GULFCOAST ULTRESOUND

Point of Care Ultrasound Scanning Skills Workshop: Ultrasound-Guided Vascular Access and Nerve Blocks for Emergency Medicine Applications November 14 – 15, 2024

Thursday, November 14 – Ultrasound-Guided Vascular Access	
8:30 AM	Welcome and Continental Breakfast
8:45 - 9:45	Hands-On Scanning – Session 1
9:45 – 10:45	Hands-On Scanning – Session 2
10:45 - 11:00	15 Minute Break
11:00 - 12:00	Hands-On Scanning – Session 3
12:00 - 1:15	Lunch
1:15 – 2:15	Hands-On Scanning – Session 4
2:15 - 3:15	Hands-On Scanning – Session 5
3:15 - 3:30	10 Minute Break: Model Rotation
3:30 - 4:30	Hands-on Scanning: Session 6

Friday, November 15 – Ultrasound-Guided Nerve Blocks for Emergency Medicine Applications	
8:30 AM	Welcome and Continental Breakfast
8:45 - 9:45	Hands-On Scanning – Session 1
9:45 - 10:45	Hands-On Scanning – Session 2
10:45 - 11:00	15 Minute Break
11:00 - 12:00	Hands-On Scanning – Session 3
12:00 - 1:15	Lunch
1:15 - 2:15	Hands-On Scanning – Session 4
2:15 - 3:15	Hands-On Scanning – Session 5
3:15 - 3:30	15 Minute Break
3:30 - 4:30	Hands-on Scanning: Session 6

** This is a tentative itinerary and is subject to change.



The Gulfcoast Ultrasound Institute is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Gulfcoast Ultrasound Institute designates this live educational activity for a maximum of 12.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the educational activity.

Approved by the American College of Emergency Physicians (ACEP) for a maximum of 12.0 hour(s) of Category I credit.

This course also meets CME / CEU requirements for ARDMS. Note: While offering the CME credit hours noted above, activities are not intended to provide extensive training or certification for exam performance or interpretation.

NEEDS STATEMENT:

The planning committee has determined a need for the following educational activity based on request from the medical community, expanded utilization of ultrasound, and lab accreditation requirements.

COURSE OBJECTIVES:

At the completion of the program, the participant should be able to:

- 1. State the relationship of transducer frequency to resolution, penetration and attenuation
- 2. List different types of transducers and their selection for different applications
- 3. Recognize commonly seen imaging artifacts.
- 4. Demonstrate the participant's knowledge to better perform ultrasound-guided vascular access procedures and nerve blocks for emergency medicine applications
- 5. Demonstrate competence to incorporate protocols, scan techniques, and interpretation criteria to improve diagnostic/treatment accuracy
- 6. Demonstrate proper transducer manipulation and system optimization to produce diagnostic images and the use of ultrasound guidance for central and peripheral line access
- 7. List the advantages and disadvantages of the "In-Plane" and "Out-of-Plane" ultrasound-guided vascular access techniques
- 8. Differentiate venous vs. arterial anatomy by ultrasound
- 9. Identify ultrasound imaging characteristics of vessels and contiguous anatomy to determine the optimal approach for vascular access
- 10. Describe ultrasound imaging characteristics of vascular pathology that would indicate a vessel is not suitable for vascular access
- 11. Increase the participants' knowledge and competence to perform ultrasound-guided nerve blocks for emergency medicine applications.
- 12. List the advantages of using ultrasound-guided nerve block techniques.
- 13. Demonstrate imaging techniques for performing ultrasound-guided upper extremity, lower extremity, truncal, and miscellaneous nerve blocks.
- 14. Increase confidence to incorporate protocols, scan techniques, and interpretation criteria to integrate the skills learned into clinical practice.

While offering CME credit hours this activity is not intended to provide extensive training or certification for performance of ultrasoundguided vascular access procedures. We recommend working under supervised conditions until an acceptable level of proficiency has been achieved.

A special thanks to the following ultrasound equipment manufacturers who provide various (in kind) equipment support to help make our programs possible (companies listed are as of the time of printing).



Disclosure of Individuals in Control of Content

In addition to the faculty listed on the previous page the following individuals are recognized by GUI as being in control of content of this program:

James Mateer, MD, RDMS (Medical Director-planner & QI Task Force) Medical Director, Gulfcoast Ultrasound Institute Milwaukee, WI No relevant financial relationships to disclose

Charlotte Derr, MD, RDMS, FACEP, FPD-AEMUS (Co-Medical Director-planner & QI Task Force)

Associate Professor of Emergency Medicine Fellowship Director of Advanced Emergency Medicine Ultrasound Fellowship Program University of South Florida Morsani College of Medicine Tampa, FL *No relevant financial relationships to disclose*

Andreas Dewitz, MD, RDMS (Member of Advisory Board & QI Task Force Subcommittee)

Clinical Professor of Emergency Medicine Clinical Director of POCUS Education, Solomont Simulation Center Department of Emergency Medicine Boston Medical Center Boston, MA *No relevant financial relationships to disclose*

Lori Green, BA, RDMS, RDCS, RVT (Program Director-planner, Content Reviewer, QI Task Force) Gulfcoast Ultrasound Institute, Inc. St. Petersburg, FL *No relevant financial relationships to disclose*

Trisha Reo, AAS, RDMS, RVT (Program Coordinator-planner, Content Reviewer, QI Task Force) Gulfcoast Ultrasound Institute, Inc. St. Petersburg, FL *No relevant financial relationships to disclose*

HANDS-ON INSTRUCTORS:

At the time of printing all hands-on instructors for this program have signed disclosure forms and have no relevant financial relationships to disclose. A verbal disclosure will be made during opening remarks. All scanning sessions are monitored by the program director and/or the program manager to ensure education objectives are met and no commercial bias occurs.

Content:

All content for this CME activity were reviewed and approved by member(s) of the GUI staff to determine content validity and ensure that no conflicts of interest exist prior to final course material compilation and printing.

Reviewed & approved:

Lorí Green BA, RDMS, RDCS, RVT Trísha Reo, AAS, RDMS, RVT



Welcome!!

The entire staff at Gulfcoast Ultrasound Institute would like to welcome you to our educational facility.

Our goal is to provide the highest quality continuing education possible in a relaxed and personal atmosphere. The content of each program has been carefully planned to provide you with the information needed to obtain a firm foundation to begin gaining the experience to perform and/or interpret ultrasound examinations in the specialty of your choice. The program will be structured with lectures in the morning and hands-on sessions during the afternoon to allow more individualized attention the program participants will be divided into groups for the hands-on workshops based on your experience level and type of equipment you work with.

To help you get the most out of this program we would like to make the following recommendations:

- 1. Attend the lectures and scheduled hands-on sessions.
- 2. When you are not involved in a scheduled afternoon session, take advantage of the SUPPLEMENTAL SCANNING WORKSHOP or check out a video tape from our library to watch on one of the review stations located in the break room.
- 3. If you do not understand a particular concept, ASK FOR HELP!
- 4. Study your course workbook during the evening.
- 5. Remember excellence is not achieved overnight. Becoming proficient in any ultrasound specialty requires the commitment to continually study and perform multiple (at least 100) exams before an initial level of confidence is achieved. The AIUM guidelines suggest competency for interpretation requires a minimum of 500 exams per specialty.
- 6. Begin scanning immediately upon return to the ultrasound departments even if it's on a volunteer. We recommend scanning/interpretations under supervised conditions until an accepted level of proficiency has been obtained.

All of our instructors, guest speakers and office staff are here to serve you! If you have any questions of any kind, please do not hesitate to ask.



Gulfcoast Ultrasound Institute EQUIPMENT RECOMMENDATIONS

Since 1985, Gulfcoast Ultrasound Institute has taken great pride in our ability to provide quality continuing education programs while remaining unbiased regarding the recommendation of ultrasound equipment.

Our programs are supported by most of the major equipment manufactures by providing their systems for use during the hands-on sessions. These companies have learned their products will be used and demonstrated to the best of our abilities in an educational setting and that no selling or promotion is done on our premises.

We realize that some of the course participants may currently be in the process of evaluating equipment for purchase and would like the opinions of our staff to determine the "best" system for your department. Everyone has a "favorite" ultrasound system (usually because it is the one they have worked with the most and are comfortable with) however, Gulfcoast Ultrasound must take an unbiased position in regards to equipment recommendations.

If you are currently evaluating equipment for purchase, we suggest you invite the equipment manufacturers to your facility for a private demonstration to determine image quality, ease of use, over-all capabilities etc. on an individual basis.

Thank you!

Lorí Green BA, RDMS, RDCS, RVT

Lori Green, BA, RDMS, RDCS, RVT Program Director