



**Muhammad Hasan, MBBCh, RPVI, RVT, RDMS, RDCS**

Muhammad Hasan is currently the Director of the Department of Noninvasive Vascular Testing at Miami Cardiac & Vascular Institute of Baptist Hospital of Miami. He leads a team of 58 Board Certified Physicians, Registered Technologists and Registered Nurses.

In addition; working as learning/ education expert, course developer, clinical trainer, instructor, and reviewer for many national and international organizations such as Intersocietal Commission of Accreditation IAC, Society of Diagnostic Medical Sonography (SDMS), Society of Vascular Ultrasound (SVU), University of Texas (UT), Philips Clinical Education and more.

He is an adjunct professor at Nova Southeastern University, regularly published, given dozens of high profile societal lectures, and well respected as a vascular ultrasound leader and innovative pioneer.

## Courses

### **Renovascular Disease and Protocols for Renal Duplex Vascular Sonography**

This course for noninvasive vascular ultrasound technologists is developed to meet the need to standardize performance protocols and diagnostic criteria for noninvasive evaluation of renovascular disease. The course includes lectures and interactive case study. Program topics include a brief review of renal anatomy and physiology, pathophysiology of and sonographic evaluation of renal artery stenosis, chronic and end-stage renal disease. Noninvasive vascular testing protocols and diagnostic criteria with case study correlations including DSA angiography, CTA and MRA will also be presented.

### **Venous Sonography Testing Protocols: Upper, Lower extremity, Iliac, IVC, and SVC**

This 2 hour course includes lectures and interactive case presentations. Program topics include upper and lower extremity venous duplex sonography, comprehensive protocol for , evaluation of the upper and lower extremity peripheral veins, central veins of the head and neck, pelvic Veins and the Inferior vena cava. This course provides a review of the essential protocols for venous duplex sonography for an experienced sonographer or a comprehensive overview for the beginner.

### **Transcranial Duplex Imaging: Anatomy and Acoustic Windows**

This 2 hour program provides the essential skills needed for those performing Transcranial Doppler Imaging (TCDI). This course provides a review of the essential anatomy and acoustic windows needed to perform TCDI examinations. Educational material will be presented in the form of detailed lectures as well as some correlative case study

### **Vascular Innovations: xPlane and 3D/4D Vascular Case Studies**

This 2 hour program provides an overview of the clinical value of the xPlane and 3D/4D imaging capabilities for improved accuracy, efficiency, and communication in vascular ultrasound imaging related to the XL14-3 transducer primarily. Educational material will be presented in the form of detailed lectures as well as some correlative case study.