



## 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*

3 Penn Center West | Suite 224 | Pittsburgh, PA 15276 | [www.asra.com](http://www.asra.com)

# ASRA



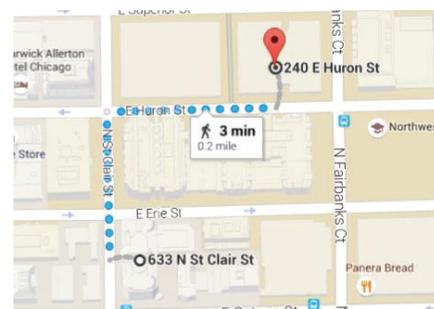
## **ASRA-ASA Ultrasound-Guided Regional Anesthesia Education Portfolio Cadaver Course**

Saturday, November 2—Sunday, November 3, 2019

Northwestern Simulation, Chicago, IL

# COURSE GUIDE

## Top 5 Course Essentials



### 1 Locations

#### Educational Sessions

Northwestern Simulation  
240 East Huron Street  
Chicago, IL 60611  
Tel: 312.503.4034

#### Recommended Hotel

Hyatt Centric Magnificent Mile  
633 North Saint Clair Street  
Chicago, IL 60611  
Tel: 312.787.1234

### 2 eLearning

Maximize learning! Get more hands-on time with expert faculty. Course curriculum includes a comprehensive suite of 10 eLearning videos. These are an integral part of the program and must be completed prior to attending the weekend course. See page 4 for more information.

### 3 Educational Materials and Presentations

Educational support materials are available to learners on the [ASRA website](#) and accessible with the password **ASRACCRA19**. Materials are available to meeting participants prior to, during, and after the meeting (up to one year) for educational purposes only. Access to particular content is provided based on meeting registration and is password protected. Distribution is limited, and none of the materials should be further distributed or reproduced.

### Evaluations and CME Certificates

Your opinion matters! Evaluate sessions and faculty and obtain your CME certificate by accessing the online system before **November 19th** at [www.surveymonkey.com/r/ASRACCRA19](http://www.surveymonkey.com/r/ASRACCRA19). See pages 15-16 for more information on CME credits and certificates.

### Attendance Policies

#### 5 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. 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.
- Exhibit hall: Infant children who are held or harnessed (no strollers are permitted) may accompany a registered attendee at any time. In addition, adult children ages 21 and over may purchase a guest ticket to accompany a registered attendee during the opening network reception only.
- Saturday celebration: All children are welcome to the Saturday night celebration. Tickets must be purchased for any children over 2 years old.
- 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

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## **Educational objectives**

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

- Discuss the basic principles of ultrasound imaging, equipment, functionality, aseptic technique, and local anesthetic selection for ultrasound-guided regional anesthesia.
- Identify and describe the surface and ultrasound anatomy.
- Apply peripheral nerve block ultrasound scanning and needling techniques.
- Perform peripheral nerve blocks with superior dexterity.
- Assess billing and economic issues related to ultrasound-guided regional anesthesia.
- Fulfill knowledge base and technical skills requirements for the Ultrasound-Guided Regional Anesthesia (UGRA) Education and Clinical Training Portfolio.

## **Target audience**

The course is designed for physician regional anesthesia practitioners currently using or wishing to use ultrasound technology in the administration of regional nerve blocks. The course is designed to meet the varied educational needs from those just starting to use ultrasound guidance in regional anesthesia to the more practiced clinician with a broader experience base.



# eLearning Course Curriculum

## Pre-course Video eLearning (Required)

5.25 credits

Course curriculum includes a comprehensive suite of 10 eLearning videos. These are an integral part of the program and must be completed prior to attending the weekend course. The mandatory videos modules will take an estimated 5.25 hours to complete.

1. Basic Ultrasound and Needling Approaches
2. Ultrasound Physics, Artifacts, Pitfalls, and Complications – Part 1
3. Ultrasound Physics, Artifacts, Pitfalls, and Complications – Part 2
4. General Introduction, Ultrasound-Guided Nerve Blocks – Are They Better Than Nerve Stimulation?
5. Upper Limb Nerve Block Options and Evidence Supporting Their Use
6. Lower Limb Nerve Blocks and Ultrasound Safety
7. Sono-Anatomy and Techniques for Truncal and Chest: Part 1
8. Sono-Anatomy and Techniques for Truncal and Chest: Part 2
9. Billing and Documentation in Different Jurisdictions
10. Local Anesthetic Systemic Toxicity (LAST)

## Accessing the eLearning

- Follow this link to the entire collection of 10 videos: <https://vimeo.com/showcase/6259207>
- Use this password to access the videos: **ASRACCRA19**
- Videos do not have to be viewed in one sitting.
- You must attest to viewing all videos prior to claiming CME.

## Support and Questions

For technical support, please contact ASRA at [asrameetings@asra.com](mailto:asrameetings@asra.com). Replies will be provided within 24-36 hours over business days.

## Failure to Complete and/or Cancellation

The eLearning must be successfully completed prior to attending the course. If not, you will not be able to participate and your course registration fee will only be refunded according to ASRA policy which states: "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."

# Onsite Program

Saturday, November 2, 2019

9.5 credits

7:00 am	Registration and Breakfast	
7:15 am	Welcome and Introduction	Stuart Grant, MBChB, FRCA
7:20 am	Lecture: Upper Limb Scanning Preview	Andrew Gray, MD, PhD
7:40 am	Break and Transition to Lab	
7:45 am	Upper Limb Scanning – Group Assignments	

Learners will be in small working groups categorized as A or B. The course structure enables all learners to address each focused content area via both hands-on live model scanning and cadaver needling.

Throughout the course, all six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. Attendees will be placed in groups numbered 1-18 (indicated on name badge), with ~5 participants in each group. Groups rotate to a different station during each station, 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.	
<b>Group A</b>	<b>Group B</b>
<b>Hands-On Live Model Scanning (sonoanatomy)</b> All six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. (20 minutes at each station)	<b>Cadaver and Meat Phantom Needling, Clinical Scenario, and Anatomy Stations</b> (single shot and selected continuous catheter techniques) (40 minutes at each station)
Blocks to be covered: 1. Interscalene 2. Supraclavicular 3. Infraclavicular 4. Suprascapular nerve, distal at elbow 5. Axillary block 6. Consolidate/review	<ul style="list-style-type: none"> <li>• Cadaver station needling upper limb blocks</li> <li>Blocks to be covered:               <ol style="list-style-type: none"> <li>1. Interscalene</li> <li>2. Supraclavicular</li> <li>3. Infraclavicular</li> <li>4. Suprascapular nerve, distal at elbow</li> <li>5. Axillary block</li> <li>6. Consolidate/review</li> </ol> </li> <li>• Clinical Scenarios, ultrasound physics</li> <li>• Anatomy of upper limb</li> </ul>

9:45 am	Break
10:00 am	Upper Limb Scanning – Groups swap to alternate side

<b>Group B</b>	<b>Group A</b>
<b>Hands-On Live Model Scanning (sonoanatomy)</b> All six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. (20 minutes at each station)	<b>Cadaver and Meat Phantom Needling, Clinical Scenario, and Anatomy Stations</b> (single shot and selected continuous catheter techniques) (40 minutes at each station)
Blocks to be covered: 1. Interscalene 2. Supraclavicular 3. Infraclavicular 4. Suprascapular nerve, distal at elbow 5. Axillary block 6. Consolidate/review	<ul style="list-style-type: none"> <li>• Cadaver station needling upper limb blocks</li> <li>Blocks to be covered:               <ol style="list-style-type: none"> <li>1. Interscalene</li> <li>2. Supraclavicular</li> <li>3. Infraclavicular</li> <li>4. Suprascapular nerve, distal at elbow</li> <li>5. Axillary block</li> <li>6. Consolidate/review</li> </ol> </li> <li>• Clinical Scenarios, ultrasound physics</li> <li>• Anatomy of upper limb</li> </ul>

## Onsite Program *(Saturday, continued)*

12:00 pm	Break and Transition to Lunch Lectures	
12:10 pm	Lunch Lecture 1: Q+A Review – Upper Limb Labs	Antoun Nader, MD
12:40 pm	Lunch Lecture 2: Lower Limb Scanning Preview	Sean Dobson, MD, PhD
1:00 pm	Break and Transition to Lab	
1:10 pm	Lower Limb Scanning – Group Assignments	

Group A	Group B
<b>Hands-On Live Model Scanning (sonoanatomy)</b> All six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. (20 minutes at each station)	<b>Cadaver and Meat Phantom Needling, Clinical Scenario, and Anatomy Stations</b> (single shot and selected continuous catheter techniques) (40 minutes at each station)
Blocks to be covered: 1. Fascia iliaca/supra inguinal fascia iliaca 2. Subartorial/adductor canal distal femoral/sapheous 3. Anterior sciatic/obturator 4. Ankle 5. Popliteal/iPACK 6. Consolidate/review	<ul style="list-style-type: none"> <li>• Cadaver station needling lower limb blocks</li> <li>1. Fascia iliaca/supra inguinal fascia iliaca</li> <li>2. Subartorial/adductor canal distal femoral/sapheous</li> <li>3. Anterior sciatic/obturator</li> <li>4. Ankle</li> <li>5. Popliteal/iPACK</li> <li>6. Consolidate/review</li> <li>• Clinical scenarios, ultrasound physics</li> <li>• Anatomy of lower limb</li> </ul>

3:10 pm	Break
3:25 pm	Lower Limb Scanning – Groups swap to alternate side

Group B	Group A
<b>Hands-On Live Model Scanning (sonoanatomy)</b> All six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. (20 minutes at each station)	<b>Cadaver and Meat Phantom Needling, Clinical Scenario, and Anatomy Stations</b> (single shot and selected continuous catheter techniques) (40 minutes at each station)
Blocks to be covered: 1. Fascia iliaca/supra inguinal fascia iliaca 2. Subartorial/adductor canal distal femoral/sapheous 3. Anterior sciatic/obturator 4. Ankle 5. Popliteal/iPACK 6. Consolidate/review	<ul style="list-style-type: none"> <li>• Cadaver station needling lower limb blocks</li> <li>1. Fascia iliaca/supra inguinal fascia iliaca</li> <li>2. Subartorial/adductor canal distal femoral/sapheous</li> <li>3. Anterior sciatic/obturator</li> <li>4. Ankle</li> <li>5. Popliteal/iPACK</li> <li>6. Consolidate/review</li> <li>• Clinical scenarios, ultrasound physics</li> <li>• Anatomy of lower limb</li> </ul>

5:25 pm	Break and Transition to Lecture	
5:35 pm	Lecture: Q+A Review – Lower Limb Labs	Adam Amundson, MD
6:00 pm	Day 1 Adjournment	

# Onsite Program *(continued)*

Sunday, November 3, 2019

6.75 credits

- 7:00 am Breakfast and Lecture: Chest and Trunk Scanning Preview
- 7:30 am Break and Transition to Lab
- 7:35 am Chest and Trunk Scanning – Group Assignments

David Auyong, MD

Group A	Group B
<b>Hands-On Live Model Scanning (sonoanatomy)</b> All six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. [20 minutes at each station]	<b>Cadaver and Meat Phantom Needling, Clinical Scenario, and Anatomy Stations</b> (single shot and selected continuous catheter techniques) [40 minutes at each station]
Blocks to be covered: 1. TAP/lateral quadratus lumborum/posterior quadratus lumborum 2. Rectus sheath/iliohypogastric-Ilioinguinal 3. Anterior quadratus lumborum 4. PVB erector spinae plane and retrolaminar block 5. PECS/serratus anterior 6. Consolidate/review	<ul style="list-style-type: none"> <li>• Cadaver station needling chest and trunk                             <ol style="list-style-type: none"> <li>1. TAP/lateral quadratus lumborum/posterior quadratus lumborum</li> <li>2. Rectus sheath/iliohypogastric-Ilioinguinal</li> <li>3. Anterior quadratus lumborum</li> <li>4. PVB erector spinae plane and retrolaminar block</li> <li>5. PECS/serratus anterior</li> <li>6. Consolidate/review</li> </ol> </li> <li>• Clinical scenarios, ultrasound physics</li> <li>• Anatomy of chest and trunk</li> </ul>

9:35 am Break to Next Area

9:50 am Chest and Trunk Scanning – Groups swap to alternate side

Group B	Group A
<b>Hands-On Live Model Scanning (sonoanatomy)</b> All six blocks will be covered at each station so that learners will be exposed to a variety of faculty for each of the blocks. [20 minutes at each station]	<b>Cadaver and Meat Phantom Needling, Clinical Scenario, and Anatomy Stations</b> (single shot and selected continuous catheter techniques) [40 minutes at each station]
Blocks to be covered: 1. TAP/lateral quadratus lumborum/posterior quadratus lumborum 2. Rectus sheath/iliohypogastric-Ilioinguinal 3. Anterior quadratus lumborum 4. PVB erector spinae plane and retrolaminar block 5. PECS/serratus anterior 6. Consolidate/review	<ul style="list-style-type: none"> <li>• Cadaver station needling chest and trunk                             <ol style="list-style-type: none"> <li>1. TAP/lateral quadratus lumborum/posterior quadratus lumborum</li> <li>2. Rectus sheath/iliohypogastric-Ilioinguinal</li> <li>3. Anterior quadratus lumborum</li> <li>4. PVB erector spinae plane and retrolaminar block</li> <li>5. PECS/serratus anterior</li> <li>6. Consolidate/review</li> </ol> </li> <li>• Clinical scenarios, ultrasound physics</li> <li>• Anatomy of chest and trunk</li> </ul>

11:50 pm Break to Transition to Lunch Lectures

12:00 pm Lunch Lecture 1: Q+A Review – Chest and Trunk Labs

Derek Dillane, MBChB, FCARCSI

1:00 pm Lecture: Live Scanning with Faculty

Derek Dillane, MBChB, FCARCSI, and Andrew Gray, MD, PhD

1:45 pm Course Recap and Closing Remarks

Stuart Grant, MBChB, FRCA

2:00 pm Adjournment



## Course Faculty



Brian Allen, MD, is an assistant professor at Vanderbilt University Medical Center in Nashville, TN, where he directs the Acute Pain Service and the regional anesthesiology and acute pain medicine fellowship. He completed undergraduate and medical school at Washington University, residency at Vanderbilt, and regional fellowship at Oregon Health and Science University before returning to join the Vanderbilt faculty. His clinical focus is on regional and multimodal analgesia in enhanced recovery after surgery (ERAS) pathways. Research interests include educational assessment, evaluating ERAS efficacy and compliance, and opioid minimization.



Adam Amundson, MD, attended residency and fellowship in regional anesthesia at Mayo Clinic in Rochester, MN. As a Mayo Clinic anesthesiology consultant, his educational interests involve point-of-care ultrasound, research in regional anesthesia, and orthopedic perioperative surgical home improvements. He is very active in resident and fellow regional anesthesia education and teaching ultrasound-guided workshops at ASRA and American Society of Anesthesiology meetings. In his free time, he enjoys spending time with his wife, two boys, and a new baby girl.



David Auyong, MD, is the medical director of the Lindeman Ambulatory Surgery Center and section head of orthopedic anesthesiology at Virginia Mason Medical Center in Seattle, WA. His research focuses on improving patient outcomes with regional anesthesia, most recently with blocks like the continuous adductor canal block and suprascapular nerve block. He has co-authored a popular textbook, *Ultrasound Guided Regional Anesthesia*, now in its second edition. David is often recognized by his videos on YouTube describing ultrasound-guided regional anesthesia approaches to many different nerve blocks.



W. Michael Bullock, MD, PhD, is an assistant professor at Duke University Hospital in Durham, NC. He graduated in 2010 with an MD and PhD from the University of New Mexico in 2010 and completed residency and fellowship in regional anesthesiology at Duke University Hospital in 2015. He remained on staff at Duke where he is currently director of resident education for the regional anesthesiology rotation and assistant program director for the regional anesthesiology and acute pain medicine fellowship. His research interests include ultrasound-guided nerve blockade, tourniquet hypertension, gastric ultrasound, and trainee education.



Derek Dillane, MB BCh, FCARCSI, is an associate professor at University of Alberta in Edmonton, Canada, where he completed a clinical and research fellowship in regional anesthesia in 2006. His clinical research interests involve the use of ultrasound in regional anesthesia with a particular focus on education and training techniques. He has taught and led numerous ultrasound workshops in North America and internationally. He is a past chair of the Canadian Anesthesia Society Regional Anesthesia Section.



Sean Dobson, MD, PhD, is an associate professor of anesthesiology at Wake Forest University School of Medicine in Winston-Salem, NC. He completed his residency and fellowship in regional anesthesia at Duke University Medical Center in Durham, NC. He served in the United States Navy at Naval Medical Center Portsmouth, where he was the division officer of acute pain management assisting in the care of wounded warriors. He was deployed to Afghanistan as a forward resuscitative anesthesiologist in 2012 in support of Operation Enduring Freedom. He was chosen by the anesthesiology residents at Wake Forest to receive the 2015 Golden Apple Teaching Award.



Carlo Franco, MD, is the chair of regional anesthesia at JHS Hospital of Cook County Chicago, IL, and professor of anesthesiology and anatomy at Rush University Medical Center in Chicago. Dr. Franco received his degree in general surgery and anatomy from the University of Valparaiso in Chile. He immigrated to the United States in 1985 and served as visiting professor of anatomy at the Medical College of Ohio in Toledo from 1985-1986 and 1988-1989. Dr. Franco completed his anesthesiology residency at Sinai Hospital of Detroit in Detroit, MI, and was recruited to Cook County Hospital of Chicago (now JHS Hospital of Cook County) by Dr. Alon Winnie in 1994. He has introduced some new anatomy-based nerve blocks.



Stuart Grant, MB ChB, FRCA, graduated from the University of Glasgow, UK, in 1989 and trained in anaesthesia in Glasgow before taking an appointment in the department of anesthesiology at Duke University in 2002. He is now chief of the division of regional anesthesia and acute pain at the University of North Carolina Chapel Hill. He has written multiple publications on the use of regional anesthesia in major joint replacement and ambulatory surgery. His textbook *Ultrasound Guided Regional Anesthesia* is now in its second edition.



Andrew T. Gray, MD, PhD, is a professor of clinical anesthesia at the University of California, San Francisco, where he directs the regional anesthesia program at San Francisco General Hospital. He has written more than 20 articles and two textbooks on ultrasound-guided regional anesthesia and now pursues investigations on safety and efficacy of new regional anesthetic techniques.



Vivian Ip, MBChB, FRCA, is an associate clinical professor of anesthesia at the University of Alberta Hospital in Edmonton, Canada. She is one of the leaders of the fentanyl crisis campaign known as Doctors against Tragedies. She was previously the director of the ambulatory regional anesthesia program at the University of Alberta Hospital. She received her anesthesia training in London, UK. Subsequently, she undertook two fellowships in Canada: regional anesthesia and acute pain management and ambulatory anesthesia. She previously served in the ASRA Research Committee and is currently the associate editor of regional anesthesia, for the ASRA Newsletter Committee. She is also active in research, and her research interests include regional nerve block catheters, airway, and green anesthesia.



Michael Jarrell, MD, primarily works in freestanding ambulatory surgery centers in Florida, some of which routinely perform outpatient total joint replacements. He is adjunct faculty at the Gulf Coast Ultrasound Institute. Dr. Jarrell has been an oral board examiner for the American Board of Anesthesiologists (ABA) since 2015 and an Objective Structured Clinical Examination Ultrasonography trainer/grader for the ABA.



Hari Kalagara, MD, FCARCSI, EDRA, is passionate about regional anesthesia and has completed a regional anesthesia fellowship at Cleveland Clinic in Cleveland, OH. He has attained European Diploma in Regional Anaesthesia (EDRA) by the European Society of Regional Anesthesia and was given ASRA's Resident/Fellow of the Year Award in 2017. Dr. Kalagara organizes and serves as primary activity director for the cadaveric regional anesthesia ultrasound workshops 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 into patient care. Dr. Kalagara is currently working as assistant professor at the University of Alabama at Birmingham with a special interest in regional anesthesia.



Kwesi Kwofie, MD, completed a fellowship at the New York School of Regional Anesthesia. He is currently assistant professor of anesthesiology and director of acute pain and regional anesthesia at Dalhousie University in Halifax, Canada, and chair of the regional anesthesia and acute pain section of the Canadian Anesthesiologists Society. Dr. Kwofie has published and presented around the world on nerve blockade, mechanisms of nerve injury, acute pain, and anesthesia in low-resource settings.



Janice Man, MD, is currently a clinical instructor in the department of Anesthesia, Perioperative and Pain Medicine at Stanford University in Stanford, CA, and is board-certified in anesthesiology and pediatric anesthesiology. She completed her medical school education at the Yale University School of Medicine, New Haven, CT; residency training at University of California, San Francisco; pediatric anesthesia fellowship training at Children's Hospital of Philadelphia, Philadelphia, PA; and her pediatric regional anesthesia fellowship at Stanford. She received the Outstanding Research Award in Acute Pain at the Society of Pediatric Pain Medicine Annual Conference in 2016. Her interests include utilization of regional anesthesia and comprehensive multimodal analgesic protocols in the reduction of opioid consumption for acute pain in pediatric patients.



Eman Nada, MD, PhD, is an assistant professor of anesthesiology and perioperative medicine at the University of Massachusetts in Worcester, MA. She has completed fellowships in regional anesthesia and neuroanesthesia at the Cleveland Clinic Foundation. She is passionate about education, which she demonstrates through participating in workshops and other educational activities. She believes in the importance of having strong knowledge of anatomy to be a good regional anesthesiologist. Her interests include prolonging nerve blocks and integrating them into the multimodal pathway to reduce or even replace the use of opioids.



Antoun M. Nader, MD, is a professor in the department of anesthesiology and orthopedics at the Feinberg School of Medicine at Northwestern University in Chicago, IL. He is the section chief for regional anesthesia and acute pain management at Northwestern Memorial Hospital and the medical director for acute pain medicine. He is also the fellowship co-director for the adult and pediatric regional anesthesia and acute pain management fellowship at McGaw Medical Center of Northwestern University. Dr. Nader is board certified in anesthesiology, with a subspecialty certification in pain management. He is a member of the American Society of Anesthesiologists, ASRA, and the Association of University Anesthesiologists. With interests in neuroanesthesiology and pain management, he is engaged in numerous activities, including authorship, editorial work, grant review, and lecturing for many societies. During his medical career in pain management, he has authored and coauthored more than 150

original peer-reviewed articles, editorials, reviews, books, commentaries, case reports, and technical notes. He is very involved in the development of institutional pathways for regional anesthesia and pain management protocols that have resulted in publications in major anesthesia journals.



Kristopher Schroeder, MD, lives and works in Madison, WI, where he serves as the section chief for the regional anesthesia and acute pain management section at the University of Wisconsin. He currently serves as the editor of the *ASRA News* and welcomes suggestions for future topics and authors. Outside of work, he enjoys spending time running, biking, and travelling with his three daughters and veterinary anesthesiologist wife.



Luminita Tureanu, MD, FRCPC, is an assistant professor of anesthesiology at Northwestern University Feinberg School of Medicine in Chicago, IL. She is board certified in anesthesiology and is a fellow of the Royal College of Physicians and Surgeons of Canada. Dr. Tureanu completed her anesthesiology residency and chronic pain fellowship at Cook County Hospital in Chicago and the regional anesthesiology and acute pain medicine fellowship at Western University in London, Canada. Her interests include teaching evidence-based ultrasound-guided regional anesthesia and multimodal analgesia to residents and fellows.



Vishal Uppal, MBBS, FRCA, is assistant professor and director of the regional anesthesia fellowship program at Dalhousie University in Halifax, Canada. He completed his anesthesia residency at Glasgow, UK, and his fellowship in ultrasound-guided regional anesthesia from University of Western Ontario in London, ON. He has published on a broad range of topics in regional anesthesia including paravertebral blocks, spinal anesthesia, and technologies to improve needle visibility. He serves as a teaching faculty at numerous national and international ultrasound-guided regional anesthesia workshops.

# ASRA Leadership

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Stuart Grant, MB ChB, FRCA, Chair

Derek Dillane, MB BCh, FCARCSI

## Disclosure and Resolution of Personal Conflicts of Interest

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

Last Name	First Name	Role	COI	Honoraria / Expenses	Consulting / Advisory Board	Speakers Bureau	Funded Research (Individual)	Funded Research (Institution)	Royalties / Patent	Other	Off-Label Usage
Allen	Brian	Associate Faculty	No								No
Amundson	Adam	Faculty	No								No
ASRA Administrative Team (Bortler, Oliver, Stengel, Stuever)		Society, CME, Meeting Management	No								No
Auyong	David	Faculty	Yes	Avanos (Halcyon Health)			FujiFilm SonoSite				No
Bullock	W. Michael	Associate Faculty	Yes		Pacira Pharmaceuticals	Pacira Pharmaceuticals					No
Chan	Vincent	CME	Yes	Philips Healthcare			University of Toronto, MSH-UHN AMO Innovation Fund				No
Chin	Ki-Jinn	CME	No								No
Dillane	Derek	Faculty, Planning Committee	Yes				PCORNI Regain per patient funding				No
Dillane	Derek	Video eLearning Faculty- disclosures at time of recording	No								No
Dobson	Sean	Faculty	No								No
Franco	Carlo	Faculty	No								No
Grant	Stuart	Chair, CME, Faculty, Planning Committee	Yes		Bbraun, Avanos			SPR Therapeutics, Avanos	Oxford University Press		No
Gray	Andrew	Faculty	Yes						Elsevier-Saunders		No
Gray	Andrew	Video eLearning Faculty- disclosures at time of recording	Yes						Elsevier-Saunders		No
Guha	Rahul	Video eLearning Faculty- disclosures at time of recording	No								No
Horn	Jean-Louis	Video eLearning Faculty- disclosures at time of recording	Yes					Infutronicx			
Ip	Vivian	Faculty	No								No

## Disclosure and Resolution of Personal Conflicts of Interest *(continued)*

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

Last Name	First Name	Role	COI	Honoraria / Expenses	Consulting / Advisory Board	Speakers Bureau	Funded Research (Individual)	Funded Research (Institution)	Royalties / Patent	Other	Off-Label Usage
Jarrell	Michael	Associate Faculty	No								No
Kalagara	Hari	Faculty	No								No
Kwofie	Kwesi	Associate Faculty	Yes							FujiFilm SonoSite - Equipment Support for Research	No
Man	Janice	Associate Faculty	No								No
Nada	Eman	Associate Faculty	No								No
Nader	Antoun	Faculty	No								No
Nicol	Andrea	CME	Yes		Sandoz Pharmaceuticals Mainstay Medical		NIH				No
Pino	Carlos	CME	Yes		Pacira Pharmaceuticals				Wolters Kluwer		No
Salinas	Francis	Video eLearning Faculty- disclosures at time of recording	Yes								
Schroeder	Kristopher	Associate Faculty	Yes	Speaking fees for Northwest Anesthesia Seminars							No
Sites	Brian	CME (ex-officio)	Yes		Access Anesthesiology						No
Tureanu	Luminita	Associate Faculty	No								No
Uppal	Vishal	Associate Faculty	No								No
Viscusi	Eugene	CME (ex-officio)	Yes		AcelRx, Cara, Heron, Trevena, Neumenda, Mallinckrodt, Frezenius, Concentric, Salix	Salix		Pacira, Durect			No
Vorenkamp	Kevin	CME	No								No

# Continuing Medical Education Information

## To receive your CME certificate

1. Access the online system before November 19 by visiting [www.surveymonkey.com/r/ASRACCRA19](http://www.surveymonkey.com/r/ASRACCRA19).
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:

- Discuss the basic principles of ultrasound imaging, equipment, functionality, aseptic technique, and local anesthetic selection for ultrasound-guided regional anesthesia.
- Identify and describe the surface and ultrasound anatomy.
- Apply peripheral nerve block ultrasound scanning and needling techniques.
- Perform peripheral nerve blocks with superior dexterity.
- Assess billing and economic issues related to ultrasound-guided regional anesthesia.
- Fulfill knowledge base and technical skills requirements for the Ultrasound-Guided Regional Anesthesia (UGRA) Education and Clinical Training Portfolio.

## Target audience

The course is designed for physician regional anesthesia practitioners currently using or wishing to use ultrasound technology in the administration of regional nerve blocks. The course is designed to meet the varied educational needs from those just starting to use ultrasound guidance in regional anesthesia to the more practiced clinician with a broader experience base.

## Accreditation and credit designation statements

Credits by Day	Maximum
Pre-Course eLearning	5.25
Saturday	10.5
Sunday	6.75
<b>Total Credits:</b>	<b>22.5</b>

### Physicians

The American Society of Regional Anesthesia and Pain Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American Society of Regional Anesthesia and Pain Medicine designates this other activity (blended eLearning and live course) for a maximum of 22.5 *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®

This activity contributes to the CME requirements for Part II: Lifelong Learning and Self-Assessment of the American Board of Anesthesiology's (ABA) redesigned Maintenance of Certification in Anesthesiology Program® (MOCA®), known as MOCA 2.0™. Please consult the ABA website, [www.theABA.org](http://www.theABA.org), for a list of all MOCA 2.0 requirements. Maintenance of Certification in Anesthesiology Program® and MOCA® are registered certification marks of The American Board of Anesthesiology.®

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.

## ASRA-ASA Ultrasound-Guided Regional Anesthesia (UGRA) Education and Clinical Training Portfolio

The Ultrasound-Guided Regional Anesthesia Education and Clinical Training Portfolio is a joint ASRA - ASA initiative designed for anesthesiologists who wish to distinguish themselves in the field and provide evidence of training and experience. The portfolio guides participants through a comprehensive educational and training experience that fulfills current recommendations for ultrasound-guided regional anesthesia (UGRA). This ASRA course has been approved for knowledge base and technical skills components of the portfolio. For more information and approved sessions, visit the ASA website.



### 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 and web-based (synchronous or asynchronous) 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 and e-learning 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 would like to thank the following companies  
for their generous support.

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## Educational Grants

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B. Braun Medical  
GE Healthcare

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## In-Kind Support — Durable Equipment

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Alpinion USA  
FUJIFILM Sonosite  
GE Healthcare

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## Disposable Supplies

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Safersonic

# Guidelines Regarding Industry Representative Participation and In-Kind Support

## Industry Support

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

## Disclosure

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

## Industry Representative/Technician Participation

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

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

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

## Attendee Feedback

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

# ASRA



# 45th Annual Regional Anesthesiology & Acute Pain Medicine Meeting

April 23-25, 2020

Hilton San Francisco Union Square

Abstract submission deadline: January 7.

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

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