symgery
Simulated surgery real experience

TSYM™
High-Fidelity Haptic Simulator that offers a Complete Surgical Training Platform:

- The best in-class haptic feedback to reinforce psychomotor skills
- Ultra-precise virtual anatomy
- More than 25 surgical instruments available
- Virtual fluoroscopy to verify the positioning of tools and instruments in real-time

Measure & Analyze Performance in Real Time:

The T SYM™ simulator offers performance measures and feedback in real-time to provide an objective and measurable evaluation that is adapted to each procedure.

Examples of metrics:
- Width and direction of the pedicle canal
- Quantity of healthy bone resected
- Incorrect or dangerous contact with critical tissues

Features:

- Magnification (from 1.5x to 10x) and full camera controls
- Pedal-controlled instruments and fluoroscopy
- Three tool handles to control more than 25 surgical instruments
- Real-time fluoroscopy
- AP, LAT and fully-customed views in X-ray mode
- Instant feedback and OR tips
- New and improved soft tissues simulation
- Results and final imaging saved to the user account.

Physical Specifications:

- A haptic robot module, approx. 45 cm x 45 cm X 40 cm
- A high-performance computer and a single medical-grade 24” touch-screen
- The robot generates haptic feedback on 5 degrees of freedom
**TRAINING CONTENT**

**Fundamental Skills—Dry Lab:**
(To get acquainted with the various instruments)
Introduction to the:
- Awl
- Burr
- Depth Gauge
- Drill
- Kerrison
- Pedicle Finder

Pedicle Screw Insertion in a Free Form Scoliotic Spine

**Surgical Techniques:**
(Techniques common to numerous spine surgeries or necessary as key steps of Medtech devices)
- Pedicle Screw Insertion - L1-S1
- Lateral Mass Screw Insertion - C3-C7
- Transforaminal Lumbar Interbody Fusion - L4-L5
- Screw Insertion C1-C2

**Patient Cases:**
(Spine clinical surgical procedures with patient profile)
- Right Paramedian Disc Herniation - Discectomy - L4-L5
- Diffuse Bulging Disc - Laminectomy - L2-L3
- Stenosis - Laminectomy - C4-C6
- Adjacent Segment Disease - Decompression and Fusion - C3-C7
- Anterior Cervical Discectomy and Fusion - C5-C6 (upcoming Q1 2024)
"I think that overall the simulation is very good. It allows for excellent re-creation of the surgical skills needed to complete a Discectomy and other spine surgeries."

- Dr. Jared Crasto

"It makes more sense in terms of being able to follow the sequential steps of the surgery and knowing where you did well or where you need to improve upon... if they want to go back and practice they can know which step based on the metric."

- Dr. Jeremie Larouche