Introduction to Perioperative Point-of-Care Ultrasound and Focused Assessed Transthoracic Echocardiography Conference

November 4, 2017 • 7:30 am - 5:30 pm
UNC School of Medicine Clinical Skills and Patient Simulation Center

PRE-CONFERENCE STUDY
Pre-study is strongly encouraged prior to participating in the conference, to gain familiarity with basic images and to facilitate the hands-on skills acquisition part of the course. Suggested websites for e-learning include USABCD.org for interactive e-learning modules at http://usabcd.org/learning. Click on the Basic Cardiac Ultrasound (FATE) module for further information. Access to this module requires a separate fee. Other free online links include the Point of Care Ultrasound site hosted by Toronto General Hospital Department of Anesthesia at https://poc.ucr.ac.uk/focus/index.htm

DISCLOSURES
This activity has been planned and implemented under the sole supervision of the course directors in association with the UNC Office of Professional Development (UNC CPD). This activity has not received any financial support as defined by the ACCME. None of the planners, presenters, or UNC CPD staff have financial relationships with commercial interests.

CONFERENCE LOCATION
The course will be held at the University of North Carolina School of Medicine Clinical Skills and Patient Simulation Center, Third Floor, 316 Berryhill Hall, 150 Medical Drive, Chapel Hill, NC 27599.

For directions: www.med.unc.edu/csc/about/directions-the-skills-center

PARKING
Parking for attendees can be found in the Dogwood Deck, the patient and visitor deck at UNC Hospitals. It is located at 101 Manning Drive, Chapel Hill, NC 27514. The conference location is a 10-minute walk from the parking facility.

ACCOMMODATIONS
For out of town visitors, discounted room rates are available at the Hyatt Place in Chapel Hill. For reservations, call 919-929-9511 and mention “UNC Point of Care Course” to obtain the discounted rate of $124/night. Rates expire: October 3, 2017.
The information presented at this activity should improve participants’ ability to:

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parasternal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE)
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

COURSE DESCRIPTION
The course will provide basic training and expertise in assessing basic cardiovascular function utilizing parastratal long axis; parasternal short axis; apical 4-chamber; and subcostal views. An introduction to color flow doppler will be discussed to aid in the recognition of significant valvular pathology. Participants will also learn how to assess for the presence of lung pathologies, including pneumothorax; pleural effusions; lung consolidation; endobronchial intubation; and intraabdominal pathologies including hemoperitoneum and ascites.

A unique feature of the course will be a low faculty student ratio of 1:4, with a primary emphasis on learning the hands-on skills for image acquisition and interpretation. The activity will take place in a specially designed medical skills simulation lab, using a combination of live models, high-fidelity simulators, and experienced physician faculty and medical sonographers.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parastratal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE).
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parastratal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE).
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parastratal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE).
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parastratal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE).
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parastratal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE).
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.

LEARNING OBJECTIVES
- Recognize and utilize knobology of the ultrasound machine to optimize ultrasound imaging, including the use of color doppler
- Identify the steps necessary to obtain and interpret images of the parastratal long axis and parastratal short axis views; the apical 4-chamber view; the subcostal 4-chamber view; and the subcostal IVC view
- Identify the steps necessary to obtain and interpret images of normal lung function and pathology, and recognize B-lines; lung sliding; lung pulse; lung point; seashore and barcode signs; and identify pneumomediastinum
- Perform and interpret simple hemodynamic calculations including fractional shortening (FS); ejection fraction (EF); mitral septal separation (MSS); tricuspid annular systolic excursion (TAPSE); and mitral annular systolic excursion (MAPSE).
- Utilize color doppler for qualitative assessment of valvular pathology, including mitral stenosis and regurgitation; aortic stenosis and insufficiency; and tricuspid regurgitation
- Assess qualitative left and right ventricular function
- Recognize the presence of pericardial effusions and tamponade physiology
- Assess volume status and estimate central venous pressure
- Perform a focused assessed sonography exam for trauma (FAST) to assess for the presence of intraperitoneal fluid or blood, and identify the splenorenal recess; the hepaticorenal recess and the retrovesicular pouch.

TARGET AUDIENCE
This activity is targeted to anesthesiologists, surgeons, emergency medicine, internists and critical care physicians, with minimal or no previous experience in point-care-ultrasound and transthoracic echocardiography.