



VANDERBILT WUNIVERSITY
MEDICAL CENTER

JANUARY/FEBRUARY 2016

Message from the Chair

As we look ahead



Warren S. Sandberg, MD, PhD

I hope each of you had a restful holiday season and are refreshed and ready for the new year. The kick-off to a new year is a great time to set new goals or remind ourselves of current goals. I personally have three goals, which include:

• Preparing the department and the periop team to navigate the CS2.0

transition and come out stronger on the other side

- Consolidating and extending the benefits of departmental Enchanced Recovery After Surgery (ERAS) and Periop Consult Service successes from 2015
- Continuing to equip and develop the leadership in all of its endeavors The diverse talent within our department continues to demonstrate the four Cs articulated in 2015: we are compassionate, creative, committed and collaborative in so many ways. (For new hires, ask your AA or hiring manager for a department badge.)

Take a look at the press coverage to see some of the action within Anesthesiology.

I want to highlight a couple of upcoming events. A History of Nurse Anesthesia reception will take place on Wednesday, January 27, 2016, commemorating over 100 years of nurse anesthesia service at Vanderbilt University Medical Center. A reception will be held from 5:00-6:00 pm followed by speakers from 6:00 pm - 8:00 pm, including Dr. Bradley Smith, longest serving chair of the department. The event is a great opportunity to recognize and honor our CRNA staff.

Thank you to each of you for your ongoing commitment to Anesthesiology. Your dedication and talent are appreciated!

Press Coverage

Vanderbilt Anesthesiology Promotes Leadership and Diversity to Residents Tennessee Tribune January 6, 2016

Dr. Susan Eagle-Invision-Heart Tennessean January 5, 2016

ADVERSE Drug Events: Incidence & risk reduction across the care continuum Anesthesiology January 2016

Shaw lauded for research mentorship Vanderbilt Reporter December 10, 2015

Vanderbilt, Ono Pharmaceutical sign drug discovery agreement
Vanderbilt Reporter
December 10, 2015

The upside of EHRs: 3 physicians' perspectives on what they get right Beckers Hospital Review December 2015

As Non-OR Procedures Soar, New Guidelines Are Needed Anesthesiology News December 2015

Advanced Airway Training Needed for Anesthesiologists Anesthesiology News November 9, 2015

Schools of Nursing, Medicine create new LGBT health course Vanderbilt Reporter November 12, 2015

Visit the newsfeed on the homepage of website to view additional news

Indiana State Health Commissioner Promotes Leadership and Diversity to Residents

Renuka Christoph

Dr. Jerome Adams, Indiana State Health Commissioner, was invited by Dr. Jesse Ehrenfeld with the Department of Anesthesiology to speak on diversity and leadership development to residents. Adams, a practicing anesthesiologist at Indiana University, provided residents with personal insight on his path to leadership.

"We were privileged to have Dr. Adams share his insight in minority leadership development and converse with our residents. It is through such collaborative efforts that we are equipping tomorrow's leaders with the necessary tools for success," stated Dr. Warren Sandberg.



Dr. Jerome Adams and Dr. Warren S. Sandberg

cont'd page 4

SPOTLIGHT



Catherine Behrle Nurse Practitioner Division of Anesthesiology-Critical Care Medicine

PREVIOUS POSITION: RN, University of Cincinnati Medical Center, MICU

EDUCATION:
MS in Nursing, University
of Cincinnati, Cincinnati, OH
(2014)
BS in Nursing, University
of Cincinnati, Cincinnati, OH
(2009)



Meredith Coleman CRNA

PREVIOUS POSITION: RN, Neurosciences Intensive Care University Hospital, Birmingham, AL

EDUCATION: MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2015) BS in Nursing, Samford

University, Birmingham, AL (2011) BA in Business Administration

Christy Crockett, MDAssistant Professor, Division of Pediatric Anesthesiology

PREVIOUS POSITION: Assistant Professor of Anesthesiology, Duke University Medical Center, Division of Pediatric Anesthesiology and Division of Women's Anesthesiology, Durham, NC

EDUCATION: MD, University of North Carolina at Chapel Hill, Chapel Hill, NC (2009) BS in Biology, University of North Carolina at Charlotte, Charlotte, NC (2005)



Hunter Douglas Research Assistant I

PREVIOUS POSITION: Scribe, Scribe America, Knoxville, TN

EDUCATION: BS in Biochemistry, Cellular, and Molecular Biology, University of Tennessee, Knoxville, TN (2014)



Jennifer JayaramPerioperative Nurse
Practitioner

PREVIOUS POSITION: NP, Instructor, Assistant in Surgery Vanderbilt University Medical Center, Center for Surgical Weight Loss

EDUCATION: MS in Nursing, University of Colorado, Denver, CO (2003) BS in Nursing, University of Tennessee, Knoxville, TN (2001)



Katharina Modes, MDAssistant Professor of Clinical Anesthesiology, Division of Pediatric Anesthesiology

PREVIOUS POSITION: Anesthesiologist, Cumberland Anesthesia Associates, Fayetteville, NC

EDUCATION: MD, University of Regensburg, Regensburg, Germany



Katherine Salvador CRNA

EDUCATION: MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2015) BS in Nursing, Auburn University, Auburn, AL (2010)



Jessica Simms CRNA

PREVIOUS POSITION: RN, Cardiothoracic Intensive Care Vanderbilt University Medical Center

EDUCATION:
MS in Nursing (Anesthesiology), Middle Tennessee School of Anesthesia, Madison, TN (2015)
BS in Nursing, Florida State University, Tallahassee, FL (2008)



Jenny Venecek

Program Coordinator, ImPACT Africa Office of Educational Affairs

Office of Educational Affairs

PREVIOUS POSITION: Chicago Regional Recruiter, United States Peace Corps Midwest Recruitment Office, Chicago, IL

EDUCATION: MA, International Education, SIT Graduate Institute, Brattleboro, VT BA, Anthropology, UNC-Charlotte, Charlotte, NC



Lindsey Kilgore Administrative Assistant II,

Administrative Assistant II, Division of Cardiothoracic Anesthesiology

PREVIOUS POSITION: Vanderbilt Medical Group, Access Operations

EDUCATION: BS in Business Management, Jacksonville State University, Jacksonville, AL (2014)



Crystal Parrish

Nurse Practitioner Division of Pain Medicine

PREVIOUS POSITION: NP, Premise Health Occupational Health at Nissan, Franklin, TN NP, Pain and Spine Consultants, Lebanon, TN

EDUCATION: MS in Nursing, Vanderbilt School of Nursing, Nashville, TN (2005)



Jeffrey Boon

Nurse Practitioner Division of Anesthesiology-Critical Care Medicine

PREVIOUS POSITION: NP Resident, Emory University Center for Critical Care

EDUCATION: MS in Nursing, Vanderbilt University, Nashville, TN (2013) BA in Philosophy, Rhodes College, Memphis, TN (2005)



Accomplishments



Dr. Brian Rothman

C.

Dr. Andrew Shaw

Dr. Jerod Denton



Dr. Kelly McQueen

Dr. Vikram Tiwari was elected as "President Elect" of the Health Applications Society (HAS) within the Institute for Operations Research and the Management Sciences (INFORMS) for 2016. The position will automatically move up to "President" for 2017. HAS has 900 members worldwide. INFORMS has over 8,000 members worldwide. Tiwari will be running the HAS cluster in the next annual IN-FORMS conference, which will be held in Nashville November 13-16, 2016. Contact Dr.Tiwari if interested in presenting or creating a session/panel.

Dr. Brian Rothman was invited to serve on the American Society of Anesthesiologists 2016 Ad Hoc Committee on Data Governance. In this role, Rothman will provide oversight and guidance to ASA staff leadership to ensure that ASA's information technology (data collection, IT strategies, IT projects, business intelligence, technology infrastructure, etc.) is aligned with ASA's strategic plan, initiatives and Board of Directors (BOD)\House of Delegates (HOD) actions.

Dr. Andrew Shaw was elected for membership into the Foundation for Anesthesia Education and Research (FAER) Mentors in Anesthesiology. The objective of the Academy is to recognize those individuals who, as mentors, have contributed to the development and advancement of academic anesthesiology in research and promoted mentoring among others in the specialty, thereby increasing the quality of research and advancing the scope of academic anesthesiology.

Dr. Jerod Denton lectured at the Department of Biochemistry and Molecular Pharmacology at the University of Massachusetts Medical School, on "Inward Rectifier Potassium Channels: Emerging Drug Targets for Global Health."

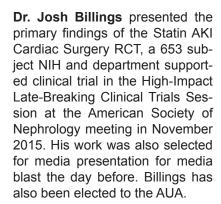
Ono Pharmaceuticals is supporting Dr. Jerod Denton's drug discovery

lab with a post- doctoral fellow, Takahiro Mori, and lab operating funds support for the next two years.

Dr. Kelly McQueen attended the Global Action Summit held in Nashville and gave a presentation entitled, "Adding Value-Decreasing Maternal and Infant Mortality Through Surgery and Safe Anesthesia."

Dr. Heidi Smith has been elected to Associate Membership in the Association of University Anesthesiologists (AUA).

Startup company, Volumetrix, which was co-founded by **Dr. Su-san Eagle**, has been recommended for Phase I STTR funding by the National Science Foundation for project: "Wireless point-of-care sensor for continuous fluid status monitoring of patients with congestive heart failure." Volumetrix seeks to fulfill critical unmet needs in medicine by developing novel non-invasive devices and algorithms for intravascular volume status determination.



Dr. Mark Newton has been appointed to World Federation of Societies of Anaesthesiolgists (WFSA) for a one-year term as a member of the ASA Committee on Representation.

Dr. Michael Pilla was invited to join the SOM Clinical Practice Appointments and Promotions Committee.



Dr. Heidi Smith



Dr. Susan Eagle



Dr. Josh Billings



Dr. Mark Newton



Dr. Michael Pilla

ATTENTION CLINICAL FACULTY

Have You Started Your Career Development Award (CDA) Application?

The Career Development Award (CDA) program application process is now in effect and provides an opportunity to reflect on your FY16 goals and set your intentions for FY17. As you look back, document your achievements to date within your Curriculum Vitae. This will save time during the Academic Achievement Award (AAA) program this summer when you will be rewarded for your efforts this fiscal year. See below for additional information:

FY17 Career Development Award Program

For the period of July 1, 2016 – June 30, 2017

Important Dates:

January 29th Applications due
 April 11th Notice of CDA

All clinical faculty must apply for a CDA to be guaranteed any non-clinical time (including "baseline" days) except:

- VMG pain physicians unless you have >20% department-funded effort
- Faculty who do not have >20% Vanderbilt effort
- · Per diem faculty

Common Application Issues:

- Omitting the "base days" (no guaranteed "base days" anymore)
- Writing too little (or too much) about how you will spend CDA
- Expecting more CDA without evidence of accomplishment with current CDA *or* providing compelling rationale

FY16 Academic Achievement Award Program

For the period of July 1, 2015 – June 30, 2016

Important Dates:

June 6th Forms sent to faculty

• July 11th Forms due

September 30th Payment received

Summary of changes for FY 2015-2016:

- To qualify for AAA, you must complete at least 2/3 of all resident or fellow evaluations assigned via New Innovations (starting October 1st)
- Will now get 1 point for every evaluation with substantive narrative feedback
- Cap for Vanderbilt teaching increased to 500 points and can get 300 additional points if garner more than 1,000 points (500 above cap)
- Enduring materials component refined
- "Clinical Care Pathways" category refined with new category of "Practice Protocols"
- Impact factors adjusted indexed to our key journals
- Refinement and clarification of Academic Service category

For any questions regarding these programs and your participation please contact **Dr. Matthew Weinger**, Vice Chair for Faculty Affairs or **Callie Hanks**, Program Coordinator. Read the **full guidelines here**.

Indiana State Health Commissioner cont'd



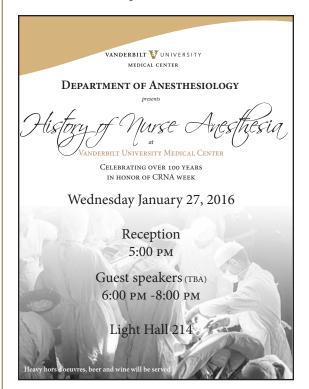
Dr. Charlene Dewey, Assistant Dean for Educator Development, Dr. Sheryl Rimrodt, Assistant Professor in Developmental Medicine, Dr. Jesse Ehrenfeld, Commissioner Jerome Adams, Dr. Annet Kirabo, Pharmacology, Dr. Kevin Johnson, Chair of Bio Informatics

The commissioner emphasized the importance of patient advocacy and getting involved with institutional and government organizations where key decisions are being made. Issues such as HIV, proper drug prescribing and hypertension were among the relevant topics mentioned during a lunch discussion.

As health commissioner, Adams finds his power to convene and connect individuals as the greatest asset in his role. Through this, vital conversations are taking place and individuals who otherwise would not have had a voice are being heard.

"Commissioner Adams is an inspiring leader, who embodies the type of change that is possible when physicians bring their leadership skills to bear on our nation's greatest public health problems," commented Dr. Jesse Ehrenfeld, the professional development rotation director.

"I am delighted that our trainees were able to learn so much from him and take away from the experience a little bit of his passion for health."



Recent Publications

Aline F, Wanderer JP, Ehrenfeld JM. Managing the Impact of the ICD-10 Transition on a Data Warehouse. J Med Syst. 2016 Mar;40(3):57. doi: 10.1007/s10916-015-0418-9. Epub 2015 Dec 9. PubMed PMID: 26649437.

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Craig BT, Rellinger EJ, Mettler BA, **Watkins S, Donahue BS,** Chung DH. Laparoscopic Nissen fundoplication in infants with hypoplastic left heart syndrome. J Pediatr Surg. 2015 Oct 23. pii: S0022-3468(15)00622-3. doi: 10.1016/j. jpedsurg.2015.10.013. [Epub ahead of print] PubMed PMID: 26572850.

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for Us Lately?" - Defining Performance and Value at the Individual Clinician Level. Anesthesiol Clin. 2015 Dec;33(4):659-77. doi: 10.1016/j.anclin.2015.07.008. Review. PubMed PMID: 26610622.

Enkhbaatar P, Nelson C, Salsbury JR, Carmical JR, Torres KE, Herndon D, Prough DS, **Luan L, Sherwood ER.** Comparison of Gene Expression by Sheep and Human Blood Stimulated with the TLR4 Agonists Lipopolysaccharide and Monophosphoryl Lipid A. PLoS One. 2015 Dec 7;10(12):e0144345. doi: 10.1371/journal.pone.0144345. eCollection 2015. PubMed PMID: 26640957; PubMed Central PMCID: PMC4671644.

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Held JM, Litt J, **Kennedy JD, McGrane S,** Gunter OL, Rae L, Kahn SA. Surgeon-Performed Hemodynamic Transesophageal Echocardiography in the Burn Intensive Care Unit. J Burn Care Res. 2016 Jan-Feb;37(1):e63-8. doi: 10.1097/BCR.0000000000000325. PubMed PMID: 26594864.

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Johnson KB, Patterson BL, Ho YX, Chen Q, Nian H, Davison CL, **Slagle J**, Mulvaney SA. The feasibility of text reminders to improve medication adherence in adolescents with asthma. J Am Med Inform Assoc. 2015 Dec 11. pii: ocv158. doi: 10.1093/jamia/ocv158. [Epub ahead of print] PubMed PMID: 26661717.

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Kharade SV, Flores D, Lindsley CW, Satlin LM, **Denton JS.** ROMK Inhibitor Actions in the Nephron Probed with Diuretics. Am J Physiol Renal Physiol. 2015 Dec 9:ajprenal.00423.2015. doi: 10.1152/ajprenal.00423.2015. [Epub ahead of print] PubMed PMID: 26661652.

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Kla KM, Coursin DB, **Rice MJ.** Limitations of the Pupillary Reflex: Do the Eyes Have It? Anesthesiology. 2015 Dec;123(6):1480-1. doi: 10.1097/ALN.0000000000000896. PubMed PMID: 26655314.

Latuska RF, Kuhl NO, Garrett CG, **Berry JM**, Gelbard A. Severe bradycardia associated with suspension laryngoscopy. Laryngoscope. 2015 Nov 3. doi: 10.1002/lary.25590. [Epub ahead of print] PubMed PMID: 26526978.

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Rice MJ, Coursin DB. Glucose Meters: Here Today, Gone Tomorrow? Crit Care Med. 2015 Nov 17. [Epub ahead of print] PubMed PMID: 26588831.

Rooks HJ, Anthony JR, Sexton KW, Marshall AP, Guillamondegui OD, **Ehrenfeld JM**, Shack RB, Thayer WP. Transfers for Hand Surgery Correlate with Increased Reoperations for Complications. Am Surg. 2015 Nov;81(11):1177-81. PubMed PMID: 26672590.

Sandberg WS. Searching for Meaningful Topics of Improvement in Anesthesiology. Anesthesiology. 2015 Nov 5. [Epub ahead of print] PubMed PMID: 26540151.

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Stark RJ, Choi H, Koch SR, Fensterheim BA, Lamb FS, **Sherwood ER.** Endothelial cell tolerance to lipopolysaccharide challenge is induced by Monophosphoryl lipid A. Clin Sci (Lond). 2015 Dec 15. pii: CS20150592. [Epub ahead of print] PubMed PMID: 26669797.

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jcot.2015.04.004. Epub 2015 Jun 18. PubMed PMID: 26566333; PubMed Central PMCID: PMC4600831.

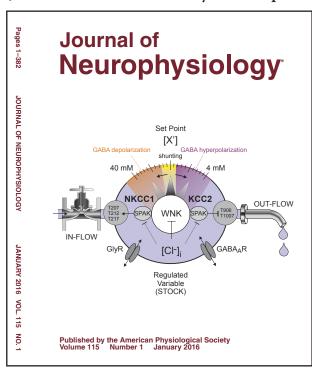
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Journal features cover art by Eric Delpire



Cover art by Eric Delpire

See pages 9-10 for ASRA apps editorial reprinted from the Jan/Feb 2016 issue of *Regional Anesthesia* and *Pain Medicine*

agement of a Pediatric Patient with Catecholamine-Induced Cardiomyopathy Undergoing Laparoscopic Paraganglioma Excision Requiring Biventricular Assist Device Support. J Cardiothorac Vasc Anesth. 2015 Aug;29(4):999-1002. doi: 10.1053/j.jvca.2014.04.007. Epub 2014 Aug 29. PubMed PMID: 25169899.

Wills TA, Baucum AJ 2nd, Holleran KM, Chen Y, Pasek JG, **Delpire E**, Tabb DL, Colbran RJ, Winder DG. Chronic intermittent alcohol disrupts the GluN2B-associated proteome and specifically regulates group I mGlu receptor-dependent long-term depression. Addict Biol. 2015 Nov 8. doi: 10.1111/adb.12319. [Epub ahead of print] PubMed PMID: 26549202.

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* Note that we will continue be referenced as "Vanderbilt University Medical Center."

COMING SOON

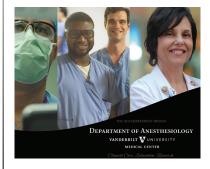
Anesthesiology Lead Shielding Inspections

The Vanderbilt Department of Radiology and Radiological Sciences will provide courtesy annual lead shielding inspections in the coming months. The Tennessee Department of Health and Environment, Radiological Health Division, requires inspection of personal protective lead shielding. VUMC requires lead shielding be inspected visually and fluoroscopically annually. Also, lead shielding inspections are a high priority with the Joint Commission, as evidenced by their July visit, as well as are verified during timely Environment of Care Surveys by VEHS, Environment of Care Teams.

The Department of Anesthesiology will be sending out an email later this month detailing how inspections will be coordinated. Stay tuned for further details.

Contact: jonathan.p.dulong@vanderbilt.edu





Contact your AA or amy.nabours@ vanderbilt.edu for a copy of the Department Profile and a department badge

Use it to

Engage. Connect. Promote!



Jon Dulong has joined the Run for Research Team to support the life-saving and life-changing work of the American Liver Foundation.* One in 10 Americans, from infants to the elderly, has liver disease. It is more important than ever to help the American Liver Foundation in their commitment to providing research, education, advocacy and support.

Click to visit Jon's personal fundraising page!



Attention Social Media Gurus

Interested in joining the Anesthesiology Social Media committee?

The committee will meet once a month to:

- Discuss development of a Facebook page
- Determine content for Twitter and Facebook
- Gather internal content
- Identify strategies for growth

Contact amy.nabours@vanderbilt.edu



Please join us for a special

Grand Rounds

COMMEMORATING 70 YEARS OF SERVICE

"Birth and Adolescence of the Department of Anesthesiology at Vanderbilt University School of Medicine"

FRIDAY, JANUARY 15, 2016 | 6:30 AM LIGHT HALL, ROOM 214

Presenter: Dr. Bradley Smith (Anesthesiology Department Chair, 1969-1993) Breakfast provided

Email department news to AnesthesiologyCommunications@vanderbilt.edu

Office of the Chair 1211 21ST AVENUE SOUTH, 722 MAB NASHVILLE, TN 37212 615-936-1595

DEPARTMENT OF ANESTHESIOLOGY

VANDERBILT WUNIVERSITY
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Creating, and Protecting, the American Society of Regional Anesthesia and Pain Medicine's Intellectual Property

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he creation and use of cognitive aids for medical practice have increased exponentially in recent years. With the evolution of available drugs, increased use of algorithms and care pathways, and expanded surgical indications for patients of greater medical complexity, the anesthesiologist's ability to recall facts is challenged, and the potential for error intensified. Complete and accurate recall diminishes further when one is fatigued or stressed. The American Society of Regional Anesthesia and Pain Medicine (ASRA) has long recognized these challenges and consequently devoted considerable financial and intellectual resources to the creation and periodic updating of evidence-based guidelines and practice advisories on topics such as periprocedure coagulopathy² and local anesthetic systemic toxicity (LAST).³ Although users appreciate an advisory's expansive content, until recently they likely have struggled with how to easily access its information short of being blessed with a photographic memory or stuffing large manuscripts into their back pocket. Acknowledging this struggle, ASRA was quick to invest in the creation of user-friendly apps for smart phones and similar devices. The society is proud of these products and endeavors to promote them across specialties and continents. Although ASRA guidelines, practice advisories, and apps are created for the benefit of medical practitioners and their patients, they are not in the public domain. These products are copyrighted, and the society aggressively protects the intellectual property from which they are derived.

The ASRA Coags app has expanded both its content and platform. Guidelines for care of the patient receiving antithrombotic or thrombolytic drugs were developed into an iOS app in spring 2013 and sold through the Apple App Store. A team from Vanderbilt University worked with ASRA to create this app, which distills recommendations derived from the extensive background manuscript² into logic trees based on drug name and clinical scenario (eg, when to safely perform a block in someone taking the drug or restart the drug after epidural catheter removal). In early 2015, ASRA released an offshoot of this work⁴ for the purpose of addressing interventional pain medicine practice scenarios, with special emphasis on management paradigms that differ from those for regional anesthetic blocks. This new app was released fall 2015 as ASRA Coags Pain to distinguish it from the renamed ASRA Coags Regional (Fig. 1). The society has expanded app availability to the Android platform via Google Play. Dual platform availability highlights our commitment to making these products available to the widest possible international audience in anticipation of the 2016 release of the updated regional anesthesia antithrombotic and thrombolytic guidelines, which have been melded with those of the European Society of Anaesthesiology.

On its surface, the process of creating and revising guidelines and practice advisories may seem inexpensive. The teams of physicians who construct these works are not paid by the society, which itself
does not seek to underwrite costs through unrestricted commercial grants. Indeed, ASRA is a standard
bearer for guideline and advisory creation free of industry support and its potential for perceived influence. The society's efforts have spanned 2 decades of updated anticoagulation guidelines and slightly
less longevity for those initiatives related to LAST,³ neurologic complications,⁵ infectious complications, and most recently pediatric regional anesthesia.⁶ Throughout this time, ASRA has been blessed
by teams of content experts who have freely given their time, expertise, and editorial skills—all without
benefit of pay or support teams of methodologists and medical writers. The products that result from
these efforts represent the writers' intellectual property. By virtue of publication in the journal, ASRA
becomes the copyright owner and thus assumes the role of protecting the authors' intellectual rights as
well as its own interests. Contrary to the "low cost" creation of advisory content, the development of apps
is an expensive undertaking. The costs of developing the Coags, LAST, and TimeOut apps are in excess
of \$30,000. Apple and Google receive a 30% commission on each sale and require ASRA to play by
their rules when it comes pricing the apps (eg, we cannot offer member discounts). To mitigate these

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FIGURE 1. The ASRA Coags for regional anesthetic applications (left) and interventional pain medicine applications (right).

restrictions, ASRA sets a reduced introductory price for the first month and urges its members to purchase before the price increases.

We hope you now have a better understanding of how ASRA develops its guidelines and cognitive aid products. But this editorial would be incomplete without a story and a warning. During development of ASRA Coags Regional, the society became aware of an iOS app for the management of patients taking or expecting to take antithrombotic and thrombolytic drugs while undergoing regional anesthesia. The American Society of Regional Anesthesia and Pain Medicine's name appeared multiple times in the app, thereby implying our endorsement. Yet nowhere in the app was there proper citation to the information "cut and pasted" from our anticoagulation guidelines²; indeed, the developers had never sought our permission or collaboration. Discovering who these plagiarists and thieves were proved not an easy task, as their US company Web site did not list principals, and their server was located in France. With the help of our attorneys and Apple, sale of the offending app was shut down within days, but not before the perpetrators grossed an estimated \$40,000 though the unauthorized use of ASRA's intellectual property.

The American Society of Regional Anesthesia and Pain Medicine is justifiably proud of its continual efforts to create and update the best evidence-based guidelines and advisories related to complex clinical issues involving our subspecialties. The society and the individuals who develop these products are honored to invest their time and resources into creating the intellectual property that fuels these initiatives and resultant cognitive aids. However, on behalf of its member volunteers and Regional Anesthesia and Pain Medicine, ASRA will use any

recourse to defend its intellectual property from those who wish to profit illegally from our good will and expertise.

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