



# MAHEC Ultrasound

## EM-FM POCUS

*Limited Space Available!*

**2-DAY EVENT: SEPTEMBER 7-8, 2018**

### DESCRIPTION

This robust, 1 1/2-day course incorporates live models, simulations, didactic lectures, and is ideal for general internists, family practice physicians, emergency physicians, residents, fellows, and advance practice providers. Attendees will participate in hands-on sessions and lectures that will cover the basics in several areas of medical ultrasound with clinical applications in inpatient, outpatient, and emergency settings. These skills will form the foundation for basic assessment with point-of-care ultrasound as well as procedural methods such as FAST, RUSH, Cardiovascular, MSK, DVT and Renal.

**Please note:** This course is not a certificate course. It is an opportunity to learn and practice point-of-care ultrasound. Certification and privileges are determined by your local regulatory bodies and credentialing systems.

### AUDIENCE

General internists, hospitalists, pulmonary critical care physicians, emergency physicians, family medicine residents, fellows, advanced practice providers and emergency personnel.

### OBJECTIVES

**Upon completion of this activity, participants will be able to:**

- Review fundamental principles/image formats used in sonography
- Identify normal and abnormal sonoanatomy of the kidneys
- Identify at least three office-based clinical applications of ultrasound
- Demonstrate the necessary scanning skills required to maximize diagnostic capabilities
- Discuss basic principles of point-of-care ultrasound machine operation and scanning
- Discuss basic and advanced point-of-care ultrasound applications, including lung and pleural ultrasound, vascular access, procedural guidance, focused abdominal and pelvic ultrasound, deep venous thrombosis evaluation, cardiac echocardiography, and musculoskeletal/soft tissue applications
- Learn how to enhance adequate ultrasound images for focused examinations
- Through clinical case review, learn to diagnose conditions commonly identified at the bedside using point of care ultrasound



MAHEC assumes permission to use audio, video and still images from this program for promotional and educational purposes. Please speak with a staff member if you have any concerns.



**Stay connected! Follow us on Facebook: @MAHECED**

### LOCATION

**MAHEC Mary C. Nesbitt Biltmore Campus**  
121 Hendersonville Rd, Asheville, NC 28803

### DATE

**Friday, September 7, 2018**

### REGISTRATION PROGRAM

3:45 pm–4:00 pm  
4:00 pm–8:00 pm (*dinner provided*)

### DATE

**Saturday, September 8, 2018**

### REGISTRATION PROGRAM

7:30 am–8:00 am (*breakfast provided*)  
8:00 am–6:00 pm (*lunch provided*)

### PROGRAM FEE

**\$750.00**

### PHYSICIAN ASSISTANTS

**\$500.00**

### NURSE PRACTITIONERS

**\$500.00**

### MEDICAL STUDENTS AND RESIDENTS

**\$350.00**

### EMS, EMTS & PARAMEDICS

**\$250.00**

[CLICK HERE TO REGISTER](#)

### FACULTY

**Benjamin Gilmer, MD**, is on faculty at the MAHEC Family Medicine Residency Program and directs its ultrasound curriculum. He leads MAHEC's Global Health curriculum, where point-of-care ultrasound plays an important role. His areas of interest include medical education and rural/global health. He is the Family Medicine Clerkship Director for UNC Asheville and Medical Director for UNC's Kenan Primary Care Scholars Program and MAHEC's Rural Health Fellowship. He practices full-spectrum family medicine—including obstetrics—and is passionate about advancing POCUS throughout WNC.

**Vivek Tayal, MD, FACEP**, currently serves as the Chief of the Division of Emergency Ultrasound in the Department of EM at Carolinas Medical Center and has been active nationally in the American College of Emergency Physicians (ACEP) Emergency Ultrasound Section, Society for Academic Emergency Medicine (SAEM) Ultrasound Interest Group, and American Institute of Ultrasound in Medicine (AIUM) Emergency Ultrasound Section. His academic interests include new avenues in ultrasonography, resuscitation, health policy and computerization of Emergency Department (ED) operations.

**Margaret Lewis, MD**, received her BS in Chemical Engineering from USC in 2002. She completed medical school in 2008 and Emergency Medicine residency in 2011, both at the Medical University of SC. She then completed an Emergency Ultrasound Fellowship at Carolinas Medical Center in 2012 and joined CMC as ultrasound faculty. Her focuses include ultrasound in medical student education, resident education, remote education, as well as international medicine.

*(continued on next page)*

## PROGRAM AGENDA

### FRIDAY, SEPTEMBER 7, 2018

- 3:45–4:00** Registration and Light Refreshments (*provided*)
- 4:00–4:15** Course Overview and POCUS Introduction  
— Benjamin Gilmer, MD
- 4:15–4:45** POCUS Knobology and Basic Physics  
— Benjamin Gilmer, MD
- 4:45–5:15** **Didactic:** eFAST  
— Vivek Tayal, MD, FACEP and Margaret Lewis, MD
- 5:15–6:00** **Scan Lab:** eFAST
- 6:00–7:00** Working Dinner (*provided*) and **Didactic:** Pulmonary  
— Margaret Lewis, MD and Caitlin O’Callaghan, MD
- 7:00–7:45** **Scan Lab:** Pulmonary Focused
- 7:45–8:00** Evening Wrap-Up with Q&A and Adjourn

### SATURDAY, SEPTEMBER 8, 2018

- 7:30–8:00** Registration and Light Breakfast (*provided*)
- 8:00–9:00** **Didactic:** Cardiovascular: PLAX, PSS, Apical 4 View  
— Vivek Tayal, MD, FACEP and Margaret Lewis, MD
- 9:00–9:45** **Scan Lab:** Cardiovascular: PLAX, PSS, Apical 4 View
- 9:45–10:00** Break
- 10:00–10:30** **Didactic:** AAA/IVC — Benjamin Gilmer, MD
- 10:30–11:00** **Scan Lab:** AAA/IVC
- 11:00–11:30** **Didactic:** Liver/Gallbladder  
— Caitlin O’Callaghan, MD
- 11:30–12:00** **Scan Lab:** Liver/Gallbladder
- 12:00–1:00** Working Lunch (*provided*) and **Didactic:** MSK Focus: Shoulder and Knee  
— Jessica Knapp, MD and Brent Fisher, MD
- 1:00–1:45** **Scan Lab:** MSK Focus: Shoulder and Knee
- 1:45–2:15** **Didactic:** RUSH  
— Vivek Tayal, MD, FACEP and Margaret Lewis, MD
- 2:15–2:45** **Scan Lab:** RUSH
- 2:45–3:00** Break
- 3:00–5:00** **Concurrent Breakout Sessions**
- 3:00–3:30** **Didactic** Breakout Sessions
- 3:30–4:00** **Scan Lab** Breakout Sessions
- A.** DVT — Benjamin Gilmer, MD and Will McLean, MD
- B.** Renal — Caitlin O’Callaghan, MD and Andrew Beeghly, MD
- C.** Fascia Iliaca Blocks — Emily Natarella, MD
- D.** Thyroid — Benjamin Gilmer, MD
- 4:00–4:30** **Didactic** Breakout Sessions
- 4:30–5:00** **Scan Lab** Breakout Sessions
- E.** DVT — Benjamin Gilmer, MD and Will McLean, MD
- F.** Renal — Caitlin O’Callaghan, MD and Andrew Beeghly, MD
- G.** Procedure: Ophtho vs. Line Placement  
— Vivek Tayal, MD, FACEP; Scott Ramming, MD; and Margaret Lewis, MD
- H.** Thyroid — Benjamin Gilmer, MD
- 5:00–5:30** POCUS Olympics Finale  
— Margaret Lewis, MD and Benjamin Gilmer, MD
- 5:30–6:00** Wrap-Up with Q&A and Adjourn

**Caitlin O’Callaghan, MD**, is an Emergency Medicine Physician and Regional Ultrasound Director for the Department of Emergency Medicine at Mission Health. She earned her medical degree from Virginia Commonwealth University School of Medicine in 2013. Her Emergency Medicine residency (2016) and Emergency Ultrasound Fellowship (2017) were both completed at the University of Kentucky.

**Jessica Knapp, MD**, is a former coach and collegiate runner who completed her family medicine training in NC followed by a sports medicine fellowship at the University of Connecticut. She recently joined us as the Assistant Sports Medicine Fellowship Director after teaching at Tufts Family Medicine Residency, Tufts School of Medicine and Harvard Medical School for several years. In addition to teaching, she is involved in research focused on female athletes for which she earned the AMSSM Young investigator’s Research Grant Award.

**Brent Fisher, MD**, joined Asheville Orthopaedic Associates in June 2016. He is a primary care sports medicine physician who specializes in non-operative orthopaedic care, including musculoskeletal ultrasound evaluations and guided injections. He also treats concussion and has prior experience in sideline management of high school, university, and professional sports teams.

**Will McLean, MD**, is a member of the MAHEC Family Medicine faculty and also serves as medical director of the Deerfield Retirement Community. He graduated from UNC–Chapel Hill SOM and completed his residency at MAHEC. His academic interests include the use of ultrasound in older adults and in the nursing home setting.

**Andrew Beeghly, DO**, is a board-certified Emergency Physician and Hyperbaric Physician with Mission Hospital in Asheville, NC. He has training and expertise in austere applications of ultrasound in the areas of trauma and tropical medicine. He was director of ultrasound at Blanchfield Army Community Hospital and officer in charge of forward deploying ultrasounds and training for the 5th Special Forces Group. Andrew has applied ultrasound in remote areas of the world.

**Emily Natarella, MD**, is a board-certified anesthesiologist practicing at Mission Hospital in Asheville, NC. She has a special interest in regional anesthesia, particularly for orthopedic surgery, and has been active in efforts to combine regional anesthesia techniques with multimodal therapies to reduce pain, perioperative narcotic usage, and decrease risk of delirium. Dr. Natarella attended medical school at the University of Alabama School of Medicine and completed residency in Anesthesiology at UAB Hospital in Birmingham, AL.

**Scott Ramming, MD**, is an emergency medicine doctor in Asheville, NC and is affiliated with multiple hospitals in the area, including Angel Medical Center and McDowell Hospital. He received his medical degree from The Robert Larner, MD College of Medicine at the University of Vermont and has been in practice for more than 20 years.

### MEDICAL COURSE DIRECTOR

**Benjamin Gilmer, MD**, MAHEC, Asheville, NC

### DIRECTIONS

**MAHEC Mary C. Nesbitt Biltmore Campus**  
121 Hendersonville Road, Asheville NC 28803

**From I-40 E:** Take Exit 50 and turn left onto Hendersonville Road.

**From I-40 W:** Take Exit 50B and merge onto Hendersonville Road.

At the first light, turn left into the DoubleTree Hotel complex. Turn left (away from the hotel). You will see a steep driveway on your right. Turn right and go up that driveway to the MAHEC Biltmore Campus.

**From 19-23 (I-26):** Take 240 East to Exit 5B (Charlotte Street). Exit right onto Charlotte Street. At the 4th light, make a left onto Biltmore Avenue. Proceed through 8 traffic lights. At the 9th light, turn right into the DoubleTree Hotel complex. Turn left (away from the hotel). You will see a steep driveway on your right. Turn right and go up that driveway to the MAHEC Mary C. Nesbitt Biltmore Campus.

## CREDITS

### Continuing Medical Education

**Accreditation:** MAHEC is accredited by the NC Medical Society (NCMS) to provide continuing medical education for physicians.

**Credit Designation:** MAHEC designates this live activity for a maximum of **13.5 AMA PRA Category 1 Credit(s)**<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

**Disclosure Statement:** MAHEC adheres to the ACCME Standards regarding industry support to continuing medical education. Disclosure of faculty and commercial support relationships, if any, will be made known at the time of the activity.

### 13.5 CNE Contact Hours

This continuing education activity was approved by MAHEC, an approved provider by the North Carolina Nurses Association (an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation). Participants must attend the entire activity to receive credit. No partial credit is given for this activity.

**CEUs:** MAHEC designates this continuing education activity as meeting the criteria for **1.4 CEUs** as established by the National Task Force on the Continuing Education Unit. You must attend the entire workshop to receive CEUs.

**Contact Hours:** MAHEC designates this live continuing education activity as meeting the criteria for **13.5 Contact Hours**. Full attendance is required to receive credit.

## REGISTRATION

Registration fee is \$750.00; \$500.00 for Physician Assistants and Nurse Practitioners; \$350.00 for Medical Students and Residents; and \$250.00 for EMS, EMTs and Paramedics. Fees include administrative costs, educational materials, a light breakfast, and lunch.

MAHEC has a pay-up-front policy for all CE programs. The only exceptions will be for pre-approved programs where an individual payment plan is appropriate. Registrations received without accompanying payment will not be processed and participants who have not paid the course fee will not be admitted into the program.

Cancellations received at least two weeks in advance of the program date will receive a full refund unless otherwise noted. Cancellations received between two weeks and up to 48 hours prior to the program date will receive a 70% refund unless otherwise noted. No refunds will be given for cancellations received less than 48 hours prior to the program date. All cancellations must be made in writing (fax, mail, or email). Substitutes can be accommodated in advance of the program.

## PLANNING COMMITTEE

**Elaine Alexander, BSN, MSN, RNC-OB**, MAHEC, Asheville, NC

**Andrew Beeghly, MD**, Mission Hospital, Asheville, NC

**Benjamin Gilmer, MD**, MAHEC, Asheville, NC

### HAVE A QUESTION?

#### Contact the Program Planner

Elaine Alexander, MSN, RNC-OB

[elaine.alexander@mahec.net](mailto:elaine.alexander@mahec.net) or 828-257-4414

#### REGISTRATION INFORMATION

828-257-4475

#### FAX REGISTRATION

828-257-4768

#### ONLINE REGISTRATION

[www.mahec.net](http://www.mahec.net)

#### EMAIL

[registration@mahec.net](mailto:registration@mahec.net)

#### MAIL

MAHEC Registration  
121 Hendersonville Road, Asheville, NC 28803



### Special Services

828-257-4485

# MAHEC Ultrasound

## EM-FM POCUS CME Event

2018

2-DAY EVENT: SEPTEMBER 7-8, 2018

*Limited Space Available!*

Updated contact information. #19IDSIM001/54490

NAME \_\_\_\_\_

CREDENTIALS \_\_\_\_\_

SOCIAL SECURITY # XXX-XX-\_\_\_\_ (last 4 digits required)

OCCUPATION \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

HOME COUNTY \_\_\_\_\_

HOME # \_\_\_\_\_ WORK # \_\_\_\_\_

EMPLOYER \_\_\_\_\_

DEPARTMENT \_\_\_\_\_

EMPLOYER'S ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

WORK COUNTY \_\_\_\_\_

*Program announcements will be sent to your email unless you opt out from receiving MAHEC emails. We never share our mailing lists.*

Please remove my name from the MAHEC mailing list.

MEAL PREFERENCE  Vegetarian  Gluten-free  Vegan

### SELECT YOUR BREAKOUT SESSION FOR EACH TIME SLOT

3:00-4:00

4:00-5:00

A. DVT

E. DVT

B. Renal

F. Renal

C. Fascia Iliaca Blocks

G. Procedure: Ophth vs...

D. Thyroid

H. Thyroid

PROGRAM FEE

\$750.00 (no late fee)

PHYSICIAN ASSISTANTS

\$500.00 (no late fee)

NURSE PRACTITIONERS

\$500.00 (no late fee)

MEDICAL STUDENTS/RESIDENTS

\$350.00 (no late fee)

EMS, EMTs & PARAMEDICS

\$250.00 (no late fee)

*Full payment must accompany all submitted registrations unless a payment plan has been approved in advance. Registrations received without accompanying payment will not be processed.*

Check is enclosed  Credit card information provided

Visa  MasterCard  Discover Card  American Express

ACCOUNT # \_\_\_\_\_

EXP \_\_\_\_ / \_\_\_\_ CODE ON BACK OF CARD \_\_\_\_\_ (3 digits)

NAME ON CARD \_\_\_\_\_

SIGNATURE \_\_\_\_\_