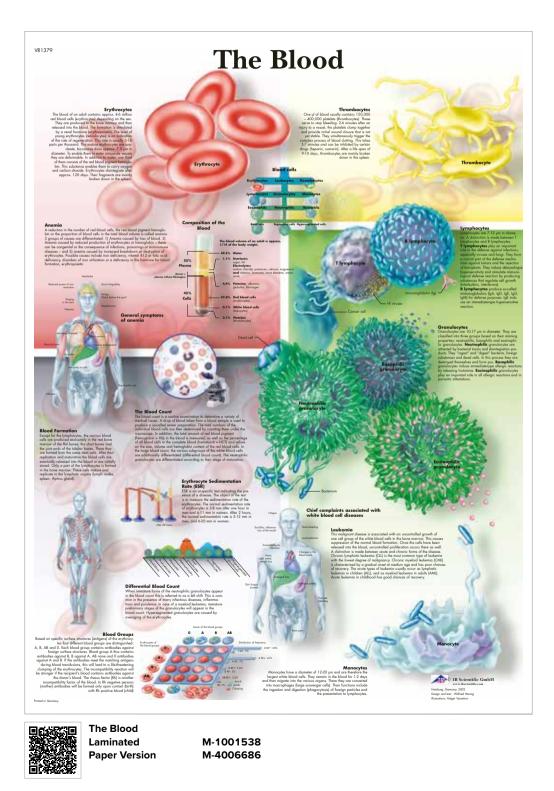


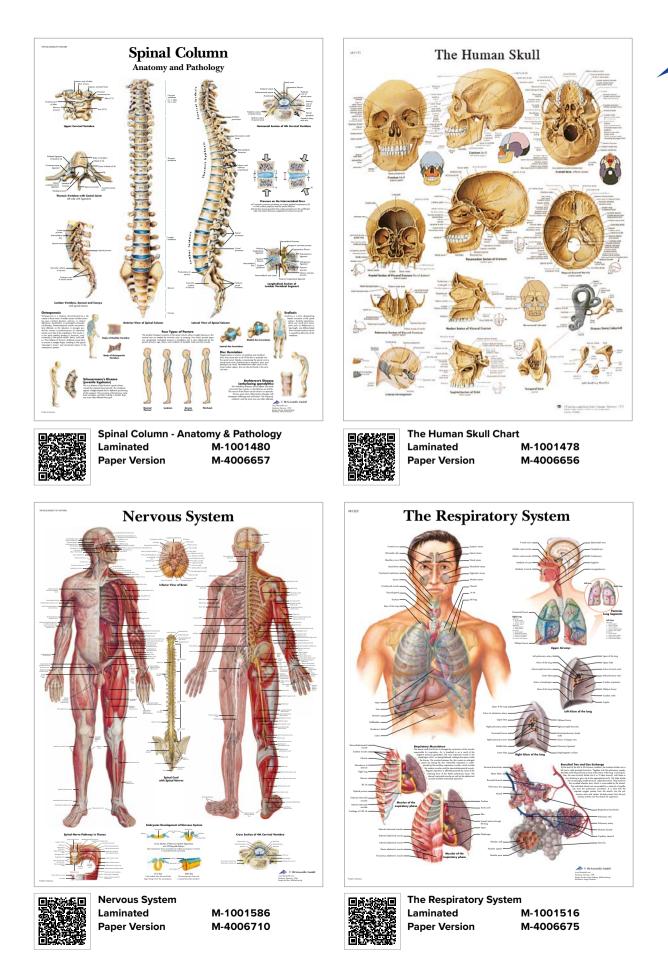


Paper Version

M-4006652

You will always find the main points on topics like Skeleton and Muscles of the Human Body, Eyes, Ears, Heart, Lungs, Nerves and Diseases such as Diabetes Mellitus, Hepatitis, Cancer, Allergies and lots more.





## **3B SCIENTIFIC CHARTS & POSTERS**

### > Please go online to 3bscientific.com to see all available versions!

### **Charts Guide**

All charts and posters are clearly illustrated and competently described. Printed on high quality paper with optional lamination.

	Laminated	Paper
Bones		
Human Skeleton	M-1001468	M-4006651
Shoulder and Elbow	M-1001482	M-4006658
Hand and Wrist	M-1001484	M-4006659
Pelvis and Hip	M-1001486	M-4006660
Foot and Ankle	M-1001490	M-4006662
Muscle		
Human Musculature	M-1001470	M-4006652
Pathologies		
Osteoporosis	M-1001472	M-4006653
Arthritis	M-1001474	M-4006654
Sports Injuries	M-1001494	M-4006664
Diseases of the Eye	M-1001498	M-4006666
Rhinitis and Sinusitis	M-1001504	M-4006669
Diseases of the Middle Ear	M-1001506	M-4006670
Respiratory Tract Infections	M-1001508	M-4006671
Skin Cancer	M-1001514	M-4006674
Alcohol Dependence	M-1001620	M-4006727
Nicotine Dependence	M-1001622	M-4006728
Allergies	M-1001596	M-4006715
Decubitus Ulcers	M-1001606	M-4006720
Flu (Influenza)	M-1001608	M-4006721
HIV and AIDS	M-1001610	M-4006722
Pneumonia	M-1001518	M-4006676
Common Cardiac Disorders	M-1001526	M-4006680
Varicose Veins	M-1001534	M-4006684
Diseases of the Digestive System	M-1001548	M-4006691
Colon Cancer	M-1001550	M-4006692
Hepatitis	M-1001552	M-4006693
Diabetes	M-1001554	M-4006694
Cholesterol	M-1001558	M-4006696
Stroke	M-1001590	M-4006712
Alzheimer's Disease	M-1001592	M-4006713
Organs		
Human Eye	M-1001496	M-4006665
Human Ear	M-1001500	M-4006667

	Laminated	Paper
The Larynx	M-1001502	M-4006668
The Skin	M-1001512	M-4006673
Lymphatic System	M-1001540	not available
The Liver	M-1001544	M-4006689
The Urinary Tract	M-1001562	M-4006698
Kidney	M-1001564	M-4006699
The Prostate Gland	M-1001566	M-4006700
Human Brain	M-1001584	M-4006709
Pregnancy & Childbirth		
Pregnancy	M-1001572	M-4006703
Childbirth	M-1001574	M-4006704
Breastfeeding	M-1001578	M-4006706
Birth Control	M-1001580	M-4006707
Gynaecology		
The Female Genital Organs	M-1001568	M-4006701
The Female Breast	M-1001576	M-4006705
Stomach		
The Gastrointestinal System	M-1001542	M-4006688
The Stomach	M-1001546	M-4006690
Cell Genetics		
Human Metabolic Pathways	M-1001556	M-4006695
Blood Vessel & Nervous System		
The Blood	M-1001538	M-4006686
The Vegetative Nervous System	M-1001582	M-4006708
The Nervous System	M-1001586	M-4006710
Spinal Nerves	M-1001588	M-4006711
Acupuncture		
Foot Reflex Zone Massage	M-1001624	M-4006729
Ear Acupuncture	M-1001628	M-4006731
Body Acupuncture	M-1001626	M-4006730
Dental		
The Teeth	M-1001510	M-4006672
CPR		
Basic Life Support	M-1001616	M-4006725
Lungs		
The Respiratory System	M-1001516	M-4006675

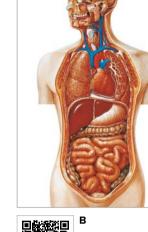
## WALL CHARTS

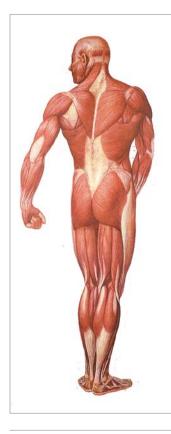


## Bestseller!









A. The Eye I	
Mounted	M-1001163
Unmounted	M-4006521

B. Torso Chart Mounted M-1001159 Unmounted M-4006519

C. The Human Musculature Chart, rear Mounted M-1001153 Unmounted M-4006516



### Wall Charts Guide

Wall charts are bigger in size, and are available mounted on wodden rods, or unmounted. They are printed on tear-resistant, waterproof paper and measure  $84 \times 200$  cm /  $84 \times 118$  cm.

	Mounted	Unmounted
Muscle		
The Human Musculature, Rear	M-1001153	M-4006516
Muscle Tissue	M-1001212	M-4006551
Nervous System		
The Central Nervous System	M-1001185	M-4006536
Skin		
The Skin	M-1001177	M-4006530
Vegetative System		
The Vegetative Nervous System	M-1001218	M-4006556
Endocrine System		
The Endocrine Glands	M-1001200	M-4006545
Heart		
The Anatomy of the Heart I	M-1001214	M-4006552
Organs		
The Male Pelvic Organs	M-1001173	M-4006527
The Female Pelvic Organs	M-1001175	M-4006528
The Internal organs	M-1001155	M-4006517
The Kidney	M-1001165	M-4006523
The Speech Organs	M-1001157	M-4006518
The Ear	M-1001161	M-4006520
The Anatomy of the Eye I	M-1001163	M-4006521

	Mounted	Unmounted
Blood		
The Composition of Blood I	M-1001183	M-4006534
Human Blood Circulation	M-1001169	M-4006525
Cell		
Human Cell Structure	M-1001179	M-4006531
Cell Division I, Mitosis	M-1001206	M-4006548
Cell Division II, Meiosis	M-1001210	M-4006550
Bacteria & Parasites		
Bacteria	M-1001194	M-4006541
Intestinal Parasites I	M-1001171	M-4006526
Intestinal Parasites II	M-1001181	M-4006532
Bones		
Bone Structure	M-1001208	M-4006549
Vascular System		
The Vascular System	M-1001151	M-4006515
Dental		
Healthy Denture	M-1001167	M-4006524
Torso		
The Human Torso	M-1001159	M-4006519
Pregnancy & Childbirth		
Position of the Child	M-1001226	M-4006562
The Birth Process	M-1001204	M-4006547
Embryology I	M-1001222	M-4006560
Embryology II	M-1001224	M-4006561

# INDEX

## 3**B**

3B BONE <i>lik</i> e <sup>™</sup> 174-190
> Skull, bony
> Skull, didactical
> Skull, human, half transparent
> Spinal Column, child 175
> Vertebrae Sets
3B MICROanatomy <sup>™</sup> 157-240
> Artery and Vein
> Bone Structure
> Digestive System
> Eye Model
> Kidney
> Liver
> Muscle Fibre
> Tongue Model

### 

Β

## C

Catheterization Trainer	86-89
C-Celia <sup>™</sup> Emergency Obstetrics Suite	120-121
Central Venous Catheterisation	82-83
Charts	264-269
Choking Torso	34
Circulatory System	233
Circumcision	113
Condom Training Model	249
Contraception	248
Contraceptives, use of	249
Correct Lifting, Figure	173
CPR <i>Lilly</i> ™	
CPR <i>Lilly</i> AIR <sup>™</sup>	24
CPR <i>Lilly</i> PRO <sup>™</sup>	25



Decubitus	
Defibrillation	29, 36, 42-43, 54, 56, 105
Dental Care Model	
Dental Development	



Dental Disease	224, 253
Dentition Models	224-227
Diabetes	260-261
Diet	256-257
Digestive System	236-241
Diseases of the Oesophagus	238
Drug Abuse	262-263

## Ε

\_\_\_\_

Ear Examination	109
Ear Models	221-223
ECG Trainer	43-45
Enema Administration	65
Epidural and Spinal Injection	72-73
Eye Models	218-220

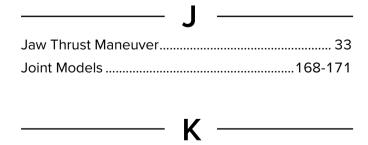
	F
Family Planning	
Foot Models	

G	
Gallstone Model	238
Gynecological Simulators	114-137

——————————————————————————————————————	
Haemorrhoid Model	
Hand Models	164-165
Head Models	208-211
Head Models with Muscles	
Health Education	
Heart Models	228-233
Heimlich Maneuver	34-35
Hip	169-171

HIV/AIDS	249
Human Anatomy	142-241
Hysteroscopy	136

lr	jection & Punction
>	Arm/Hand28-111
	Intraarterial (ia)74, 80
	Intraderm al (id)/intracutaneous (ic)
	Intramuscular (im)
	Intravenous (iv)
	Subcutaneous (sc). 28, 60-61, 64, 67, 74-75, 110
>	Body
>	Buttock65, 77-78
	Intramuscular (im)65, 77-78
>	Leg
	Intramuscular (im)28, 60-61, 67, 77, 79
	Intraosseous (io) 37-38, 41, 43-45, 66, 68, 111
	Intravenous (iv)111
	Intestinal Diseases238
	Intubation16-49
>	Adult16, 18, 24-25, 28-29, 42
>	Baby
>	Child



Kidney Models
---------------

## INDEX

L	
Laparoscopy	92-95, 136
Lap-X Expert	
Larynx Models	
Liver Models	239
Lumbar Puncture	110
Lung Models	234-235

> Standard	243
Osteoporosis Model	172
Ostomy Care	37, 60-65, 68-69

P
Paediatric Clinical & Nursing Skills110-113
Paranasal Sinuses
Patient Care
> Adult
> Baby
> Child
> Geriatric
Pelvis Models182-185
> Female
> Male
Patient Communication58-59
Physiology of Nerves217
Postpartum Hemorrhage (PPH)124-125
Punction & Injection
> Arm/Hand
Intraarterial (ia)74, 80
Intraderm al (id)/intracutaneous (ic)79-80
Intramuscular (im)
Intravenous (iv)
Subcutaneous (sc) . 28, 60-61, 64, 67, 74-75, 110
> Body
> Buttock65, 77-78
Intramuscular (im)65, 77-78
> Leg
Intramuscular (im)28, 60-61, 67, 77, 79
Intraosseous (io) 37-38, 41, 43-45, 66, 68, 111
Intravenous (iv)111
Pregnancy250-252
Prolapsed Intervertebral Disc173
Prostate Models

— M — — —

Medical Simulation	8-141
Medical Charts & Posters	
Men's Health	254-255
Mini Skeleton	
Mini Skull	191
Mini Spinal Column	
Mini Torso	
Minimally Invasive Training	
Moulage and Wound Simulation	
Musculature	192-197
Muscle Arm	
Muscle Figures	192-195, 198
Muscle Leg	

——— N ———	Sub
NENAsim	> Bod
Nervous System216-217	> Butt
NOELLE <sup>®</sup> 119	Intra

O	
Obesity	147
Obstetrics	114-137
ORTHObones	242-245
> Biomechanical Test Blocks	245
> Premium	244



——————————————————————————————————————	-
RealMom <sup>™</sup> 116-117	,
Rescue Manikins20-21, 34	ł

S

Torso, Asian	
Trauma	
——— U ———	
Ultrasound Trainers	

_
SECTRA Table, SECTRA Board138-141
Sexually Transmitted Deseases (STD)249, 134
Shaken Baby Syndrome (SBS)253
SIMone <sup>™</sup> Birthing Simulator114-115
Skeleton Parts156-166
> Lower Extremities
> Upper Extremities156, 160-165
Skeletons150-159
Skin Cancer Model207
Skin Models206-207
Skin Section Model207
Skulls
SMART MOM Birthing Simulator118-119
Software 3B MUSCLE <i>trainer</i> ™197
Spinal Column Models175-181
> Adult176-181
> Child175
Spinal Cord Model216
Stomach237
Stump Bandaging71
Suture Trainers100-101, 130

I	
Tactical Casualty Care Simulator	
Testical Self Examination	254-255
Tongue Model	
Torso Models	198-205
Torso MRI Transverse Sections	
Torso, Dark Skin	

## V

Urinary System......236-241

Vascular Access	
Vasectomy	90-91
Venipuncture	75-76, 80, 112
Vertebrae Models	145, 172-173



Wall Charts	
Women's Health	247
Wound Care	

## **3B SCIENTIFIC® PRODUCT RANGE**



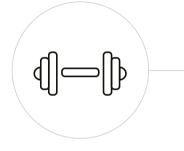
### MEDICAL SIMULATION

Simulators and skills trainers enable students to develop or enhance their knowledge, skills, or to analyze and respond to realistic situations in a simulated environment, and to gain competence and confidence. You will find simulators and skills trainers for all your training needs manufactured to meet all your standards at 3bscientific.com.

### MEDICAL EDUCATION

Anatomical models are an essential teaching tool in medical education both for students and patients. Cast from actual specimens, 3B Scientific's anatomy models are professionally manufactured to meet medical quality standards. All models are hand-painted, made from medical quality phthalate free plastics and lead free paints, and are compliant to the EU REACH regulation. The 3B Scientific brand name represents quality materials, superior craftsmanship and a 3-year quality guarantee.



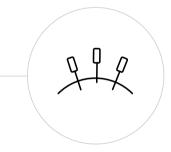


### HEALTHCARE AND HEALTH EDUCATION

3B Scientific has for more than 7 decades focused on providing life-like learning experiences and expanded into patient education for practitioners. In addition to medical simulators and anatomical models for medical education the company provides supplies and devices for healthcare practitioners such as physiotherapists, chiropractors, natural-health professionals, and acupuncturists. Finding the right products is now faster than it has ever been. Visit 3bscientific.com to see the full range of therapy and fitness equipment and accessories.

### ACUPUNCTURE

Traditional Chinese Medicine (TCM) treats the body as a whole. Today, the integration of eastern and western medicine is growing at a fast pace and clinics and hospitals are providing acupuncture treatments. The quality of the tools and needles used during the treatments is of highest importance for the comfort of the patients. 3B Scientific offers high quality acupuncture needles and tools at competitive prices.



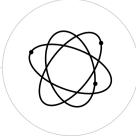


#### BIOLOGY

The 3B Scientific group has a rich history in this area dating back to 1819 when Calderoni – now Hungary 3B Scientific, was one of the forerunners in natural science education. Engaging Biology classes are the most effective way to create a long-lasting learning experience. 3B Scientific models are perfect tools for fascinating, hands-on education, all cast from actual specimens and made of highest quality material.

### PHYSICS

Physics teaching success depends on reaching students with practical, hands-on, inquiry based education. 3B Scientific products support teachers worldwide in mastering this challenge with engaging, exciting products and experiments.



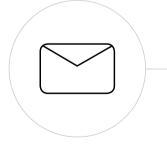




## **CONNECT WITH US!**

VISIT YOUR LOCAL 3B SCIENTIFIC REPRESENTATIVE ONLINE — Order online, save time and find full product information and more!





SEND AN EMAIL TO YOUR LOCAL 3B SCIENTIFIC REPRESENTATIVE

CALL YOUR LOCAL 3B SCIENTIFIC REPRESENTATIVE!



## **NEW!** 3B Scientific<sup>®</sup> Gynecologic Skills Trainer P91

The new Gynecologic Skills Trainer P91 is a full-sized, adult lower torso made of 3B Scientific SKIN*like*<sup>™</sup> high-quality silicone for a realistic look, feel and texture in addition to a life-like softness offered during palpation. It is a new versatile training tool designed to add hands-on experience for learners practicing gynecologic skills.

**>** Page 132

