



4 Credit-Hour CME - Fundamentals of Ultrasound Guided Needle Placement

Focused hands-on skills development leading to proficiency in ultrasound guided needle placement.

SCHEDULED DATES 2025

July 29th, August 9th, September 20th, October 11th, November 15th, December 20th

10 A.M. – 2 P.M.

FORMAT

- Dedicated location with a range of ultrasound machines.
- ➤ 4 hours focused on hands on training.
- > Scheduled or Private (maximum 8)
- Advanced simulation and real time ultrasound scanning with the latest in needle guidance technology.
- ➤ Block and procedure specific simulation workshops on request.

VALKYRIE ACADEMY

81 War Memorial Drive, Suite C Berkeley Springs WV 25411 REGISTRATION COST \$450









OBJECTIVES

- > State the fundamentals of ultrasound physics and demonstrate appropriate optimization for system controls.
- > Demonstrate image orientation, transducer preparation, and scan protocols for scanning with ultrasound.
- Perform image adjustments for optimal success and understand doppler fundamentals.
- Recognize appearance of key anatomy under ultrasound.
- > Acquire skills to guide a needle with ultrasound both in-plane and out-of-plane with confidence to an identified target.

AGENDA



On-Site Instructor: Robert Nicholls

Lt. Col (Rtd) MEng (Hon)

Robert Nicholls boasts over 20 years of expertise in designing, developing, teaching, and training various programs that utilize simulators for ultrasound-guided regional anesthesia (UGRA) procedure training.



Chaired By: Jeff Gadsden

MD, FRCPC, FANZCA

Dr. Gadsden is Valkyrie-Simulators' Skills Workshop Coordinator, and Associate Professor of Anesthesiology and Chief of the Division of Orthopedic, Plastic, and Regional Anesthesiology at Duke University School of Medicine.

Session 1: How to operate an ultrasound machine & optimize the image.

- Understand ultrasound technology and the science behind it.
- Develop comprehensive understanding of device settings for optimal results.
- Achieve skills to fine-tune settings, enhancing ultrasound imagery.
- Master the core transducer manoeuvres and scanning techniques for optimal image acquisition.



Session 2: Essential transducer manoeuvres and object recognition.

- Recognize the ultrasonographic appearance of structures relevant to regional anaesthesia & ultrasound artifacts.
- Confidently identify nerves, fascicles, tendons, blood vessels, bone, muscle, and fascial planes.
- Recognize the most common ultrasound artifacts.

Session 3: Needle Techniques

- Master the techniques to guide needles both in-plane and out-of-plane, ensuring precise targeting every time
- Master probe cover usage and catheter placement.

Session 4: Hands On

➤ Hands on practise of all developed skills using anatomical simulators.

ATTRACTIONS IN BERKELEY SPRINGS WV

https://archive.berkeleysprings.com/attractions/





