Introduction to Carotid & Peripheral Vascular Duplex/Color Flow Imaging
September 27 – 30, 2021

Monday, September 27, 2021		
7:45	Welcome and Continental Breakfast	
8:00	Interactive Polling Session	
8:15	Doppler & Color Fundamentals	Lori Green, BA, RT(R), RDMS, RDCS, RVT
10:00	Break	
10:15	Carotid Anatomy & Physiology	Trisha Reo, AAS, RDMS, RVT
11:00	Break	
11:15	Normal Spectral Analysis	Lori Green, BA, RT(R), RDMS, RDCS, RVT
11:45	Carotid Scan Protocol	Trisha Reo, AAS, RDMS, RVT
12:30	Lunch	
1:30	Hands-On Scanning	
5:00	Adjourn	

Tuesday, September 28, 2021		
7:30	Continental Breakfast	
7:45	Intima-Media Thickness: Measurement & Evaluation	Phil Bendick, Ph.D., RVT, FSDMS, FSVU
8:15	Carotid Stenosis Assessment	
9:15	Break	
9:30	Challenging Case Studies	
10:45	Stretch Break	
10:55	Non-Atherosclerotic Carotid Abnormalities	
11:20	Case Studies and How to Structure a Report	
12:00	Post-Polling Session	
12:15	Lunch	
1:00	Hands-On Scanning / How to Structure a Report + Cases	Phil Bendick, Ph.D., RVT, FSDMS, FSVU
4:30	Adjourn	

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Wednesday, September 29, 2021		
7:45	Continental Breakfast	
8:00	Interactive Polling Session	
8:15	Venous Anatomy, Scan Techniques & Normal Characteristics	Phil Bendick, Ph.D., RVT, FSDMS, FSVU
9:00	Break	
9:15	Duplex / Color Evaluation of LE DVT	
10:00	Duplex / Color Evaluation of UE DVT	
10:30	Break	
10:45	Evaluation of Venous Insufficiency	
11:15	Duplex / Color Evaluation for Venous Ablation Procedures - Types of Vein Ablation Procedures - Pre-Procedure Mapping - Post-procedure Mapping	
12:30	Lunch: Optional video lecture- Doppler/Color Fundamentals	
1:30	Hands-On Scanning & Live Demonstration of Venous Insufficiency	Phil Bendick, Ph.D., RVT, FSDMS, FSVU
5:00	Adjourn	

Thursday, September 30, 2021		
7:45	Continental Breakfast	
8:00	LE Arterial Anatomy & Physiology	Rob Daigle, BA, RVT, FSVU, FSDMS
8:30	Clinical Exam & Indirect Testing	
9:30	Break	
9:45	Direct Testing & Duplex Scanning	
11:00	Break	
11:15	Live Demo: Arterial Duplex	
11:45	Treatment of Lower Arterial Disease	
12:15	Interactive Polling Session with Discussion	
12:30	Lunch	
1:30	Hands-On Scanning Duplex & Segmental Pressures	
4:30	Adjourn	

** This is a tentative course itinerary. Lecture faculty, times and dates may be subject to change.

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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 32.0 *AMA PRA Category 1 Credits™.* Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 32.0 Medical Knowledge MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC 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 requests from the medical community, expanded utilization of ultrasound, and lab accreditation requirements.

COURSE OBJECTIVES: Upon completion of this program, the participant should be able to:

1. Increase the participants' knowledge to better perform and/or interpret Carotid Duplex/Color Flow Imaging and Peripheral Vascular ultrasound examinations.
2. Apply knowledge of the anatomy/physiology of the cerebrovascular, venous, and arterial systems.
3. Cite Doppler/color physics principles and be able to (sonographers) apply these principles to optimize system controls and/or (physicians) utilize this information for identifying technical errors which may result in misdiagnosis.
4. Perform routine scan protocols and Doppler calculations in a complete carotid duplex/color, venous, and arterial examinations.
5. Differentiate normal/abnormal spectral Doppler/color characteristics for identifying disease.
6. List methods for obtaining quantitative information and state the diagnostic relevance of each measurement.
7. Characterize plaque morphology and other pathology associated with cerebral vascular disease.
8. Perform Intima-Media Thickness measurements and state the clinical significance as a screening method for cardiovascular disease.
9. Integrate the information to include and prepare a structured report for a carotid ultrasound examination.
10. Apply diagnostic criteria for accurate interpretation of carotid duplex/color flow and peripheral vascular examinations.
11. State the indications and applications of indirect testing methods for lower arterial disease.
12. Demonstrate vein mapping techniques to identify suitability as a potential arterial bypass graft.
13. State the role of ultrasound in the diagnosis and treatment of venous insufficiency.
14. Perform evaluation for venous insufficiency and patency of perforators for vein therapy treatment.

While offering CME credit hours this activity is not intended to provide extensive training or certification for performance of or interpretation of Carotid and Peripheral Vascular Ultrasound Examinations. 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).

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Disclosure of Relevant Financial Relationships With Commercial Companies/Organizations

Gulfcoast Ultrasound Institute, Inc. endorses the standards and essentials of the Accreditation Council for Continuing Medical Education for activities and the speakers at these activities disclose relevant relationships with commercial companies.

Speakers having relevant relationships include receiving from a commercial company research grants, consultancies, honoraria and travel, or having a self-managed equity interest in a company.

FACULTY:

Phil Bendick, Ph.D., RVT, FSDMS, FSVU
Vascular Ultrasound Consultant
Vass, North Carolina
No relevant financial relationships to disclose

Rob Daigle, BA, RVT, FSVU, FSDMS
Vascular Ultrasound Consultant
Littleton, CO
No relevant financial relationships to disclose

Lori Green, BA, RT, RDMS, RDCS, RVT
President, Program Director
Gulfcoast Ultrasound Institute, Inc.
St. Petersburg, FL
No relevant financial relationships to disclose

Trisha Reo, AAS, RDMS, RVT
Program Coordinator
Gulfcoast Ultrasound Institute, Inc.
St. Petersburg, FL
No relevant financial relationships to disclose

All presentations 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.

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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 (Co-Medical Director-planner & QI Task Force)
Assistant Professor of Emergency Medicine &
Fellowship Director of Emergency Medicine
Ultrasound Fellowship Program
University of South Florida Medical School
Tampa, FL
No relevant financial relationships to disclose

Andreas Dewitz, MD, RDMS (Member of Advisory Board & QI Task Force Subcommittee)
Associate Professor of Emergency Medicine
Vice Chair of Ultrasound Education
Boston Medical Center
Boston, MA
No relevant financial relationships to disclose

Lori Green, BA, RT, 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

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:

Lori Green, BA, RT, RDMS, RDCS, RVT

Trisha Reo, AAS, RDMS, RVT

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.

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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 DVD from our library.

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.

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Gulfcoast Ultrasound Institute
EQUIPMENT RECOMMENDATIONS

Throughout the past 34 years 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!

Lori Green, BA, RT, RDMS, RDCS, RVT

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