



**American Society of Regional Anesthesia and Pain Medicine**

*Advancing the science and practice of regional anesthesiology and pain medicine  
to improve patient outcomes through research, education, and advocacy*

# ASRA



## **Introduction to Perioperative Point-of-Care Ultrasound**

Saturday, December 7 — Sunday, December 8, 2019

Hilton Orlando Lake Buena Vista, Florida

#ASRAPoCUS

# COURSE GUIDE

*Jointly provided with:*

**usabcd**  
UltraSound Airway Breathing Circulation Dolor

# Course Overview

- Earn 28.25 CME credits by completing the eLearning provided by USabcd and attending the weekend course.
- Hands-on scanning sessions with concise lectures to summarize content
- World-renowned experts, low attendee-to-instructor ratio
- Personalized learning with ample time for Q&A and faculty feedback
- Case discussions and pre/post testing to assess learning
- Basic Focused Assessed Transthoracic Echocardiography (FATE) certification.

This course fills a much-needed educational gap as well as prepares physicians to be leaders in patient safety and perioperative ultrasonography by providing a comprehensive introduction to several PoCUS applications of relevance to clinical regional anesthesiologists, including the identification of clinical questions to be answered, technical performance aspects, and interpretation of results.

With a “flipped classroom” format, practical hands-on sessions, and internationally renowned faculty, you will learn useful information and skills that will add immediate benefit in clinical practice. The comprehensive and learner-centered curriculum includes:

## 15 Hours of Mandatory eLearning

Course curriculum includes a suite of eLearning modules provided by joint educational provider USabcd. The eLearning is an integral part of the program and must be successfully completed prior to attending the weekend course.

## Lectures

Because instructional content is delivered in advance via the eLearning modules, onsite lectures will be succinct and summarize key information; allowing more time for the hands-on practice with expert faculty.

## Hands-on

For each session, groups rotate to a new faculty member, model, and machine to allow for exposure to different equipment, scanning and teaching styles, as well as sonoanatomy of various models. There are 5 participants per station, 1-2 faculty per station, and “floating” experts for extra support throughout. Each hands-on session will reinforce previously learned skills, building a solid foundation throughout the weekend.

## Review

In addition to real-time feedback during the hands-on sessions, the program offers ample time for formal and informal Q&A with fellow attendees and faculty.

## Basic FATE Certification *(must complete entire program through Sunday to be certified)*

In addition to pre/post-testing, participants will also earn Basic Focus Assessed Transthoracic Echocardiography (FATE) certification, an internationally endorsed format with a 25-year track record and more than 400 completed courses.

## Educational Objectives

After participating in this educational activity, participants should be able to:

- Integrate up-to-date PoCUS skills into daily clinical practice as the “21st-Century Stethoscope.”
- Improve management of the critical patient or patient in shock.
- Diagnose acute respiratory complications of regional anesthesia such as pneumothorax and diaphragmatic paresis.
- Evaluate for patients with interstitial syndrome or pleural effusions.
- Manage challenging airway patients.
- Assess and diagnose patients with cardiopulmonary changes such as hypotension, hypoxia, and shock.
- Assess NPO status of patients.
- Assess for intra-abdominal fluid and abdominal compartment syndrome via the Focused Assessment with Sonography for Trauma (FAST) exam.
- Utilize a variety of cutting-edge Point-of-Care Ultrasound machines.
- Discuss how PoCUS can add value to your practice in the setting of the Affordable Care Act and Perioperative Surgical Home (PSH) model.
- Discuss the role for Focused Cardiac Ultrasound in Advance Cardiac Life Support to help with diagnosis and management of patients in a pulseless electrical activity (PEA) arrest.

## Target Audience

The course is designed for the **physician learner** wanting to gain a comprehensive understanding of perioperative point-of-care ultrasound applications including identification of clinical questions to be answered, technical performance aspects, and interpretation of results. The course is designed for **anesthesiologists, hospitalists, intensivists, and those practicing emergency medicine.**

## Top 5 Course Essentials

# 1

### Location

Hilton Orlando Lake Buena Vista  
1751 Hotel Plaza Boulevard  
Lake Buena Vista, Florida 32830  
Tel: 1.407.827.4000  
[Take a tour of the hotel](#)

The ASRA course will take place  
in the International Ballroom  
on 1st floor.

# 2

### eLearning and Presentations

Materials are available to participants prior to, during, and after the course, up to one year, for educational purposes only. Access to particular content is provided based on registration and is password protected. Distribution is limited and none of the materials should be further distributed or reproduced.

- **eLearning:** See page 14 for details on available modules and access codes.
- **Presentations:** Visit the [ASRA website](#), click Download Presentations and use password **ASRAPOCUS19** when prompted.

# 3

### Evaluations and CME Certificates

Your opinion matters! Evaluate the course and obtain your CME certificate by accessing the online system before **December 24th** at [www.surveymonkey.com/r/ASRAPOCUS19DEC](http://www.surveymonkey.com/r/ASRAPOCUS19DEC). See pp. 18-19 for more information on CME credits and certificates.

# 4

### Basic FATE Certification

Participants completing the mandatory eLearning and attending the entire weekend course will also earn Basic Focus Assessed Transthoracic Echocardiography (FATE) certification; an internationally endorsed format with a 25-year track record and over 400 completed courses. Basic FATE certificates will be issued as follows.

- **eLearning Completed Prior to Course:** Certificates Issued at Registration Desk, Sunday, December 8, at 1:00 pm.
- **eLearning NOT Completed Prior to Course:** Certificates emailed through December 24th (*additional \$100 fee applies*)

For those failing to complete the mandatory eLearning prior to the course, a two-week extension will be provided to do so. Once the eLearning is completed, please send an email to [asrameetings@asra.com](mailto:asrameetings@asra.com) to request your Basic FATE certificate. An administrative and certification late fee of \$100 will be charged. Basic FATE certificates will not be issued after this date.

# 5

### Attendance Policies

**Attendee cancellation and refunds:** Registration fees are refundable, minus a \$100 processing fee, if cancellation is received in writing no later than three (3) weeks prior to the event commencement. After this date, under no circumstances will refunds or credits be granted.

**Attendee substitutions:** Attendee substitutions are allowed if notification is made in writing no later than three (3) weeks prior to the event commencement. A \$100 processing fee will be charged. After this date, under no circumstances will substitutions be granted.

*(continued on next page)*

**Attendee no-shows:** No refunds or credits will be given to “no shows.”

**Attendee guests/accompanying persons:** All event activities (including educational sessions, meal functions, exhibit hall, etc.) are exclusively reserved for registered attendees. Badges provided at registration are required for entrance into all functions and will be strictly enforced. Exceptions to this are as follows.

- **Educational session halls:** Only children who are held or harnessed (no strollers are permitted) may accompany a registered attendee. Children may not occupy a seated spot. If a child becomes a distraction to attendees, the infant must be removed from the room immediately. No children, under any circumstance, are permitted in workshops or PBLDs.
- **Miscellaneous:** Lactation rooms will be available whenever possible. Please see program guide or registration desk for location. Please see hotel concierge for additional childcare options.

There will be no exceptions to the above for children, toddlers, or teens without prior written approval. Please send any requests to [asrameetings@asra.com](mailto:asrameetings@asra.com).

### **Photography and Recording Privileges**

ASRA reserves exclusive rights to photograph and/or record (audio and video) all event proceedings and participants for use in marketing materials, presentations, and course content reproductions (online or other). Photography and/or recording by individuals is not permitted in the scientific, educational, and business meetings during any ASRA event, unless specifically pre-authorized by ASRA. Individuals granted such privileges shall be properly registered at the event and issued the proper proof of privileges (press badge or other).

### **ASRA Modification or Cancellation**

ASRA reserves the right to **modify** the event’s schedule or program, as necessary. ASRA also reserves the right to cancel this event, in which case a full refund of the registration fee will be provided. ASRA is unable to refund any attendee expenses (flight, hotel, etc.) in the case of ASRA cancellation.

### **Mailing List and Attendee Contact Information**

ASRA provides an attendee mailing list containing name, degree, title, organization, and mailing address to industry partners and fellow attendees; email addresses and telephone numbers are not provided. Attendees may opt-out of this list when registering. ASRA will also use a lead retrieval system in the exhibit hall. Participant badges will contain the following information: name, degree, organization, mailing address, telephone number, email address, and registration type. Attendees have the option to allow exhibitors to scan their badge or not.

### **Liability and Insurance**

The American Society of Regional Anesthesia and Pain Medicine and meeting organizers cannot accept liability for personal accidents or loss of or damage to private property of participants, either during or indirectly arising from the meeting. Participants are advised to take out their own personal health and travel insurance for their trip.

### **Americans with Disabilities Act (ADA)**

ASRA fully complies with the legal requirements of the ADA and the rules and regulations thereof. If any participant in this educational activity has a special need, please contact us at: American Society of Regional Anesthesia and Pain Medicine, 3 Penn Center West, Suite 224, Pittsburgh, PA 15276, [asrameetings@asra.com](mailto:asrameetings@asra.com), Toll-free in USA: 855.795.ASRA, Tel: 412.471.2718.

## ASRA Board of Directors

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Jan Boublik, MD, PhD; Stanford University, School of Medicine, Stanford, CA

Stephen Haskins, MD; Hospital for Special Surgery, New York, NY

Nadia Hernandez, MD; University of Texas at Houston McGovern School of Medicine, Houston, TX

William Manson, MD; University of Virginia Health System, Charlottesville, VA

## eLearning Curriculum Authors

Thomas Fichtner Bendtsen, MD, PhD; USabcd, Aarhus University Hospital, Aarhus, Risskov, Denmark

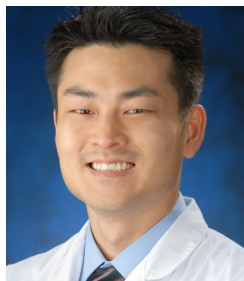
Lars Knudsen, MD, PhD; USabcd, Aarhus University Hospital, Aarhus, Risskov, Denmark

Anahi Perlas, MD, FRCPC; Toronto Western Hospital, Toronto, Canada

Erik Sloth, MD, PhD; USabcd, Aarhus University Hospital, Aarhus, Risskov, Denmark

## Course Faculty

Echocardiography is a well-established skill set within the anesthesia profession, with expanding use in the perioperative setting through Basic Focus Assessed Transthoracic Echocardiography (FATE) training. All ASRA course faculty are experts in their field, with several also having either testamur status or certification via the National Board of Echocardiography.



**Kyle Ahn, MD**, is an associate professor of anesthesiology and vice-chair for academic affairs at the University of California Irvine (UCI). He completed his residency at University of Connecticut and his regional anesthesiology fellowship at Mayo Clinic in Rochester, MN. He is a board-certified anesthesiologist and a fellow of the American Society of Anesthesiologists. Dr. Ahn serves as instructor for simulation and MOCA at UCI Medical Education Simulation Center. Special interests include regional anesthesia, perioperative ultrasound, and medical education.



**Corrie Anderson, MD**, graduated from Harvard College and received his MD degree from Stanford University in California. At Stanford, he was in the medical scientist training program. He completed both a pediatric residency and a pediatric anesthesiology fellowship at the Boston Children's Hospital. His primary anesthesiology training was at the Brigham & Women's Hospital in Boston, MA. He was founding director of the UCLA pediatric pain medicine program and he directed the Seattle Children's Pain Service for six years in Washington.



**Karen Boretsky, MD**, is trained in pediatric anesthesia, critical care, and regional anesthesia. She practiced pediatric and adult anesthesia for many years. In 2012, she became the director of the regional anesthesia program at Boston Children's Hospital. Her research interests include evaluating the role of regional anesthesia in managing pain and recovery in children. She has authored articles on novel regional anesthesia techniques and presents nationally and internationally. She is passionate about finding ways to minimize pain and improve safety using regional anesthesia in children.



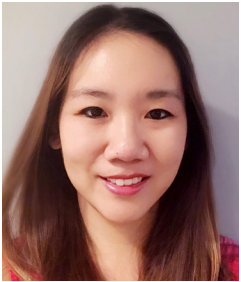
**Jan Boublik, MD, PhD**, is an assistant professor of anesthesiology at Stanford University in California. He graduated medical school and received a PhD in bioengineering from Medizinische Hochschule in Hannover, Germany, including two years as a visiting scientist at the Massachusetts Institute of Technology, Division of Health Sciences and Technology, and completed his residency at Brigham and Women's Hospital in Boston, MA. His research interests include PoCUS, functional outcomes after surgery, innovative technologies, and techniques in anesthesia. He currently serves on the ASRA Membership Committee and chairs ASRA's Perioperative Point-of-Care Ultrasound Special Interest Group.



**Nibras Bughrara, MD**, is an assistant professor of anesthesiology and critical care medicine, surgery and internal medicine. He completed his critical care medicine fellowship and advanced perioperative echocardiography training at Johns Hopkins School of Medicine. Currently he is the division chief of anesthesia critical care and the founder and director of the critical care echocardiography program at Albany Medical College in Albany, NY. Dr. Bughrara is the principal investigator (PI) of an ongoing multicenter study on blending focused transthoracic echocardiography learning in existing anesthesiology residency training programs and the PI of a multicenter study on performing focused echocardiographic evaluation in life support for in-hospital cardiac arrest patients.



**Melissa Byrne, DO, MPH**, is a graduate of Michigan State University College of Osteopathic Medicine. After residency in anesthesiology at the University of Michigan, she worked in private practice in Virginia before returning back to her home in Michigan to complete a fellowship in Regional and Ambulatory Anesthesia. Her interests include resident education and Point of Care Ultrasound (PoCUS). She has recently been named Assistant Director for PoCUS where she is active in curriculum development.



**Stephanie Cheng, MD**, is an attending anesthesiologist at the Hospital for Special Surgery (HSS) in New York. She completed her undergraduate studies at Cornell University Medical School at NYU School of Medicine, her residency at Yale/New Haven Hospital, and her regional anesthesiology and acute pain fellowship at HSS. She is a FATE instructor and an advocate for ultrasound-guided diagnosis.



**Javier Cubillos, MD**, completed anesthesiology residency at the Universidad Javeriana in Bogota, Colombia followed by fellowship training in regional anesthesia and obstetric, both at the University of Toronto. From 2012 to 2018, he served as assistant professor of anesthesiology in the Hospital San Ignacio and Fundacion Santafe de Bogota, Colombia. Currently, he is back in Canada practicing as a clinical fellow in the department of anesthesia & perioperative medicine of Western University in London, Ontario, Canada.



**Johanna Blair de Haan, MD**, attended the University of Texas Health Science Center at Houston (UTHSC) for medical school and completed residency training in anesthesiology at UTHSC-Houston, including a year as chief resident. She then completed an additional year of fellowship training in regional anesthesiology, acute pain medicine, and perioperative ultrasound at the same institution. Now, she is an assistant program director for anesthesiology residency at UTHSC-Houston, as well as program director of the regional anesthesiology fellowship program.



**James Stewart Green, MBBS, FRCA**, is a clinical assistant professor at the University of Alberta Hospital in Edmonton, Canada. Dr. Green completed medical school and postgraduate training in anesthesia at Newcastle-u-Tyne and Glasgow in the United Kingdom before receiving his fellowship training in regional anesthesia under the guidance of Dr. Ban Tsui at the University of Alberta. Dr. Green is currently practicing as a clinical anesthetist at the University of Alberta Hospital, with specialist clinical interests in regional anesthesia and neuroanesthesia. Research interests include anesthesia and cancer survival, regional anesthesia, and ultrasound of the head and neck.



**Stephen Haskins, MD**, is a regional anesthesiologist trained at the Hospital for Special Surgery in New York, NY. During his fellowship, Dr. Haskins developed an interest in PoCUS, specifically focused cardiac, lung, abdominal, and gastric ultrasound. Dr. Haskins is the co-founder and co-chair of the ASRA Perioperative PoCUS Special Interest Group. He is also lead author for Point-of-Care Ultrasound (PoCUS) for the Regional Anesthesiologist and Pain Specialist Review Series in the Regional Anesthesia and Pain Medicine journal.



**Nadia Hernandez, MD**, completed her anesthesiology residency at the Icahn School of Medicine at Mount Sinai Health System in New York, NY, followed by fellowship training in regional anesthesia and acute pain medicine. She moved back home to Texas where she serves as an assistant professor of anesthesiology at the University of Texas (UT) at Houston McGovern School of Medicine. After one year, Dr. Hernandez revamped the regional anesthesiology fellowship and was promoted to director of regional anesthesiology at UT Houston as well as program chair of the regional anesthesia and perioperative ultrasound fellowship. She is one of the co-founding members of the ASRA Perioperative Point-of-Care Ultrasound Special Interest Group.



**Hari Kalagara, MD**, is passionate about regional anesthesia and completed a regional anesthesia fellowship at Cleveland Clinic in Cleveland, OH. He has attained European Diploma in Regional Anesthesia (EDRA) by the European Society of Regional Anesthesia and was awarded the ASRA Resident/Fellow of the Year Award for 2017. Dr. Kalagara organizes and serves as primary activity director for the cadaveric regional anesthesia ultrasound workshops held at Cleveland Clinic. He is convinced of the benefits of regional anesthesia for pain relief for various surgical procedures and always tries to incorporate regional anesthesia for patient care. Dr. Kalagara is currently working as assistant professor at the University of Alabama at Birmingham with special interest in regional anesthesia.



**Michelle Kars, MD**, completed her training in both general pediatrics and anesthesiology at New York Presbyterian Weill-Cornell in New York, followed by a fellowship in pediatric anesthesia at Children's National Medical Center in Washington, DC. Dr. Kars is currently the director of the Pediatric Acute Pain Service at Northwell Cohen Children's Medical Center and the director of Continuing Medical Education for the department of anesthesiology at Long Island Jewish Medical Center. She is an assistant professor of anesthesiology at the Zucker School of Medicine at Hofstra/ Northwell where she serves as a part of the core faculty for the anesthesia residency. Her clinical interests include PoCUS application in pediatrics as well as research in regional anesthesia techniques in infants and children to minimize opioid requirements in the perioperative period.





**Wolf Kratzert, MD**, was born in Germany and graduated from Hamburg University Medical School. He completed his residency in anesthesiology at the University of California San Diego and subspecialized in critical care medicine and cardiothoracic anesthesiology at Columbia University and Stanford University. In 2014, he joined the department of anesthesiology and perioperative medicine at David Geffen School of Medicine at UCLA, where he holds the position of assistant clinical professor. He spends his clinical time as part of the cardiothoracic and critical care divisions in the department, with focus on the perioperative management of patients with advanced heart failure, adult congenital heart disease, and cardiothoracic surgery. He is board certified in anesthesiology, critical care medicine, and advanced perioperative echocardiography, with expertise in transesophageal and transthoracic echocardiography, as well as critical care ultrasound.



**William Manson, MD**, is an anesthesiologist at the University of Virginia in Charlottesville. He originally trained in emergency medicine and completed a fellowship in emergency ultrasound. Following ultrasound training, he became the associate director and then director of emergency ultrasound in the department of emergency medicine at Emory University. Then, he undertook training in anesthesiology at UT Southwestern / Parkland in Dallas, TX, followed by a regional anesthesiology fellowship at the University of Virginia. Dr. Manson's research focus is perioperative point-of-care ultrasound.



**Jemiel Nejim, MD**, is a board-certified anesthesiologist who specializes in critical care medicine. He trained entirely on the west coast and upon completion of his training at the University of California San Francisco, he attended in the operating rooms there. Being a California explant, Dr. Nejim exudes calm even when faced with challenging situations. Dr. Nejim's main interests include echocardiography and the use of ultrasound in acute situations.



**Clemens Ortner, MD**, is European trained and Privat Dozent as academic degree at the Medical University of Vienna. Dr. Ortner is currently working as visiting assistant professor at the department of anesthesia at Stanford University School of Medicine promoting point of care ultrasound in obstetric anesthesia. Dr. Ortner's particular interests lie in the field of obstetric anesthesiology, and he has published a number of publications on acute and chronic peripartum pain. As honorary consultant at the University of Cape Town, Dr. Ortner led research on associations of metabolic acid-base and POCUS abnormalities in preeclampsia. [top of page]



**Oliver Panzer, MD**, completed his critical care fellowship at Columbia University Medical Center (CUMC) in New York, then joined the faculty in the divisions of regional anesthesia and critical care in 2006. Early on, he was fascinated by the impact of perioperative ultrasound on their clinical practice. He created and led perioperative ultrasound workshops and lectures for multiple classes of residents and critical care fellows at CUMC. Dr. Panzer became the director of Perioperative Ultrasonography in the department in 2010, and led the departmental Perioperative Ultrasound Curriculum Committee. He has taught courses nationally at the ASA meetings since 2010, the PGA meetings in New York since 2014, and the FATE course since 2016.



**Jennifer Potter, MD**, is an attending anesthesiologist at the University of Virginia in Charlottesville. After finishing undergraduate and medical school at Duke University, she completed her first two years of residency training at the University of Utah and her final year of residency at Stanford University. She then completed a regional anesthesiology fellowship at the University of Virginia. Dr. Potter is a Testamur in the National Board of Echocardiography Examination of Special Competence in Advanced Perioperative Transesophageal Echocardiography (PTEeXAM).



**Sudarshan Setty, MD**, graduated from Montefiore Medical Center in New York in 2013 and has been an instructor in the FATE course since 2014. He is keen on teaching point-of-care ultrasound to physicians and has been the director of the FATE courses held at the University of Minnesota since 2016. As part of his international anesthesia resident education initiative, Dr. Setty has conducted a joint workshop on PoCUS at St. John's University in Bangalore, India. Dr. Setty is the director of perioperative echo in the department of anesthesiology at the University of Minnesota in Minneapolis, where they are expanding PoCUS training to faculty, fellows, residents, and medical students.



**Erik Sloth, MD, PhD**, is a professor of point-of-care ultrasound. He has authored 150 papers, mainly on hemodynamics and focused TTE. Dr. Sloth developed the FATE-protocol (Focus Assessed Transthoracic Echocardiography) almost 30 years ago, recognizing him as the founder of point-of-care cardiac-pulmonary ultrasound. He has developed a unique learning concept, based on pre-course e-learning and systematic and comprehensive hands-on training. His innovative idea, that all critical care physicians should learn FATE, is becoming reality.



**Ban Tsui, MD**, has the primary interest and objective of his research to transform regional anesthesia from an "art" into a reliable and reproducible "science" by further exploring the basic scientific and clinical aspects of electrophysiological signal monitoring and integrating this with the latest advances in ultrasound. Dr. Tsui has a strong interest in mentoring and motivating residents and anesthesiologist fellows to incorporate research into their clinical practice. Dr. Tsui has received Clinical Scholar funding from the Alberta Heritage Foundation for Medical Research since 2002. Dr. Tsui received the 2014 Dr. R.A. Gordon Research Award from the Canadian Anesthesiologists' Society (CAS), funding from the Canadian Institutes of Health Research (CIHR), and multiple awards from CAS.



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### Introduction to Perioperative Point-of-Care Ultrasound

December 7-8, 2019 | Hilton Orlando | Lake Buena Vista, Florida  
February 29-March 1, 2020 | Omni San Diego | San Diego, California  
June 6-7, 2020 | Hyatt Centric Chicago Magnificent Mile | Chicago, Illinois  
#ASRAPoCUS

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### 45th Annual Regional Anesthesiology and Acute Pain Medicine Meeting

April 23-25, 2020  
Hilton San Francisco Union Square | San Francisco, California  
#ASRASpring20



### Pain Medicine and MSK Ultrasound Cadaver Course

June 6-7, 2020  
Northwestern Simulation/Hyatt Centric Chicago Magnificent Mile  
Chicago, Illinois



### ASRA-ASA Ultrasound-Guided Regional Anesthesia Education Portfolio Cadaver Course

November 7-8, 2020  
Northwestern Simulation/Hyatt Centric Chicago Magnificent Mile  
Chicago, Illinois



### 19th Annual Pain Medicine Meeting

November 19-21, 2020  
Caesars Palace | Las Vegas, Nevada  
#ASRAFall20



### 46th Annual Regional Anesthesiology and Acute Pain Medicine Meeting

May 13-15, 2021  
Disney's Yacht & Beach Club Resort | Lake Buena Vista, Florida  
#ASRASpring21

## Disclosure and Resolution of Personal Conflicts of Interest

In accordance with the ACCME's Standards for Commercial Support and related policies, ASRA is committed to ensuring balance, independence, objectivity, and scientific rigor in its CME/CPD activities. Those in control of the educational content disclose all relevant relationships (financial or other) with any commercial interest that they or their spouse/partner have had within the past 12 months. If an individual refuses to disclose, they are disqualified from participating. Disclosure information is evaluated and conflicts of interest resolved. Disclosure is made to participants prior to the activity. Participants are asked to evaluate the objectivity and independence. Off-label or investigational use of a therapeutic product is also disclosed.

| Last Name  | First Name | Role                             | COI | Honoraria / Expenses      | Consulting / Advisory Board | Speakers Bureau           | Funded Research (Individual) | Funded Research (Institution) | Royalties / Patent   | Owner / Equity Position  | Other | Off-Label Usage |
|--|------------|----------------------------------|-----|---------------------------|-----------------------------|---------------------------|------------------------------|-------------------------------|--|--|-------|-----------------|
| Ahn  | Kyle       | Associate Faculty                | No  |                           |                             |                           |                              |                               |  |  |       | No              |
| Anderson   | Corrie     | Associate Faculty                | Yes | Avanos, FujiFilm Sonosite |                             | Avanos, FujiFilm Sonosite |                              |                               | "The "Corrie Cover" Patent Serial Number 08/290,523, US Patent granted August 1995<br>"Thermal Blanket with Surgical Access"; The "Corrie Cover" European Patent Application Number 95303126.7, Patent Number 7-2305; US Patent Application 62/856,621 filed 6/3/2019 "A system and method for guiding accurate placement of a drug delivery portal during a medical procedure..." | FUJIFILM SonoSite, Inc. usability and product evaluation session participant | No    |                 |
| ASRA Administrative Team (Bortler, Stengel, Stuever) |            | Society, CME, Meeting Management | No  |                           |                             |                           |                              |                               |  |  |       | No              |
| Bendtsen   | Thomas     | Curriculum Author                | No  |                           |                             |                           |                              |                               |  |  |       | No              |
| Boretsky   | Karen      | Faculty                          | No  |                           |                             |                           |                              |                               |  |  |       | No              |
| Boublik  | Jan        | Faculty, Planning Committee      | Yes | Pajunk                    | GE Healthcare               |                           |                              |                               |  |  |       | No              |
| Bughrara   | Nibras     | Faculty                          | No  |                           |                             |                           |                              |                               |  |  |       | No              |
| Byrne  | Melissa    | Associate Faculty                | No  |                           |                             |                           |                              |                               |  |  |       | No              |

| Last Name | First Name    | Role                        | COI | Honoraria / Expenses | Consulting / Advisory Board | Speakers Bureau | Funded Research (Individual)                       | Funded Research (Institution) | Royalties / Patent                         | Owner / Equity Position        | Other | Off-Label Usage |
|-----------|---------------|-----------------------------|-----|----------------------|-----------------------------|-----------------|--|-------------------------------|--|--------------------------------|-------|-----------------|
| Chan      | Vincent       | CME Committee               | Yes | Philips Healthcare   |                             |                 | University of Toronto, MSH-UHN AMO Innovation Fund |                               |  |                                |       | No              |
| Cheng     | Stephanie     | Associate Faculty           | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Chin      | Ki-Jinn       | CME Committee               | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Cubillos  | Javier        | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| de Haan   | J. Blair      | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Grant     | Stuart        | CME Committee               | Yes |                      | B. Braun Medical, Avanos    |                 |  | SPR Therapeutics, Avanos      | Oxford University Press                    |                                |       | No              |
| Green     | James         | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Haskins   | Stephen       | Faculty, Planning Committee | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Hernandez | Nadia         | Faculty, Planning Committee | Yes |                      | Butterfly Network, Inc.     |                 |  |                               |  |                                |       | No              |
| Kalagara  | Hari          | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Kars      | Michelle      | Associate Faculty           | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Knudsen   | Lars          | Curriculum Author           | Yes |                      |                             |                 |  |                               | co-owner of 2 patents on ultrasound drapes | co-owner ultrasound e-learning |       | No              |
| Kratzert  | Wolf Benjamin | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Manson    | William       | Faculty, Planning Committee | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Nejimi    | Jemiel        | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Nicol     | Andrea        | CME Committee               | Yes |                      | Sandoz Pharmaceuticals      |                 | NIH  |                               |  |                                |       | No              |
| Ortner    | Clemens       | Associate Faculty           | Yes |                      | Smith Medical               |                 |  |                               |  |                                |       | No              |
| Panzer    | Oliver        | Faculty                     | No  |                      |                             |                 |  |                               |  |                                |       | No              |
| Perlas    | Anahi         | Curriculum Author           | Yes |                      |                             |                 |  | Fisher & Paykel               |  |                                |       | No              |
| Pino      | Carlos        | CME Committee               | Yes |                      | Mainstay Medical            |                 |  |                               |  |                                |       | No              |
| Potter    | Jennifer      | Associate Faculty           | No  |                      |                             |                 |  |                               |  |                                |       | No              |

| Last Name | First Name | Role                       | COI | Honoraria / Expenses | Consulting / Advisory Board  | Speakers Bureau | Funded Research (Individual) | Funded Research (Institution) | Royalties / Patent | Owner / Equity Position               | Other | Off-Label Usage |
|-----------|------------|----------------------------|-----|----------------------|--|-----------------|------------------------------|-------------------------------|--------------------|---------------------------------------|-------|-----------------|
| Sloth     | Erik       | Curriculum Author, Faculty | Yes |                      |  |                 |                              |                               |                    | co-owner US-abcd producing e-learning |       | No              |
| Sudarshan | Setty      | Associate Faculty          | No  |                      |  |                 |                              |                               |                    |                                       |       | No              |
| Tsui      | Ban        | Faculty                    | No  |                      |  |                 |                              |                               |                    |                                       |       | No              |
| Viscusi   | Eugene     | CME Committee (ex-officio) | Yes |                      | AcelRx, Cara, Heron, Trevena, Neumenda, Mallinckrodt, Frezenius, Concentric, Salix | Salix           |                              | Pacira, Durect                |                    |                                       |       | No              |
| Vorenkamp | Kevin      | CME Committee              | No  |                      |  |                 |                              |                               |                    |                                       |       | No              |

# eLearning Course Curriculum

## Mandatory eLearning

The following eLearning modules are provided by joint educational provider [USabcd](#) and are an integral part of the program. Modules will be available to all registered attendees for one year after the course.

1. Airway Ultrasound
2. Basic Lung Ultrasound
3. Ultrasound Assessment of Gastric Content
4. Focused Assessment with Sonography for Trauma (FAST)
5. Basic Focus Assessed Transthoracic Echocardiography (FATE)
6. Optional: Basic Ultrasound Physics

## Accessing the eLearning

- You have received a total of 6 emails (one per module) from USabcd with subject "Course Enrollment."
  - If a new user to USabcd, login details were included in the first enrollment email only; all subsequent emails simply inform of enrollment per module.
  - If an existing user with USabcd, all emails simply inform of enrollment per module with a link to login with your existing email and password.
  - If you did not receive these emails, please check your spam/junk/bulk folders.
- All 6 modules are accessible by logging in at [www.usabcd.org](http://www.usabcd.org) and clicking on "My Courses" (folder icon, top right corner).

## Support and Questions

For technical support, please contact USabcd Course Coordinator Anja Musiat at [am@usabcd.org](mailto:am@usabcd.org). Replies will be provided within 24-36 hours (2-3 business days).

## About USabcd

USabcd was founded in 2010 by Erik Sloth, MD, PhD, DMSc, professor of Point-Of-Care Ultrasound; Lars Knudsen, MD, PhD; and Thomas Fichtner Bendtsen, MD, PhD, research anesthetist - all from Aarhus University Hospital, Denmark. **Their vision?** Global dissemination of point-of-care ultrasound as a universal tool to improve the quality of acute, critical, and perioperative patient care. **Their method?** The unique USabcd learning concept that combines eLearning with focused, structured, and comprehensive 1- to 2-day workshops of hands-on training for maximum learning outcomes. Courses based on this concept are now run all over the world.



# Saturday, December 7, 2019 (8.25 credits)

|         |                            |   |
|---------|----------------------------|---|
| 7:30 am | Registration and Breakfast |   |
| 8:00 am | Welcome and Introduction   | Nadia Hernandez, MD, and William Manson, MD |

## Airway, Lung, Gastric, Focused Assessment with Sonography for Trauma (FAST) Ultrasound

### Pre-Course eLearning ([www.USabcd.org](http://www.USabcd.org))

Airway Ultrasound  
Basic Lung Ultrasound  
Ultrasound Assessment of Gastric Content  
Focused Assessment with Sonography for Trauma (FAST)

### Lectures

|         |                         |                     |
|---------|-------------------------|---------------------|
| 8:15 am | Introduction to Gastric | Stephen Haskins, MD |
| 8:30 am | Introduction to FAST    | William Manson, MD  |

### Hands-On

8:45 am Concurrent Stations: Gastric and FAST  
10:00 am Break

### Lectures

|          |                             |                         |
|----------|-----------------------------|-------------------------|
| 10:15 am | Introduction to Airway Exam | James Green, MBBS, FRCA |
| 10:30 am | Introduction to Lung Exam   | Jan Boublik, MD, PhD    |

### Hands-On

10:45 am Concurrent Stations: Airway and Lung  
12:00 pm Introduction to Gastric, FAST, Lung, and Airway Clinical Scenarios  
12:15 pm Clinical Scenario Hands-On Stimulation

- Presentation of a clinical scenario requiring PoCUS (total of 5)
  - o Case 1: Airway - James Green, MBBS, FRCA
  - o Case 2: Lung - William Manson, MD
  - o Case 3: Gastric 1 (Full Stomach) – Johanna Blair de Haan, MD
  - o Case 4: FAST – Melissa Byrne, DO
  - o Case 5: Gastric 2 (Fluid <1.5mL/kg) – Javier Cubillos, MD

A participant in each group is given 3 minutes to perform the exam and interpret their best images.

- The participant receives feedback.
- The clinical scenario is revisited with a diagnosis and real-life images.

1:00 pm Lunch

## Focused Cardiac Ultrasound

### Pre-Course eLearning ([www.USabcd.org](http://www.USabcd.org))

Basic Focus Assessed Transthoracic Echocardiography (FATE)

### Lecture

|         |   |                     |
|---------|---|---------------------|
| 2:00 pm | Standard Cardiac Views and Inferior Vena Cava Imaging (IVC) | Erik Sloth, MD, PhD |
|---------|---|---------------------|

### Hands-On

2:30 pm Concurrent Stations: Standard Cardiac Views and IVC Imaging  
4:00 pm Break

### Lecture

|         |   |                   |
|---------|---|-------------------|
| 4:15 pm | M-Mode in the Apical 4-Chamber View: Global Ventricular Function Assessment | Oliver Panzer, MD |
|---------|---|-------------------|

### Hands-On

4:30 pm Concurrent Stations: Repeat Standard Cardiac Views with Global Ventricular Function Assessment  
6:00 pm Adjournment



# Sunday, June 9, 2019 (5 credits)

7:30 am Registration and Breakfast

## Focused Cardiac Ultrasound (continued)

### Pre-Course eLearning ([www.USabcd.org](http://www.USabcd.org))

Basic Focus Assessed Transthoracic Echocardiography (FATE)

#### Lecture

8:00 am Introduction to Point-of-Care Ultrasound in Pediatrics Karen Boretsky, MD

8:15 am M-Mode in the Parasternal Long Axis View: Fractional Shortening, Mitral Septal Separation, and Aortic/Left Atrial Diameter Nadia Hernandez, MD

#### Hands-On

8:35 am Concurrent Stations: Fractional Shortening, Mitral Septal Separation, and Aortic/Left Atrial Diameter

9:45 am Focused Echocardiography in Emergency Life Support (FEEL) Nibras Bughrara, MD

10:00 am Concurrent Stations: Repeat Standard Cardiac Views, MAPSE/TAPSE, MSS/FS/Ao/LA

10:30am FEEL protocol simulation/clinical scenario: practice obtaining subcostal 4C view in <10 seconds and then view pathology Nibras Bughrara, MD

10:40 am Break

#### Lecture

10:55 am Clinical Scenarios and Basic Focus Assessed Transthoracic Echocardiography (FATE) Certification Erik Sloth, MD, PhD

#### Hands-On

11:00 am Concurrent Stations: Application of Focused Cardiac Ultrasound in the "Real World" and Basic FATE Certification Erik Sloth, MD, PhD

- Presentation of a clinical scenario requiring a focused cardiac ultrasound exam.
- One participant in each group performs a Basic FATE exam and is given 9 minutes (90 seconds per view) to perform and record their best images.
- That participant receives feedback (2-3 minutes) on image quality and how to better optimize views.
- The clinical scenario is revisited with a diagnosis and real-life ultrasound images of pathology.
- There are a total of 5 clinical scenarios/rotations, allowing each participant to be tested.

#### Review and Certification

1:00 pm Q&A, Closing Remarks, and Basic FATE Certificate Issuance  
*(must be present to be certified)*

1:15 pm Free Scanning with Faculty *(optional)*

1:30 pm Airway/Lung/Gastric/FAST Refresher *(optional)*

1:45 pm Final Adjournment

## Group Rotations to Hands-On Stations 1-12

Attendees will be placed in groups numbered 1-12 (indicated on name badge), with 5 participants in each group. Groups rotate to a different station during each hands-on session, offering participants the opportunity to scan different models, work with different faculty, and use multiple point-of-care ultrasound machines, all of which add to the learning experience.

| Group Number | Sat, 8:45<br>gastric/FAST | Sat, 10:45<br>airway, lung | Sat 12:15<br>clinical scenarios | Sat, 2:30<br>FATE standard cardiac, MC | Sat, 4:30<br>FATE standard cardiac,<br>global ventricular function | Sun, 8:45<br>FATE cardiac multiple<br>rotation 1 | Sun, 9:45<br>FATE cardiac multiple<br>rotation 2 | Sun, 11:00<br>FATE cardiac<br>“real world,” exam |
|--------------|---------------------------|----------------------------|---------------------------------|--|--|--|--|--|
| Group 1      | 1                         | 2                          | 3                               | 4                                      | 5  | 6  | 7  | 8  |
| Group 2      | 2                         | 3                          | 4                               | 5                                      | 6  | 7  | 8  | 9  |
| Group 3      | 3                         | 4                          | 5                               | 6                                      | 7  | 8  | 9  | 10   |
| Group 4      | 4                         | 5                          | 6                               | 7                                      | 8  | 9  | 10   | 11   |
| Group 5      | 5                         | 6                          | 7                               | 8                                      | 9  | 10   | 11   | 12   |
| Group 6      | 6                         | 7                          | 8                               | 9                                      | 10   | 11   | 12   | 1  |
| Group 7      | 7                         | 8                          | 9                               | 10                                     | 11   | 12   | 1  | 2  |
| Group 8      | 8                         | 9                          | 10                              | 11                                     | 12   | 1  | 2  | 3  |
| Group 9      | 9                         | 10                         | 11                              | 12                                     | 1  | 2  | 3  | 4  |
| Group 10     | 10                        | 11                         | 12                              | 1                                      | 2  | 3  | 4  | 5  |
| Group 11     | 11                        | 12                         | 1                               | 2                                      | 3  | 4  | 5  | 6  |
| Group 12     | 12                        | 1                          | 2                               | 3                                      | 4  | 5  | 6  | 7  |

# Continuing Medical Education/Continuing Professional Development

## To Receive your CME Certificate:

1. Access the online system before December 24th by visiting [www.surveymonkey.com/r/ASRAPOCUS19DEC](http://www.surveymonkey.com/r/ASRAPOCUS19DEC).
2. Complete the anonymous online evaluation.
3. Indicate the number of hours you attended (credit will be verified against registration).
4. Your certificate will be sent to the e-mail address provided approximately 3 weeks after submission.
5. Thank you for your feedback!

## Educational Objectives

After participating in this educational activity, participants should be able to:

- Integrate up-to-date PoCUS skills into daily clinical practice as the “21st-Century Stethoscope.”
- Improve management of the critical patient or patient in shock.
- Diagnose acute respiratory complications of regional anesthesia such as pneumothorax and diaphragmatic paresis.
- Evaluate for patients with interstitial syndrome or pleural effusions.
- Manage challenging airway patients.
- Assess and diagnose patients with cardiopulmonary changes such as hypotension, hypoxia, and shock.
- Assess NPO status of patients.
- Assess for intra-abdominal fluid and abdominal compartment syndrome via the Focused Assessment with Sonography for Trauma (FAST) exam.
- Utilize a variety of cutting-edge Point-of-Care Ultrasound machines.
- Discuss how PoCUS can add value to your practice in the setting of the Affordable Care Act and Perioperative Surgical Home (PSH) model.
- Discuss the role for Focused Cardiac Ultrasound in Advance Cardiac Life Support to help with diagnosis and management of patients in a pulseless electrical activity (PEA) arrest.

## Target Audience

The course is designed for the **physician learner** wanting to gain a comprehensive understanding of perioperative point-of-care ultrasound applications including identification of clinical questions to be answered, technical performance aspects, and interpretation of results. The course is designed for **anesthesiologists, hospitalists, intensivists, and those practicing emergency medicine.**

## Accreditation and Credit Designation Statements

| Credits by Day        | Maximum      |
|-----------------------|--------------|
| Pre-Course eLearning  | 15.00        |
| Saturday              | 8.25         |
| Sunday                | 5.00         |
| <b>Total Credits:</b> | <b>28.25</b> |

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Society of Regional Anesthesia and Pain Medicine and Ultrasound of Airway, Breathing, Circulation and Dolor (USabcd). The American Society of Regional Anesthesia and Pain Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The American Society of Regional Anesthesia and Pain Medicine designates this activity (blended eLearning and live course) for a maximum of 28.25 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## The American Board of Anesthesiology® MOCA®

ASRA is an ABA-approved provider and, as a service to ASRA members and participants, CME credits are reported to the ABA. Participants must include their correctly formatted ABA ID number (3456-7890) during the online evaluation and credit claim process available at the conclusion of the activity. Once the online evaluation and credit claim process is closed, certificates will be issued and credits reported to the ABA. After this time, participants may request their CME certificate by contacting [asrameetings@asra.com](mailto:asrameetings@asra.com), but ASRA will no longer report credits to the ABA, which will then be the individual participant's responsibility.

## International Credits

**Royal College of Physicians and Surgeons of Canada:** The Royal College of Physicians and Surgeons of Canada has agreements based on the mutual recognition of credit points with the American Medical Association for live educational events. You may submit your CME certificate directly for credit recognition of this accredited group learning activity (Section 1) as defined by the Maintenance of Certification program of The Royal College of Physicians and Surgeons of Canada. For more information, visit [www.royalcollege.ca](http://www.royalcollege.ca)

**European Accreditation Council for Continuing Medical Education (UEMS-EACCME):** The UEMS-EACCME has agreements based on the mutual recognition of credit points with the American Medical Association for live educational events. Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity. The EACCME is an institution of the European Union of Medical Specialists (UEMS) [www.uems.net](http://www.uems.net).

# Commercial Support Disclosure

This course is supported, in part, by educational grants and in-kind support from industry. All support is managed in strict accordance with the ACCME's Standards for Commercial Support. Appropriate acknowledgement of all supporting organizations is made to participants prior to the educational activity in the program guide, on the event website, and with signage during the meeting.

ASRA thanks the following organizations  
for their generous support.

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## Grants

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GE Healthcare

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## Durable Equipment

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Butterfly Network

FujiFilm SonoSite

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## Disposable Supplies

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Safersonic

# Guidelines Regarding Industry Representative Participation and In-Kind Support

## Industry Support

This course is supported, in part, by educational grants and in-kind contributions from industry. All support is managed in strict accordance with the ACCME's Standards for Commercial Support. Appropriate acknowledgement of all supporting organizations is made to participants prior to the educational activity in the program guide, on the event website, and with signage during the meeting. View the guidelines for company representative and in-kind support.

## Disclosure

Attendees may view the full list of supporting companies in the printed program guide and activity website.

## Industry Representative/Technician Participation

In addition to the in-kind support provided, ASRA has requested that technicians from multiple supporting companies be present to demonstrate the operational aspects and proper functioning of the devices only.

## Strict Compliance with the ACCME's Accreditation Criteria and Standards for Commercial Support

1. ASRA is responsible for all decisions regarding the educational elements (planning, content, faculty selection, presentation, evaluation, etc.). Industry representatives in no way influence any portion of the CME activity; including how the in-kind support will be used or allocated to the educational sessions.
2. Industry employees shall be easily identifiable by their company and meeting badges.
3. The industry representative shall only contribute technical information about the use of the equipment.
4. The industry representative is restricted to knobology only.
  - a. No indications for use
  - b. No comparisons between competing products
  - c. No comparisons between the device, invasive surgery, and/or medical treatment.
5. ASRA's faculty and staff provide strict supervision to ensure proper professional behavior by industry representatives.
6. ASRA reserves the right to physically limit the technician's access to the educational setting; requesting the technician's participation only when questions arise or further assistance is needed.

## Attendee Feedback

Attendees are encouraged to communicate any concerns of commercial influence or bias directly to faculty, staff members at the registration desk, and via the online evaluation.

# ASRA



# 45th Annual Regional Anesthesiology & Acute Pain Medicine Meeting

April 23-25, 2020

Hilton San Francisco Union Square

Abstract submission deadline: January 7.

Submit at [www.asra.com/spring20/abstracts](http://www.asra.com/spring20/abstracts)

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