



# 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, June 8 — Sunday, June 9, 2019

Fairmont Chicago Millennium Park | Chicago, Illinois

#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 Hour 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

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## Location

Fairmont Chicago Millennium Park  
200 North Columbus Drive  
Chicago, IL 60601  
Tel: 1.866.540.4408  
[www.fairmont.com/chicago](http://www.fairmont.com/chicago)

The ASRA course will take place  
in the Crystal and Regent Meeting  
Rooms on Level 3.

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## 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.

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## Evaluations and CME Certificates

Your opinion matters! Evaluate the course and obtain your CME certificate by accessing the online system before **June 25th** at [www.surveymonkey.com/r/ASRAPOCUS19JUN](http://www.surveymonkey.com/r/ASRAPOCUS19JUN). See pp. 18-19 for more information on CME credits and certificates.

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## 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, June 9 at 12:45 pm.
- **eLearning NOT Completed Prior to Course:** Certificates emailed through June 25th (*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.

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## 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

**President:** Eugene Viscusi, MD

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## Scientific/Education Planning Committee

Walid Alrayashi, MD; Boston Children's Hospital, Boston, MA (Co-chair)

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 (Co-chair)

## 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.



**Walid Alrayashi, MD**, is an associate in perioperative anesthesia and pain medicine at Boston Children's Hospital. He completed his residency at NYU, then went on to complete his pediatric anesthesiology fellowship at Boston Children's, and completed an additional year in regional anesthesiology at the same institution. He has a special interest in the use of ultrasound in the perioperative care of pediatric and young adult patients. This includes the use of ultrasound for the therapeutic treatment of acute pain as well as the diagnosis for acute pathologies.



**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.



**Elird Bojaxhi, MD** received his MD degree from Texas Tech Health Science Center, residency training in anesthesiology at University of Medicine and Dentistry of New Jersey, and Regional Anesthesia and Acute Pain Medicine fellowship at Thomas Jefferson University Hospital. Dr. Bojaxhi is currently as assistant professor in anesthesiology at Mayo Clinic Florida, and the associate fellowship director of regional anesthesia and acute pain medicine. His research focus involves management of postoperative acute pain, regional anesthetic techniques, and point of care ultrasonography (PoCUS).



**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.



**Carlos Brun, MD**, is boarded Internal Medicine, Critical Care, and Anesthesia at the VA Palo Alto. He acts as the associate-director of the MSICU and is the associate program director of the combined internal medicine/anesthesia residency at Stanford. A Stanford affiliated clinical assistant professor, Dr. Brun regularly teaches a variety of learners across the disciplines of Internal Medicine, Anesthesia, and Surgery. Stanford's internal medicine and anesthesiology departments have both named him the teacher of the year. One of his passions is to share POCUS.



**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.



**Vincent Chan, MD, FRCPC, FRCA**, is a professor in the department of anesthesia at the University of Toronto, Canada. He served as president of ASRA from 2009 to 2011, received the Gaston Labat Award in 2016, and the Distinguished Service Award in 2017. He also has received the Gold Medal Award by the Canadian Anesthesiologists' Society in 2009 and the Carl Koller Award from the European Society of Regional Anaesthesia and Pain Therapy in 2016. Dr. Chan received his bachelor's of science degree and MD from McGill University in Montreal, QC, Canada, and obtained postgraduate training in anesthesiology at the University of Toronto. Dr. Chan also serves on the editorial board of *Anesthesiology* and *Regional Anesthesia and Pain Medicine*. He has published more than 200 peer-reviewed articles, 14 book chapters, and 80 scientific abstracts. He has performed 46 visiting professorships in North America and abroad and given more than 120 international and 90 domestic lectures. In addition, he has trained more than 40 postgraduate clinical and research fellows during his academic career.



**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.



**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.



**Amanda Kleiman, MD**, clinical interest/focus centers on caring for patients undergoing cardiothoracic and major vascular surgery as well as liver transplantation. Dr. Kleiman's research interests include improvement of the care of cardiothoracic surgical patients, echocardiography, and education research focusing on maximizing the quality of resident and medical student education. Her particular education research interests include biases in education, the effect of stress, sleep, and wellness on resident training, and novel education/learning techniques.



**Richelle Kruisselbrink, MD**, is a member of the department of anesthesia at Toronto Western Hospital. Her clinical and research interests include regional anesthesia and the perioperative applications of point-of-care ultrasound. Dr. Kruisselbrink recently obtained "Testamur" status at the National Board of Echocardiography by successfully completing the Examination of Special Competence in Adult Echocardiography. She is very active in education both within Toronto and internationally.



**Yan Lai, MD, MPH**, is a regional anesthesiology faculty, fellowship director, and assistant professor at Mount Sinai St. Luke's and Roosevelt Hospitals in New York City. He completed his anesthesiology residency and regional fellowship at Mount Sinai Hospital. He is a teaching faculty in ultrasound-guided nerve block workshops at the Post-Graduate Assembly (PGA) and has been a speaker at the American Society of Anesthesiologists and PGA for the past three years. He has been conducting workshops for residents and healthcare providers, as well as on global missions to Liberia and China. He is honored to be invited as a workshop faculty member for ASRA.



**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.



**Rana Movahedi, MD**, is a clinical associate of anesthesiology at Keck School of Medicine of USC in Los Angeles, CA. Currently, she is section director for regional anesthesiology and associate program director for regional anesthesiology and acute pain medicine fellowship. Dr. Movahedi completed her residency at Cedar-Sinai Hospital in Los Angeles, CA, and a regional anesthesiology fellowship at the Hospital for Special Surgery in New York, NY.



**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.



**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.



**Bridget Pulos, MD**, is a regional anesthesiologist at Mayo Clinic in Rochester, MN. She graduated from Tufts University in Medford, MA, and completed medical school, anesthesiology residency, and a regional anesthesia and acute pain medicine fellowship at the University of Pennsylvania in Philadelphia. Dr. Pulos' interests include resident education, ultrasound-guided regional anesthesia, and the impact of regional anesthesia on perioperative outcomes.



**Michael Singleton, MD**, is an assistant professor of anesthesiology at Vanderbilt University Medical Center in Nashville, TN. After finishing medical school at Indiana University, he completed residency at the University of Utah where he developed an interest in both regional anesthesia and the use of echocardiography in the perioperative period. He continued to develop his interests in the different applications of ultrasound as a fellow in regional anesthesiology at Hospital for Special Surgery in New York, before starting at Vanderbilt.



**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.



save  
the  
dates

[www.asra.com](http://www.asra.com)



November 2-3, 2019  
**ASRA-ASA Ultrasound-Guided Regional Anesthesia Education Portfolio Cadaver Course**  
Northwestern Simulation  
Chicago, Illinois



November 14-16, 2019  
**18th Annual Pain Medicine Meeting**  
New Orleans Marriott | New Orleans, Louisiana  
#ASRAFall19



December 7-8, 2019  
**Introduction to Perioperative Point-of-Care Ultrasound**  
Hilton Orlando | Lake Buena Vista, Florida  
#ASRAPoCUS



March 7-8, 2020  
**Introduction to Perioperative Point-of-Care Ultrasound**  
Omni San Diego | San Diego, California  
#ASRAPoCUS



April 23-25, 2020  
**45th Annual Regional Anesthesiology and Acute Pain Medicine Meeting**  
Hilton San Francisco Union Square | San Francisco, California  
#ASRASpring20



November 19-21, 2020  
**19th Annual Pain Medicine Meeting**  
Caesars Palace | Las Vegas, Nevada  
#ASRAFall20



**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*

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## 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 (Institution)	Royalties / Patent	Owner / Equity Position	Other	Off-Label Usage
Alrayashi	Walid	Faculty, Planning Committee	No								No
Anderson	Corrie	Associate Faculty	Yes	Avanos, FUJIFILM SonoSite		Avanos, FUJIFILM SonoSite				FUJIFILM SonoSite useability and product evaluation session participant	Yes, any drugs used in pediatrics since most are not approved for pediatric use.
ASRA Team (Borter, Simper, Stengel, Stuever)		Society, CME, Meeting Management	No								No
Bendtzen	Thomas	Curriculum Author	No								No
Bojaxhi	Elird	Associate Faculty	No								No
Boublik	Jan	Faculty, Planning Committee	No								No
Brun	Carlos	Faculty	No								No
Bughrara	Nibras	Faculty	No								No
Byrne	Melissa	Associate Faculty	No								No
Chan	Vincent	Faculty, CME Committee	Yes	Philips							No
Chin	Ki-Jinn	CME Committee	No								No
Cubillos	Javier	Faculty	No								No
de Haan	Johanna Blair	Associate Faculty	No								No
Grant	Stuart	CME Committee	Yes		B. Braun Medical, Avanos	SPR Therapeutics, Avanos					No

Last Name	First Name	Role	COI	Honoraria / Expenses	Consulting / Advisory Board	Speakers Bureau	Funded Research (Institution)	Royalties/ Patent	Owner/ Equity Position	Other	Off-Label Usage
Green	James	Faculty	No								No
Haskins	Stephen	Planning Committee	No								No
Hernandez	Nadia	Faculty	No								No
Kalagara	Hari	Associate Faculty	No								No
Kleiman	Amanda	Associate Faculty	No								No
Knudsen	Lars	Curriculum Author	Yes					co-owner of 2 patents on ultrasound drapes	co-owner usabcd ltd. producing e-learning		No
Kruisselbrink	Richelle	Faculty	No								No
Lai	Yan	Faculty	Yes					uptodate.com			No
Manson	William	Faculty, Planning Committee	No								No
Movahedi	Rana	Faculty	Yes			Merck					No
Nejim	Jemiel	Faculty	No								No
Nicol	Andrea	CME Committee	No								No
Panzer	Oliver	Faculty	No								No
Pertas	Anahi	Curriculum Author	Yes				Fisher & Paykel				No
Pino	Carlos	CME Committee	Yes		Mainstay Medical						No
Pulos	Bridget	Associate Faculty	No								No
Singleton	Michael	Associate Faculty	No								No
Sites	Brian	CME Committee (ex-officio)	Yes		Access Anesthesiology						No
Sloth	Erik	Faculty, Curriculum Author	Yes						co-owner usabcd ltd. producing e-learning		No
Viscusi	Eugene	CME Committee (ex-officio)	Yes		AcelRx, Cara, Heron, Trevena, Neumenda, Mallinckrodt, Fresenius, Con-centric, 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."
  - o 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.
  - o 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.
  - o 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, June 8, 2019 (8.25 credits)

7:30 am	Registration and Breakfast	
8:00 am	Welcome and Introduction	Walid Alrayashi, 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	Richelle Kruisselbrink, 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	Vincent Chan, MD, FRCPC, FRCA

#### 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
	<ul style="list-style-type: none"><li>• Presentation of a clinical scenario requiring PoCUS (total of 5)</li><li>• A participant in each group is given 3 minutes to perform the exam and interpret their best images.</li><li>• The participant receives feedback.</li><li>• The clinical scenario is revisited with a diagnosis and real-life images.</li></ul>
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
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#### 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
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#### 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	Focused Echocardiography in Emergency Life Support (FEEL)	Nibras Bughrara, MD Walid Alrayashi, MD
8:20 am	POCUS FAQ: Overcoming Barriers to Implementation	
8:35 am	M-Mode in the Parasternal Long Axis View: Fractional Shortening, Mitral Septal Separation, and Aortic/Left Atrial Diameter	Nadia Hernandez, MD

### Hands-On

8:45 am	Concurrent Stations: Fractional Shortening, Mitral Septal Separation, and Aortic/Left Atrial Diameter	Nibras Bughrara, MD
9:45 am	Concurrent Stations: Repeat Standard Cardiac Views, MAPSE/TAPSE, MSS/FS/Ao/LA <ul style="list-style-type: none"><li>• FEEL protocol simulation/clinical scenario: practice obtaining subcostal 4C view in &lt;10 seconds and then view pathology</li></ul>	
10:30 am	Break	

### Lecture

10:45 am	Clinical Scenarios and Basic Focus Assessed Transthoracic Echocardiography (FATE) Certification	Erik Sloth, MD, PhD
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### Hands-On

11:00 am	Concurrent Stations: Application of Focused Cardiac Ultrasound in the "Real World" and Basic FATE Certification <ul style="list-style-type: none"><li>• Presentation of a clinical scenario requiring a focused cardiac ultrasound exam.</li><li>• 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.</li><li>• That participant receives feedback (2-3 minutes) on image quality and how to better optimize views.</li><li>• The clinical scenario is revisited with a diagnosis and real-life ultrasound images of pathology.</li><li>• There are a total of 5 clinical scenarios/rotations, allowing each participant to be tested.</li></ul>	Erik Sloth, MD, PhD
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### Review and Certification

12:45 pm	Q&A, Closing Remarks, and Basic FATE Certificate Issuance <i>(must be present to be certified)</i>
1:00 pm	Free Scanning with Faculty <i>(optional)</i>
1:15 pm	Airway/Lung/Gastric/FAST Refresher <i>(optional)</i>
1:30 pm	Final Adjournment

## Group Rotations to Hands-On Stations 1-14

Attendees will be placed in groups numbered 1-14 (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 gastric/FAST	Sat, 10:45 airway, lung	Sat 12:15 clinical scenarios	Sat, 2:30 FATE standard cardiac, MC	Sat, 4:30 FATE standard cardiac, global ventricular function	Sun, 8:45 FATE cardiac multiple rotation 1	Sun, 9:45 FATE cardiac multiple rotation 2	Sun, 11:00 FATE cardiac “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	13
Group 7	7	8	9	10	11	12	13	14
Group 8	8	9	10	11	12	13	14	1
Group 9	9	10	11	12	13	14	1	2
Group 10	10	11	12	13	14	1	2	3
Group 11	11	12	13	14	1	2	3	4
Group 12	12	13	14	1	2	3	4	5
Group 13	13	14	1	2	3	4	5	6
Group 14	14	1	2	3	4	5	6	7

# Continuing Medical Education/Continuing Professional Development

## To Receive your CME Certificate:

1. Access the online system before **June 25th** by visiting [www.surveymonkey.com/r/ASRAPOCUS19JUN](http://www.surveymonkey.com/r/ASRAPOCUS19JUN).
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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Alpinion Medical Systems

Fujifilm SonoSite

GE Healthcare

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## Disposable Supplies

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# 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.