



**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, February 24—Sunday, February 25, 2018  
Omni San Diego Hotel, San Diego, California

# COURSE GUIDE

*Jointly provided with:*

**usabcd**  
UltraSound Airway Breathing Circulation Dolor

# Course Overview

This two-day, hands-on workshop with online learning module is designed for all practicing physicians wanting to gain a comprehensive understanding of point-of-care ultrasound (PoCUS) applications including identification of clinical questions to be answered, technical performance aspects, and interpretation of results. Short didactic sessions will anchor longer scanning sessions with 5 attendees and 1-2 faculty per station plus “floating” experts for extra support throughout. Case discussions and pre- and post-tests will be included as well. The course will cover airway, lung, cardiac, gastric, and trauma assessment.

## Highlights

- 28.25 CME credits available after 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.

## 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.

## 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

Omni San Diego Hotel  
675 L Street  
San Diego, California 92101  
Tel: 1.619.231.6664  
www.omnihotels.com

The ASRA course will take place in the Gallery meeting room located across the street directly opposite the lobby.

# 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](#) and use password **ASRAPOCUS18** when prompted.

# 3

## Evaluations and CME Certificates

Your opinion matters! Evaluate sessions and faculty and obtain your CME certificate by accessing the online system before **March 12th** at [www.surveymonkey.com/r/ASRAPoCUS18](http://www.surveymonkey.com/r/ASRAPoCUS18). 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, February 25 at 12:45 pm.
- **eLearning NOT Completed Prior to Course:** Certificates Mailed through March 12, 2018 (*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 March 12.

# 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.

**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. Non-registered guests (including children, family members, colleagues, etc.) are not allowed in the event areas. Badges provided at registration are required for entrance into all functions and will be strictly enforced. Guests may be invited to attend social events or meal functions that are clearly separated from the CME portions of the activity. In which case, a separate fee will be charged to cover guest participation and a ticket issued. See event registration fees for details.

**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.

**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 Introduction to Perioperative Point-of-Care Ultrasound course. 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  
Four Penn Center West, Suite 401, Pittsburgh, PA 15276  
asrameetings@asra.com  
Toll-free in USA: 855.795.ASRA  
Tel: 412.471.2718

# ASRA Leadership

## Leadership

**President:** Asokumar Buvanendran, MD

**President-Elect:** Eugene Viscusi, MD

**Treasurer:** Samer Narouze, MD, PhD

**Immediate Past President:**

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Stavros Memtsoudis, MD

Anahi Perlas, MD, FRCPC

David Provenzano, MD

Brian Sites, MD

## Committee on Continuing Medical Education

Vincent W.S. Chan, MD, FRCPC, FRCA, Chair

Carlos Pino, MD, Vice Chair

Stuart Grant, MD

Sandra Kopp, MD

Ellen W.K. Rosenquist, MD

Kevin Vorenkamp, MD

Asokumar Buvanendran, MD (ex-officio)

## Scientific/Education Planning Committee

Jan Boublik, MD, PhD

Stephen Haskins, MD

Anahi Perlas, MD, FRCPC

## eLearning Curriculum Authors

Thomas Fichtner Bendtsen, MD, PhD

Lars Knudsen, MD, PhD

Anahi Perlas, MD, FRCPC

Erik Sloth, MD, PhD

# Course Faculty



**Walid Alrayashi, MD**, is a pediatric anesthesiologist at Boston Children's Hospital with special interest in acute pain and the use of ultrasonography in perioperative care.



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



**Carlos Brun, MD**, is an attending anesthesiologist and intensivist at the Veterans Affairs Palo Alto (VAPA) Health Care System in Palo Alto, CA. In addition to clinical duties, he acts as co-director of the Medical Surgical Intensive Care Unit at the VAPA and is the associate program director of the combined Internal Medicine/Anesthesia Residency at Stanford. He truly enjoys the learning process as he held and maintains boards in internal medicine and critical care medicine prior to certifying in anesthesia in 2011. As an affiliated clinical assistant professor, Carlos regularly teaches a variety of learners across multiple disciplines including medical students, RNs, RNPs, residents, and fellows from internal medicine, anesthesia, and surgery services. Stanford's Internal Medicine and Anesthesiology departments have both named him Teacher of the Year. One of Carlos's passions is to share ultrasonography training at the bedside to improve care of patients and to stimulate clinical discussion.



**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.



**Vincent W.S. Chan, MD, FRCPC, FRCA**, is a professor of anesthesia at the University of Toronto. He served as president of ASRA from 2009 to 2011. He was awarded the Gold Medal Award by the Canadian Anesthesiologists' Society in 2009, the International Anesthesia Research Society Teaching Recognition Award for Achievement in Education in 2011, and Distinguished Service Award from ESRA (Spain) in 2013. He received ASRA's Gaston Labat Award in 2016 and the Distinguished Service Award in 2017.



**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.



**Johanna Blair de Haan, MD**, attended the University of Texas Health Science Center (UTHSC) at Houston for medical school and residency training in anesthesiology, 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. She is now an assistant professor of anesthesiology at UTHSC-Houston and practices at Memorial Hermann Hospital in the Texas Medical Center.



**James Stewart Green, MBBS, FRCA**, is a clinical assistant professor at the University of Alberta Hospital in Edmonton, AB, 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 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 neuro-anesthesia. Research interests include anesthesia and cancer survival, regional anesthesia, and ultrasound of the head and neck.



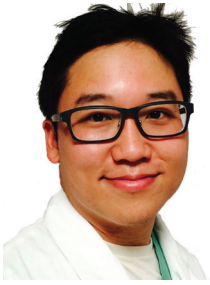
**Stephen Haskins, MD**, is a regional anesthesiologist trained at the Hospital for Special Surgery in New York, NY. During his fellowship, Dr. Haskins developed an interest in PoCUS, specifically focused cardiac, lung, and abdominal ultrasound.



**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.



**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. From 2010 until 2014, he served as faculty in the department of anesthesiology and critical care at the University of New Mexico and held the position as director of the cardiothoracic intensive care unit and perioperative echocardiography. In 2014, he joined the department of anesthesiology and perioperative medicine at David Geffen School of Medicine at the University of California, Los Angeles, 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.



**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, NY. 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 an associate workshop faculty member for ASRA.



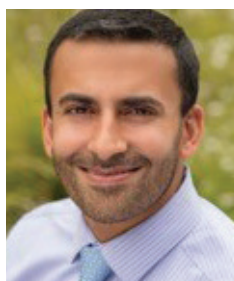
**William Manson, MD**, is an anesthesiologist at the University of Virginia in Charlottesville. He originally trained in emergency medicine, and completed a fellowship in emergency ultrasound. Following ultrasound training, he became the associate director and then director of emergency ultrasound in the department of emergency medicine at Emory University in Atlanta, GA. Then, he undertook training in anesthesiology at the University of Texas Southwestern/Parkland in Dallas, 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.



**Anahi Perlas, MD, FRCPC**, completed anesthesia and regional anesthesia training at the University of Toronto in Toronto, ON, Canada. She is currently an associate professor in the department of anesthesia at the University of Toronto and holds a clinical appointment at the Toronto Western Hospital where she is director of the Clinical Regional Anesthesia Program. Her research interests relate to innovative applications of ultrasound in the perioperative period with a special focus on regional anesthesia applications and evaluation of gastric content for aspiration risk assessment. She has obtained several peer-reviewed grants and has published more than 40 peer-reviewed articles, along with several book chapters and editorials. She is associate editor of the journal *Regional Anesthesia and Pain Medicine* and guest editor of several other peer-reviewed journals.



**Davinder Ramsingh, MD**, is a cardiac anesthesiologist who recently joined the Loma Linda University department of anesthesiology as director of Clinical Research and Perioperative Ultrasound. Dr. Ramsingh and colleagues developed an innovative teaching program for anesthesiology residents to apply whole-body PoCUS, coined FORESIGHT (Focused periOperative Risk Evaluation Sonography Involving Gastro-abdominal Hemodynamic and Transthoracic ultrasound). Dr. Ramsingh focuses his academic efforts on teaching and evaluating the utility of PoCUS for improving perioperative care.





**Pranav Shah, MD**, is an assistant professor in the department of anesthesiology at the Virginia Commonwealth University Health System in Richmond. He is a cardiothoracic anesthesiologist and intensivist. His interest is the use of PoCUS in the intensive care units as part of the evaluation for shock and respiratory failure.



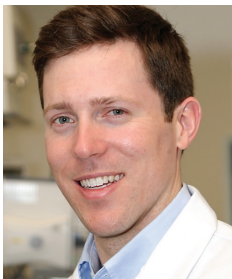
**Erik Sloth, MD, PhD**, is a professor of PoCUS. He has authored 150 papers, mainly on hemodynamics and focused transthoracic echocardiogram. Dr. Sloth developed the FATE-protocol (Focus Assessed Transthoracic Echo) almost 30 years ago, recognizing him as the founder of point-of-care cardiac-pulmonary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



**Christopher Tanaka, MD**, is an adult cardiothoracic anesthesiologist and a National Board of Echocardiography Diplomate-Examination of Advanced Perioperative Transesophageal Echocardiography (PTEeXAM) and Testamur Examination of Special Competence in Adult Echocardiography (ASCeXAM). His clinical research interests include transthoracic echocardiogram (TTE) education and the perioperative use of TTE.



**Ban Tsui, MD, MSC**, 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 (AHFMR) since 2002. Dr. Tsui is the recipient of the 2014 Dr. R.A. Gordon Research Award from the Canadian Anesthesiologists’ Society (CAS). He has previously received funding from the Canadian Institutes of Health Research (CIHR) and multiple awards from CAS.



**Douglas Wetmore, MD**, is an assistant attending anesthesiologist at Hospital for Special Surgery (HSS) in New York, NY. Dr. Wetmore completed his residency at the Icahn School of Medicine at Mount Sinai followed by a fellowship in regional anesthesiology and acute pain medicine at HSS. During his fellowship, Dr. Wetmore developed an interest in perioperative point-of-care ultrasound (PoCUS) and has since been involved in teaching PoCUS in the perioperative setting and at multiple educational conferences (Basic FATE, Advanced FATE, FEEL).

## 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, he or she is 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)
Alrayashi	Walid	Associate Faculty	No				
ASRA Administrative Team		Society, CME, and Meeting Management	No				
Bendtsen	Thomas	Curriculum Author	No				
Boublik	Jan	Faculty, Planning Committee	Yes		Pacira Pharmaceuticals		
Brun	Carlos	Associate Faculty	No				
Bughrara	Nibras	Associate Faculty	No				
Buvanendran	Asokumar	Board of Directors	Yes		Halyard		
Chan	Vincent	Faculty, CME Committee	Yes	SonoSite, Aspen Pharma	Smiths Medical		
Cheng	Stephanie	Associate Faculty	No				
Cohen	Steven	Board of Directors	Yes		Halyard, Scintilla, Boston Scientific, Abbott, SPR		
de Haan	Johanna Blair	Associate Faculty	No				
de Leon-Casasola	Oscar	Board of Directors	No				
Grant	Stuart	CME Committee	Yes	B. Braun Medical	Bbraun, Halyard		
Green	James	Faculty	No				
Haskins	Stephen	Faculty, Planning Committee	Yes	Sonosite			
Hernandez	Nadia	Associate Faculty	No				
Knudsen	Lars	Curriculum Author	Yes				
Kopp	Sandra	CME Committee	No				
Kratzert	Wolf	Associate Faculty	No				

# Disclosure and Resolution of Personal Conflicts of Interest

*(continued)*

Last Name	Funded Research (Institution)	Royalties / Patent	Stock Options	Owner / Equity Position	Employee	Off-Label Usage
Alrayashi						No
ASRA Administrative Team						No
Bendtsen						No
Boublik			(spouse) Pfizer, Genentech		(spouse) Genentech	No
Brun						No
Bughrara						No
Buvanendran						No
Chan	UHN-MSH AMO Innovation Fund					No
Cheng						No
Cohen						No
de Haan						No
de Leon-Casasola						No
Grant	SPR Therapeutics, Durect Pharma					No
Green						No
Haskins						No
Hernandez						No
Knudsen		co-owner of 2 patents on ultrasound drapes		co-owner usabcd ltd. producing e-learning		No
Kopp						No
Kratzert						No

Last Name	First Name	Role	COI	Honoraria / Expenses	Consulting / Advisory Board	Speakers Bureau	Funded Research (Individual)
Lai	Yan	Associate Faculty	No				
Manson	William	Associate Faculty	No				
Mariano	Edward	Board of Directors	No				
McCartney	Colin	Board of Directors	Yes		Teleflex Medical		
Memtsoudis	Stavros	Board of Directors	No				
Narouze	Samer	Board of Directors	Yes		Abbott		
Nejim	Jamiel	Associate Faculty	No				
Perlas	Anahi	Faculty, Planning Committee, Curriculum Author, Board of Directors	Yes				
Pino	Carlos	CME Committee	Yes		Mainstay Medical		
Provenzano	David	Board of Directors	Yes		Abbott, Boston Scientific, Bioness, Nevro, Medtronic		Medtronic
Ramsingh	Davinder	Faculty	Yes		Fujifilm Sonosite		
Rosenquist	Ellen	CME Committee	Yes				
Shah	Pranav	Associate Faculty	No				
Sites	Brian	Board of Directors	No				
Sloth	Erik	Faculty, Curriculum Author	Yes				
Tanaka	Christopher	Associate Faculty	No				
Tsui	Ban	Faculty	Yes				
Viscusi	Eugene	Board of Directors	Yes		Mallinckrodt, Trevena, Eaglet, Heron, Cara, Pfizer, Salix	Salix, Mallinckrodt, Collegium	
Vorenkamp	Kevin	CME Committee	No				
Wetmore	Douglas	Associate Faculty	No				

Last Name	Funded Research (Institution)	Royalties / Patent	Stock Options	Owner / Equity Position	Employee	Off-Label Usage
Lai						No
Manson						No
Mariano						No
McCartney						No
Memtsoudis						No
Narouze						No
Nejim						No
Perlas	Fisher & Paykel					No
Pino						No
Provenzano	Abbott					No
Ramsingh	General Electric					No
Rosenquist		UptoDate				No
Shah						No
Sites						No
Sloth				Co-owner of US-abcd ltd., producing elearning		No
Tanaka						No
Tsui		Pajunk				No
Viscusi	Durect, Pacira					No
Vorenkamp						No
Wetmore						No

# eLearning Course Curriculum

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)
- Optional: Basic Ultrasound Physics

## Accessing the eLearning

1. Visit <http://usabcd.org/>
2. Click "Create Account" if this is your first visit.
3. Login if you already have an account.
4. Click on blue button in the top right "Proceed to eLearning and Courses."  
Note: it can take several minutes after creating your account for the button to be appear.
5. Click on the "Optional Registration by Code."
6. Submit the registration code: **USABCD-XXXX-17126-12317**
7. Verify all courses are included (see list above, you will be notified when the airway module is available).
8. Click "Register Courses and Associated eLearning."
9. Click on the tab "Active eLearning Courses" to ensure all courses appear.

## Support and Questions

Visit [www.usabcd.org](http://www.usabcd.org) for helpful FAQ. For technical support, please contact USabcd Course Coordinator Anja Mu-siat at [am@usabcd.org](mailto:am@usabcd.org). Replies will be provided within 24-36 hours over 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, February 24, 2018

7:30 am Registration and Breakfast  
8:00 am Welcome and Introduction

Jan Boublik, 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 Anahi Perlas, MD  
8:30 am Introduction to FAST Stephen Haskins, MD

### Hands-On

8:45 am Concurrent Stations: Gastric and FAST  
9:45 am Break

### Lectures

10:00 am Introduction to Airway Exam James Green, MD  
10:15 am Introduction to Lung Exam Vincent Chan, MD

### Hands-On

10:30 am Concurrent Stations: Airway and Lung  
11:30 am Introduction to Gastric, FAST, Lung, and Airway Clinical Scenarios  
11:45 am Clinical Scenario Hands-On Simulation

- Presentation of a clinical scenario requiring PoCUS (total of 5).
- 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.

12:30 pm Lunch

## Focused Cardiac Ultrasound

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

Basic Focus Assessed Transthoracic Echocardiography (FATE)

### Lecture

1:30 pm Standard Cardiac Views and Inferior Vena Cava Imaging (IVC) Erik Sloth, MD

### Hands-On

2:00 pm Concurrent Stations: Standard Cardiac Views and IVC Imaging  
3:30 pm Break

### Lecture

3:45 pm M-Mode in the Apical 4-Chamber View: Global Ventricular Function Assessment Jan Boublik, MD

### Hands-On

4:00 pm Concurrent Stations: Repeat Standard Cardiac Views with Global Ventricular Function Assessment  
5:30 pm Free Scanning with Faculty (optional)  
6:00 pm Adjournment



# Sunday, February 25, 2018

8:00 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

8:30 am M-Mode in the Parasternal Long Axis View: Fractional Shortening, Mitral Septal Separation, and Aortic/Left Atrial Diameter  
Stephen Haskins, MD

#### Hands-On

8:45 am Concurrent Stations: Fractional Shortening, Mitral Septal Separation, and Aortic/Left Atrial Diameter

10:30 am Break

#### Lecture

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

#### Hands-On

11:00 pm Concurrent Stations: Application of Focused Cardiac Ultrasound in the "Real World" and Basic FATE Certification

- 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

12:30 pm Q&A, Closing Remarks, and Basic FATE Certificate Issuance (must be present to be certified)

12:45 pm Free Scanning with Faculty (optional)

1:45 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

Group Number	Sat, 8:45 gastric/FAST	Sat, 10:30 airway, lung	Sat, 2:00 FATE standard cardiac, IVC	Sat, 4:00 FATE standard cardiac, global ventricular function	Sun, 8:45 FATE cardiac multiple	Sun, 11:00 FATE cardiac "real world" exam
Group 1	1	2	3	4	5	6
Group 2	2	3	4	5	6	7
Group 3	3	4	5	6	7	8
Group 4	4	5	6	7	8	9
Group 5	5	6	7	8	9	10
Group 6	6	7	8	9	10	11
Group 7	7	8	9	10	11	12
Group 8	8	9	10	11	12	13
Group 9	9	10	11	12	13	14
Group 10	10	11	12	13	14	1
Group 11	11	12	13	14	1	2
Group 12	12	13	14	1	2	3
Group 13	13	14	1	2	3	4
Group 14	14	1	2	3	4	5

# Continuing Medical Education/Continuing Professional Development

## To receive your CME certificate:

1. Access the online system before **March 12th** by visiting [www.surveymonkey.com/r/ASRAPoCUS18](http://www.surveymonkey.com/r/ASRAPoCUS18).
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.

## 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
Saturday	8.25
Sunday	5
<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 live activity 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 (34567890) 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 companies  
for their generous support.

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### Grants

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FUJIFILM SonoSite  
GE Healthcare

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### Durable Equipment

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FUJIFILM SonoSite  
GE Healthcare  
Philips

# 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 acknowledgment 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 shall NOT expand their input into areas of clinical medicine, such as:
  - 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



- Featuring two chronic pain parallel session tracks, three regional anesthesia/acute pain parallel session tracks
- 47 hands-on workshops, including fluoroscopy, ultrasound, live model, and cadaver (physicians only)
- Special interactive sessions on stress management, catheter management, "green" anesthesia, and more
- World-renowned expert faculty eager to share their practical experience

## 2018 World Congress on REGIONAL ANESTHESIA & PAIN MEDICINE

ASRA's 43rd  
Annual Regional Anesthesiology  
& Acute Pain Medicine Meeting

#ASRAWorld18

### Chronic Pain Content

- Advanced ultrasonographic MSK imaging and interventions for pain medicine
- Recent advances in regenerative medicine related to sports medicine and injury
- Making neuromodulation therapy work for basic and advanced practitioners
- Dealing with the opioid epidemic; global perspective on the appropriate use of chronic opioids
- Pro/con debate on chronic pain management controversies
- Marijuana and cannabinoids in chronic pain management

### Regional Anesthesiology and Acute Pain Medicine Content

- Pro/con debate on regional vs. general anesthesia and regional anesthesia controversies
- Block safety strategies to prevent neurologic complications
- Tips for experts by experts for peripheral nerve, truncal, and neuraxial blocks
- Procedure-specific acute pain treatment recommendations and management of difficult pain patients
- Regional anesthesiologist's role in fast-track colorectal and joint replacement surgery
- Regional anesthesia-related complications and medico-legal issues
- New cadaver hands-on workshop for needling and catheter insertion and cadaver anatomical workshop
- NYSORA 3D anatomy and lower abdominal and extremity blocks half-day workshop

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New York Marriott Marquis, New York City, USA



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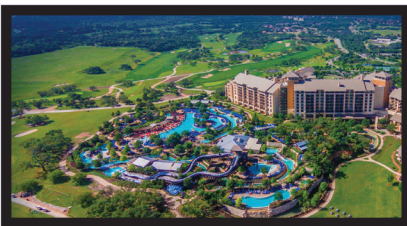
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June 16-17, 2018  
Pain Medicine and MSK Ultrasound Cadaver Course  
Northwestern's Center for Advanced Surgical Education  
Chicago, Illinois  
[www.asra.com/ccp](http://www.asra.com/ccp)



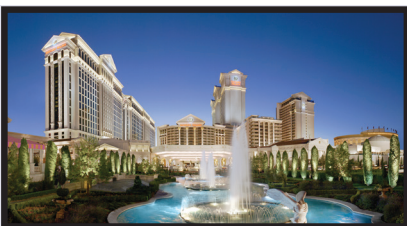
November 3-4, 2018  
ASRA-ASA Ultrasound-Guided Regional Anesthesia Education Portfolio  
Cadaver Course  
Northwestern's Center for Advanced Surgical Education  
Chicago, Illinois  
[www.asra.com/ccra](http://www.asra.com/ccra)



November 15-17, 2018  
17th Annual Pain Medicine Meeting  
JW Marriott San Antonio Hill Country | San Antonio, Texas  
#ASRAFall18  
[www.asra.com/pain](http://www.asra.com/pain)



December 1-2, 2018  
Introduction to Perioperative Point-of-Care Ultrasound  
Westin Chicago River North, Chicago, Illinois  
[www.asra.com/pocus](http://www.asra.com/pocus)  
#ASRAPoCUS



April 11-13, 2019  
44th Annual Regional Anesthesiology and Acute Pain Medicine Meeting  
Caesar's Palace | Las Vegas, Nevada  
#ASRASpring19



**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*