

**World Federation of
Neurosurgical Societies**
Interim Meeting Course

VIRTUAL NEUROSURGERY



Presentations on the recent achievements and future developments in the field of high-tech simulation in brain surgery.

Parallel, hands-on, practical session with high-tech neurosurgical simulators.

MONDAY, SEPTEMBER 7

9:00 - 17:00 Rome, Italy

COURSE SPEAKERS

Joshua B. Bederson, MD (Director)
Paolo Ferroli, MD (Director)
Antonio Bernardo, MD
Prof. Aidan Byrne
Anthony B. Costa, PhD
Rolando F. Del Maestro, MD, PhD
Alexander Z. Lever
Alessandro Perin, MD, PhD
Christopher Sarkiss, MD
Luis Serra, PhD

NEUROSURGICAL SIMULATORS & DEVICES

NeuroTouch Cranio Simulator

Immersive Touch

Surgical Theater Surgical Navigation Advanced Platform
Medtronic StealthStation® Navigation System

Virtual Proteins

Zeiss Pentero 900
Brainlab Curve

Course Schedule

9:00 am Course Begins

9:25 am Course Introduction

Joshua B. Bederson, MD and Paolo Ferrolì, MD

9:30 am High-Tech Simulation and the History of Neurosurgery

Rolando F. Del Maestro, MD, PhD

10:00 am Simulation Techniques: From High-Tech Aviation to High-Risk Medical Specialties

Alex Lever

10:30 am The Dextroscope and DEX-Ray: Virtual and Augmented Reality in Neurosurgery Planning and Navigation

Luis Serra, PhD

11:00 am Break

11:30 pm What can we Teach (and Learn!) Through Virtual Reality Neurosurgical Simulation?

Joshua B. Bederson, MD (Director)

12:00 pm High Field MRI and Finite Element Methods for Modeling Neuroanatomy in Neurosimulation

Anthony B. Costa, PhD

12:30 pm Who are Going to be the Best Neurosurgeons in the Future?

Prof. Aidan Byrne

1:00 pm Lunch

2:00 pm Neurosurgical Simulation: Mastering the Anatomy, Perfecting the Approach

Antonio Bernardo, MD

2:30 pm Methods of Assessing Neurosurgery Technical Skills in the Operating Room and During Simulation

Christopher Sarkiss, MD

3:00 pm The Besta NeuroSim Center: Prospective Studies and Educational Programs by Means of High-Tech Neurosurgical Simulators

Alessandro Perin, MD, PhD

3:30 pm Continuation of Hands-On Demonstrations

Neurosurgical Simulator & Device Schedule

_____ **NeuroTouch Cranio Simulator**

_____ **Immersive Touch**

_____ **Surgical Theater Surgical Navigation Advanced Platform (SNAP)**

Medtronic StealthStation® Navigation System

_____ **Virtual Proteins**

_____ **Zeiss Pentero 900**

Brainlab Curve

The following times are reserved for your personal, hands-on practical session, during the lecture.

You may also participate in the Hands-On Demonstration session, which begins after the presentations at 3:30 pm.

Course Speakers



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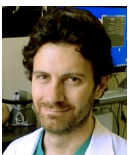
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