



# 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**

January 25<sup>th</sup>, February 15<sup>th</sup>, March 8<sup>th</sup>, April 26<sup>th</sup>, May 17<sup>th</sup>, June 7<sup>th</sup>

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

www.valkyrie-simulators.com





# 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/





