

# 20th Annual SBMT

World Congress of Society for Brain Mapping and Therapeutics Los Angeles, California, USA

Breaking Boundaries of Science, Technology, Medicine, Art, and Healthcare Policy

# SPINE BIOSKILLS LAB











Society for Brain Mapping and Therapeutics (SBMT)
Course on Neurosurgical Innovation

Room: External BioSkills Campus (Brain and Spine Observatory)

# Saturday, February 18th 9:30 AM-11:30 AM

C-BSL-1: Spine Bioskills labs (Cadaver labs)

## 1. Advanced Spinal Reconstruction

- a. Minimally Invasive Lumbar OLIF (Oblique Lateral Interbody Fusion)
- b. Total CDA (Cervical Disc Arthroplasty) for motion preservation
- c. Single position XLIF
- d. SI Fusion
- e. Augmented reality pedicle screw guidance for both percutaneous and open spine surgery

### Faculty:

- Dr. Namath Hussain
- Dr. Mike Chen
- Dr. Farzad Massoudi
- Dr. Giuseppe Umana

#### **Course Description:**

This is a live demonstration course on cadavers to perform Lumbar OLIFs, Cervical Total Disc Replacements, Single position XLIF, and SI Fusion and Augmented reality pedicle screw guidance for both percutaneous and open spine surgery while teaching spine surgeons the approach and discussing indications, complications, and necessary tools. Performing the approach on a cadaver to show each step of the operation with guidance from experienced spine surgeons in a portable cadaver lab.

### **Course Objectives:**

- 1. Learn how to perform this surgical technique with the latest state-of-the-art instrumentation.
- 2. Discussing the indications of this approach.
- 3. Discussing the complications of this approach.
- 4. Compare and contrast newer techniques and instrumentation with this approach compared with older instrumentation.
- 5. Have the opportunity to review clinical and technical pearls with an experienced spine surgeon.
- 6. How to evaluate patients for SI instability
- 7. Learn the anatomy of the Sacroiliac Joint
- 8. Understanding the radiographic imaging
- 9. Learn proper and safe screw placement in the SI joint
- 10. Acquire new information on MIS approaches & techniques and skill-based knowledge on diagnostic workup, indications, and outcomes.
- 11. Develop and improve knowledge of the pathologic anatomy and pathophysiology of common painful conditions of the spine.
- 12. Formulate a plan of care employing non-operative and MIS surgical care based on the specific patient's situation.
- 13. Learn how augmented reality surgical navigation increases procedure accuracy, reduces fluoroscopy, radiation exposure and has a nominal OR footprint.







