Introducing NYSORA ULTRASOUND SIMULATORS™

Developed by opinion leaders and educators, NYSORA ULTRASOUND SIMULATORS™ are the most anatomically accurate, tissue-like tools to learn point-of-care ultrasound and certify skills acquisition before approaching patients.

www.nysorasinulators.com
UPPER EXTREMITY NERVE BLOCK SIMULATORS

Open Breast Infracavicular Visual SIMULATOR™

**BENEFITS:**
- Learn the anatomy of the breast and tissue layers of importance in breast surgery and local anesthetic infiltration techniques
- **Internal Landmarks**
  - Pectoralis major and minor muscles; Serratus muscles; Axillary artery and vein; Cords of the brachial plexus; Clavicle; Coracoid process; Ribs 1-4
- **External Landmarks**
  - Breast anatomy; Sternocleidomastoid muscle

Combined Infracavicular/PEC Nerve Block SIMULATOR™

**BENEFITS:**
- Facilitates skills acquisition to perform Infracavicular brachial plexus and PEC blocks
- Teaches ultrasound anatomy patterns recognition and needle-eye coordination
- **Internal Landmarks**
  - Pectoralis major and minor muscles; Serratus muscles; Axillary artery and vein; Cords of the brachial plexus; Clavicle; Coracoid process; Ribs 1-4; Pleura and Chest Cavity
- **External Landmarks**
  - Clavicle; Deltopectoral groove; Pectoralis muscle; Chest wall; Coracoid process; Shoulder; Deltoid muscle

Interscalene Brachial Plexus & Supraclavicular Blocks SIMULATOR™

**BENEFITS:**
- Accelerates skills acquisition to perform Interscalene and Supraclavicular plexus blocks.
- **Internal Landmarks**
  - Teaches ultrasound brachial plexus anatomy patterns recognition and needle-eye coordination
  - Anterior scalene muscle; Middle scalene muscle; Sternocleidomastoid muscle; Carotid artery; Internal jugular vein; Subclavian artery; Subclavian vein; Clavicle; Stellate ganglion; C2-C7; First rib; Clavicle; Brachial plexus; Superficial cervical plexus; Stellate ganglion thyroid
- **External Landmarks**
  - Sternocleidomastoid muscle; Clavicle; Lateral neck; Chest wall; Thyroid notch
Combined Infraclavicular/PEC Nerve Block

**Internal Landmarks**
- Radial nerve; Ulnar nerve; Median nerve; Musculocutaneous nerves;
- Axillary artery; Axillary Vein; Deltoid muscle; Biceps muscle;
- Coracobrachialis muscle

**External Landmarks**
- Axillary fossa; Pectoralis muscle; Trapezius muscle; latissimus
- Biceps Brachialis muscle; Deltoid Muscle

**BENEFITS:**
- Facilitates knowledge and skills acquisition to perform Axillary Block
- Allows injection practice
- Teaches ultrasound axillary plexus anatomy patterns recognition and needle-eye coordination to safely guide needle insertion into axillary sheath.

**Internal Landmarks**
- Radius, ulnar carpal bones; Radial and ulnar arteries; Median and ulnar nerves; Palmares Longus; Radial Artery; Ulnar artery; Deep and superficial muscles of the forearm

**External Landmarks**
- Ulnar head; Radius; Ulna; Palmar crease; Tendons of wrist flexors;
- Thenar ligament; Veins; Hypotenar ligament

**BENEFITS:**
- Facilitates knowledge and skills acquisition to recognize ulnar and radial arteries and perform ulnar and median nerve blocks.
- Allows injection practice
- Teaches ultrasound anatomy patterns recognition of median, ulnar nerves and arteries and needle-eye coordination for safe block performance.

**Internal Landmarks**
- Clavicle; Scapula; Humerus; Suprascapular nerves; Infraspinatus muscle; Supraspinatus muscle; Suprascapular artery; Trapezius muscle; Circumflex artery

**External Landmarks**
- Scapula; Clavicle

**BENEFITS:**
- Facilitates knowledge and skills acquisition to perform Suprascapular nerve block for analgesia of the shoulder without phrenic nerve paralysis
- Teaches ultrasound anatomy pattern recognition for sciatic nerve, sciatic sheath, and needle-eye coordination
LOWER EXTREMITY NERVE BLOCK SIMULATORS

Femoral and Fascia Iliaca Blocks SIMULATOR™

**BENEFITS:**
- Facilitates knowledge and skills acquisition to perform femoral nerve block and fascia iliaca block & lateral femoral cutaneous nerve (LFCN) blocks

**Internal Landmarks**
Femoral, obturator, lateral cutaneous nerves; Saphenous nerves; Fascia iliaca; Facia lata; Iliopsoas muscle; Pectineus muscle; Sartorius muscle; Adductor muscles; Femoral artery; Femoral vein

**External Landmarks**
Inguinal crease; Anterior superior iliac spine; Proximal thigh; Hips; Pubic tubercle; Inguinal Ligament; Femoral Crease

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Popliteal and IPAC Blocks SIMULATOR™

**BENEFITS:**
- Facilitates knowledge and skills acquisition to perform popliteal sciatic and IPAC blocks
- Teaches ultrasound anatomy pattern for sciatic nerve sheath, and needle-eye coordination

**Internal Landmarks**
Popliteal artery and vein; Common peroneal nerve; Tibial nerve; Semitendinosus muscle; Semimembranosus muscle; Biceps femoris muscle; Distal part of femur

**External Landmarks**
Popliteal fossa; Tendon of Biceps Femoris Muscle; Tendon of Semimembranosus Muscle; Popliteal Fossa; Popliteal Crease; Popliteal triangle

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Adductor/Saphenous Blocks SIMULATOR™

**BENEFITS:**
- Facilitates knowledge and skills acquisition to perform femoral triangle and adductor canal block for analgesia of the knee
- Allows injection practice
- Teaches ultrasound anatomy pattern recognition for adductor canal, saphenous nerve, and needle-eye coordination

**Internal Landmarks**
Sartorius muscle; Vastus medialis muscle; Adductor canal; Femoral artery; Femoral vein; Saphenous nerve; Relevant fascial sheaths

**External Landmarks**
Mid and distal thigh; Knee; Quadriceps Femoris muscle; Sartorius Muscle
**Sciatic Transgluteal SIMULATOR™**

**BENEFITS:**
- Teaches ultrasound anatomy patterns recognition of gluteal muscles, sciatic nerve and ischial notch.
- Practice Intramuscular Injections

**Internal Landmarks**
Great trochanter; Ischial tuberosity; Sciatic nerve; Gluteus maximus

**External Landmarks**
Gluteus maximus; Gluteal crease; Femur Trochanter

**Ankle Block SIMULATOR™**

**BENEFITS:**
- Teaches ultrasound anatomy patterns recognition for nerves around the ankle, and needle-eye coordination

**Internal Landmarks**
Tibial nerve; Peroneal nerves (superficial and deep); Sural nerve; Saphenous nerve; Posterior and anterior tibial artery and vein; Tibia Fibula; Medial malleolus

**External Landmarks**
Tibia; Lateral malleolus; Medial malleolus; Side of the foot; Dorsus of the foot

**VASCULAR ACCESS**
Vascular Access IJ SIMULATOR™

**BENEFITS:**
- Teaches ultrasound anatomy pattern recognition for internal jugular vein, and needle-eye coordination

**Internal Landmarks**
Sternocleidomastoid muscles; Carotid artery; Internal jugular vein; Subclavian artery; Clavicle; First rib; Thyroid Gland; Pleura

**External Landmarks**
Sternocleidomastoid muscles; Clavicle; Cricoid cartilage; Supravclavicular fossa; Neck; Mandible

* Requires filling the vessels with fluid for best imaging.
**TORSO**

Paravertebral (PVT) and Erectores Spinae Blocks SIMULATOR™

**BENEFITS:**
- Facilitates acquisition of essential skills of using ultrasound
- Allows needle-target practice in plane and out of plane.
- Absolute must for anyone wanting to start utilizing point of care ultrasound

**Internal Landmarks**
- T3-T8; Ribs 3-8; Paravertebral space; Pleura; Spinous processes; Vertebrae T3 to T8

**External Landmarks**
- Left and right inferior angle of scapula; Vertebra prominens; Spinous processes, Paravertebral muscles

**Optional**
- Digital camera for visual confirmation of needle and catheter entry into the paravertebral space.

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Transverse Abdominis Plane SIMULATOR™

**BENEFITS:**
- Teaches ultrasound anatomy pattern recognition for abdominal muscles, fasciae, and needle-eye coordination
- Facilitates acquisition of essential skills of using ultrasound
- Allows needle-target practice in plane and out of plane
- Absolute must for anyone wanting to start utilizing point of care ultrasound

**Internal Landmarks**
- Rectus abdominis; Transverse abdominis; Internal oblique; External oblique; Pectineus; Essential Sheaths

**External Landmarks**
- Umbilicus; Rectus abdominis; Abdominal wall

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VASCULAR ACCESS

Subclavian Vein Cannulation SIMULATOR™

**BENEFITS:**
- Allows learning imaging of the subclavian vein
- Realistically built to mimic challenging needle insertion
- Teaches skills in avoiding coracoid process for successful needle placement

**Internal Landmarks**
- Coracoid process, clavicle, subclavian/axillary vein

**External Landmarks**
- Subclavian space, shoulder girdle, clavicle

*Requires filling the vessels with fluid for best visualization and practice.*
### ESSENTIAL TRAINER

**ULTRASOUND SIMULATOR™**

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**Internal Landmarks**
- Artery; Vein; Nerve

**External Landmarks**
- Not applicable
NYSORA ULTRASOUND SIMULATORS™

ABOUT US

• NYSORA ULTRASOUND SIMULATORS™ are manufactured in the EU and distributed by MedXPress.PRO.
• MedXPress.PRO is founded and managed by leaders in ultrasonography and education to develop products that improve patient safety.
• Our products, facilitate ultrasound skills knowledge acquisition, increase the educational experience and knowledge retention, and standardize training.

DESIGN

• Each ULTRASOUND SIMULATOR™ utilizes TISSUE SIMULATOR™ Technology and optimizes the development of specific knowledge and skills using landmark and ultrasound guided procedural techniques.
• All models contain internal and external landmarks necessary to practice ultrasound visualization for point of care procedures.

FOOTPRINT

• The system footprint is small to facilitate the utilization of multiple units simultaneously, making it ideal for workshops and simulation labs.
• Small footprint and standardized packing size allows easy storage and transport.

EXPERT INPUT

• Each ULTRASOUND SIMULATOR™ has been reviewed by leaders in the field of Point-Of-Care ultrasound and has been approved to ensure that the relevant external and internal landmarks for taught procedures are included and accurate.

ULTRASOUND SIMULATORS™ are shipped with carry/storage base and case, cover protectors, convenient accessory storage tray, work surface tray, convenient laminated poster with instructions for use and care for each model.