

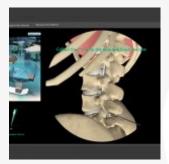
# **Spine Mentor - Minimally Invasive Surgery**

PRODUCT NUMBER: 1644









# DESCRIPTION:

The SPINE Mentor offers true-to-life training of Minimally Invasive Spine Surgeries.

The combination of realistic materials, physical spine model and advanced virtual reality capabilities enables to simulate a full procedure with a high accuracy and realistic sensation.

The simulator is suitable for anesthesiologists, and pain medicine surgeons.

# SKILLS:

- Practice the implementation of up to 4 electrodes in the epidural space
- 4 cases with different anatomical variations



- Loss of resistance technique and dynamic force feedback
- Practice safe insertion of a spine needle to the Subarachnoid space
- Position the patient in a Lateral Recumbent Position
- Accurate tracking on needle stylet for periodical checks for CSF flow

## CASES AND PATHOLOGIES:

#### **SPINAL CORD STIMULATION (SCS):**

- Accurate palpation of the spine
- Realistic resistance during needle puncture
- Real time virtual fluoroscopic guidance
- Virtual C-arm
- Usage of LOR technique
- Enables the insertion of up to 4 leads simultaneously (2 virtual, 2 physical)
- Dynamic haptics that simulate anatomic obstacles
- 3D anatomical map and labels
- Visual indicators of needle angle and penetration depth

#### **LUMBAR PUNCTURE:**

- Practice safe insertion of a spine needle to the Subarachnoid space
- Position the patient in a Lateral Recumbent Position
- Accurate tracking on needle stylet for periodical checks for CSF flow

## **CHARACTERISTICS:**

#### **FEATURES:**

- 3D printed spine for accurate palpation
- Highly realistic puncture pad for practicing needle penetration
- Real time simulated fluoroscopic image that displays the entire spine
- Virtual C-arm that can be manipulated throughout the procedure
- Dynamic haptics that simulate anatomic obstacles
- Evaluation report with metrics on the user's performance
- Prone or lateral recumbent position of the patient

## **ADDITIONAL MODULES:**

#### **MENTOR LEARN MANAGEMENT SYSTEM (optional):**



- Customizable curriculum incorporating training and didactics
- Easy and efficient administration of simulator users
- Online learning courses and video-based content
- Proficiency based hands-on training
- Performance reports with learning curve graphs
- Recorded videos of the simulation sessions for debriefing