# Table of Contents

## General Information
- Welcome from the AUA President .................................................. 3
- Welcome from Host Institutions ..................................................... 4
- Mayor’s Welcome to Chicago ........................................................... 5
- General Information ........................................................................ 6
- What to Do in Chicago ..................................................................... 9
- Restaurant Guide ............................................................................. 10
- Special Events ................................................................................ 12

## Education Sessions
- CME Information ............................................................................ 13
- Room Locator .................................................................................. 15
- Planning Committee and Program Faculty ....................................... 17
- Program Schedule .......................................................................... 20
- Aligned Meeting Day ...................................................................... 27
- Scholars’ Program ........................................................................... 29
- Clinical Research Consortium ......................................................... 34

## Abstracts
- Poster General Information ............................................................ 35
- Poster Room Diagram .................................................................... 37
- Abstract Award Winners .................................................................. 38
- Moderated Poster Discussion Session I ......................................... 40
- Moderated Poster Discussion Session II ........................................ 65
- Abstract Category Index .................................................................. 90
- Abstract Presenter Index ................................................................ 109
- 2018 Abstract Reviewers ................................................................. 116
Welcome to the AUA 2018 Annual Meeting!

Welcome to the AUA 2018 Annual Meeting, co-hosted by Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, in Chicago, Illinois. The Education Advisory Board (EAB), Scientific Advisory Board (SAB), and the Host Institution Chairs, Drs. Robert R. Gaiser, Y.S. Prakash, Jeffrey L. Apfelbaum, Peter Nagele and Charles W. Hogue, have organized a thought-provoking program addressing the latest breakthroughs and trends in academic anesthesia and the practice as a whole.

Here are some of the highlights of this year’s Annual Meeting:

**Thursday, April 26**
The EAB Program Session I: Motivation, Metacognition, and Self-Regulation will discuss the scientific applications of motivation, metacognition, and self-regulation in academic anesthesia. Scientific Advisory Board (SAB) Oral Sessions I and II will cover original research findings in the clinic and laboratory. Be present for the first of two Moderated Poster Discussion Sessions to discuss and exchange ideas with the leading experts in anesthesia education and research. The President’s Panel will address sepsis with Sepsis Revisited — Important Updates. Remember to sign-up to attend the Social Event Reception, hosted by Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, at the Art Institute of Chicago.

**Friday, April 27**
Host Program Panels I and II will highlight pioneering programs offered at Northwestern University Feinberg School of Medicine and The University of Chicago Medicine. Topics for the EAB Program Panel II: The Science of Longitudinal Assessment will include Knowledge Over the Continuum, Information as a Pedagogical Tool, and The Effect of Time on Technical Skills. Join your colleagues for the second Moderated Poster Discussion Session and learn about the latest research shaping the future of anesthesiology at the SAB Oral Sessions III and IV.

**Saturday, April 28 – Aligned Meeting Day at the IARS 2018 Annual Meeting and International Science Symposium**
I encourage you to stay an additional day to attend the education sessions at the 2018 Aligned Meeting Day, available complimentary with your AUA registration fee.

Aligned Meeting Day Sessions include:

- **T.H. Seldon Memorial Lecture:** Personalizing Health Care in the Era of Big Data with Dr. Jeffrey R. Balser – 7:30 am – 9:00 am
- **Alignment Symposium:** AUA: Mitochondria and Bioenergetics in Health and Disease: It’s Not Just A Power Failure – 9:30 am – 12:00 pm
- **IARS Scholars’ Program** – 9:30 am – 6:10 pm – Requires an additional $50 fee
- **Problem-Based Learning Discussion:** AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee? – 12:00 pm – 1:00 pm; and 2:30 pm – 3:30 pm
- **Problem-Based Learning Discussion:** AUA: Getting to the Heart of the Matter: Perioperative-Focused Cardiac and Pulmonary Ultrasound, and The Hemodynamically Unstable Patient – 4:00 pm – 5:00 pm
- **IARS, AUA, and SOCCA Alignment Reception** – 6:00 pm – 7:30 pm

This stimulating program offers opportunities to connect with your colleagues in anesthesiology. I am confident that you will find this meeting to be a rewarding experience. Make sure to explore and enjoy your time in the beautiful city of Chicago!

Sincerely,

Jeanine P. Wiener-Kronish, MD
President, Association of University Anesthesiologists (AUA)
Welcome from
Northwestern University Feinberg School of Medicine
and The University of Chicago Medicine

Dear Colleagues:

The Northwestern University Feinberg School of Medicine and The University of Chicago Medicine are delighted to host the AUA 2018 Annual Meeting. The Host Committee and AUA Leadership have assembled a dynamic program, and certainly hope you will find the meeting impactful and rewarding, and make the most out of your visit to Chicago, Illinois.

Chicago is an incubator for innovation, education, and cultural diversity. As home to some of the world’s largest skyscrapers, art institutions, colorful neighborhoods, and exceptional cuisine, it has endless attractions to see. Take a tour of the historic 110 - story Willis Tower and visit the Field Museum, Museum of Contemporary Art, or the Adler Planetarium. Feel welcome to explore and learn from the wonderful city of Chicago.

As a world-class research institution and a neighborhood health care provider, The University of Chicago Medicine serves as a leader in addressing the world’s most pressing medical, ethical, political, and economic challenges. This year, Drs. Laurie Zoloth and Wendy L. Freedman will speak during the Host Program Panel, and will provide valuable insight into their experiences at The University of Chicago. Dr. Zoloth is an internationally recognized leader in religious studies, spanning research specialties in bioethics and Jewish studies. Dr. Freedman is a world-renowned astronomer and cosmologist who has served as co-leader of the Hubble Space Telescope Key Project and initiated the Giant Magellan Telescope Project.

The Northwestern University Feinberg School of Medicine is a leader in research initiatives and global outlook, committed to improving human health through education and discovery. At this year’s meeting, the Host Program Panel speakers, Drs. A. Vania Apkarian and John Rogers, will share their knowledge from the Northwestern University Feinberg School of Medicine, presenting on Brain Mechanisms of Chronic Pain and Novel Therapeutic Opportunities and Wireless Skin-Like Sensors of Physiological Status. Dr. Apkarian has studied pain over twenty years becoming one of the most highly funded researchers in this field. His work addresses important neuroscience concerns including cortical dynamics of pain as well as brain plasticity. Dr. Rogers’ research seeks to discover the fundamental characteristics of “soft” materials and aims to control and induce novel electronic and photonic responses in these materials.

Thank you for your attendance at this important meeting. We look forward to seeing you in Chicago, Illinois!

Sincerely,

Jeffrey L. Apfelbaum, MD
Professor of Anesthesia & Critical Care; The University of Chicago Medicine; Co-Chair, Host Institution, AUA 2018 Annual Meeting

Peter Nagele, MD, MSc
Professor of Anesthesia & Critical Care, Chair, Department of Anesthesia & Critical Care, The University of Chicago Medicine; Co-Chair, Host Institution, AUA 2018 Annual Meeting

Charles W. Hogue, MD
Chair, Department of Anesthesiology; James E. Eckenhoff, Professor of Anesthesiology, Northwestern University Feinberg School of Medicine, Co-Chair, Host Institution, AUA 2018 Annual Meeting
Dear Friends:

As Mayor, and on behalf of the City of Chicago, I am pleased and proud to welcome all of those gathered for the International Anesthesia Research Society, Association of University Anesthesiologists, & the Society of Critical Care Anesthesiologists’ 2018 Annual Meetings.

Since their formation – the oldest dating back nearly a century – the International Anesthesia Research Society (IARS), Association of University Anesthesiologists (AUA), and the Society of Critical Care Anesthesiologists (SOCCA) have been committed to creating dynamic spaces for the support and cultivation of anesthesiologists, scientists, physicians and other professionals dedicated to better understanding anesthesia practice and application. Home to thousands of members worldwide, IARS, AUA, and SOCCA’s annual meeting unites leaders across disciplines dedicated to improving patient care through involved, innovative research. Every member stands committed to augmenting the role of anesthesia in medicine and interpreting methodology and outcomes in relation to our collective health. IARS, AUA, and SOCCA play an integral role in impacting education, informing policy, and enlightening the public.

This year’s meeting presents a special opportunity to come together to discuss recent innovations in the field while also remaining focused on all the advancements left to uncover. The 2018 Meeting aims to promote exposure to different techniques, tools, and social strategies that build upon new ways to approach studying and researching anesthesia. In addition, interactive sessions and thoughtful exhibits will allow attendees to explore growing trends of scientific research and medical practices to forge a place at the forefront of education and implementation. All of Chicagoland’s residents benefit year-round from the important work that the groups’ diverse membership do day in and day out. I commend all associated with IARS, AUA, and SOCCA for demonstrating excellence and dedication in your field, and for being an invaluable resource for the global science and medical communities.

After learning, exchanging ideas, and networking, it is my hope that those visiting our great city take time to experience some of the special places in Chicago. Our historic neighborhoods, iconic skyline, and incredible lakefront invite you to explore all Chicago has to offer. I hope you have a chance to sample our distinguished restaurants, tour our great universities, and visit our world-class museums during your stay.

Best wishes for an enjoyable and informative event, and much continued success.

Sincerely,

[Rahm Emanuel]
Mayor
General Information

Annual Meeting Location
AUA 2018 Annual Meeting Headquarters Hotel
Hyatt Regency Chicago
151 East Wacker Drive
Chicago, Illinois, USA, 60601
312-565-1234

Annual Meeting Registration
Registration Hours
Thursday, April 26, 2018  . . . . . . . . . . . . . . 6:00 am – 6:00 pm
Friday, April 27, 2018  . . . . . . . . . . . . . . . . 6:00 am – 6:00 pm

Registration Materials
Attendee registration materials will include a printed room locator for the AUA 2018 Annual Meeting, listing all sessions and event locations.

Name Badges
Your registration materials include your name badge which you must wear at all times while attending events in the hotel. Only attendees with name badges will be admitted to meeting rooms. If you misplace your badge, please visit the Registration Desk for a replacement.

Registration Fee
The AUA 2018 Annual Meeting registration fee includes access to the EAB Panels, Host Program Sessions, two lunches, all Moderated Poster Discussion Sessions, President’s Panel, and SAB Oral Sessions. The AUA Social Event Reception and Scholars’ Program require a separate, non-refundable fee to sign-up. Check at registration for availability.

Annual Meeting Registration Cancellation Policy
The registration cancellation deadline was Thursday, April 12, 2018. Registrations canceled on or before Thursday, April 12, were refunded, minus a $50 processing charge.

Poster Room Hours
The Poster Room is located in Riverside West, Exhibit Level, East Tower of the hotel.
Thursday, April 26  . . . . . . . . . . . . . . . . . . 6:00 am – 5:00 pm
Friday, April 27  . . . . . . . . . . . . . . . . . . . . . 6:00 am – 5:00 pm

Poster Pickup Booth Hours
The poster pickup booth is located in Riverside West, Exhibit Level, East Tower of the hotel.
Thursday, April 26  . . . . . . . . . . . . . . . . . . 6:00 am – 2:00 pm
Friday, April 27  . . . . . . . . . . . . . . . . . . . . . 6:00 am – 2:00 pm
General Information, continued

Services

Speaker Ready Room
The Speaker Ready Room is located in Field, Third Floor, West Tower of the hotel.
Thursday, April 26 ...................... 6:00 am – 6:00 pm
Friday, April 27 ......................... 6:00 am – 6:00 pm

Abstracts List and Event Search
Search all sessions, abstracts and speakers for the IARS, AUA and SOCCA 2018 Annual Meetings on the event site at www3.aievolution.com/ars1801.

Internet Availability
Complimentary wireless internet is available in the conference area and all AUA scheduled meeting rooms. Open your wifi settings and choose the network labeled, “Hyatt Conference.” When prompted for an access code, enter “AM2018.” Please no streaming or video downloads.

Official App of the IARS, AUA and SOCCA 2018 Annual Meetings
The IARS, AUA and SOCCA will feature an interactive app, IARS Mtgs, allowing you to view the complete event schedule, explore all sessions, and get detailed presenter information. Participate in the interactive games on the app each day and connect with your peers and colleagues. Download IARS Mtgs, available for iPhone, iPad and Android in the Apple and Google Play stores.

Social Media
We want to see what you’re getting out of the meeting, whether it’s meeting another doctor for the first time, the food at our special events, or an interesting idea you heard at a session. Share that post on social media and use the hashtag #AUA2018.

Treasure Hunt
Participate in our IARS, AUA and SOCCA 2018 Annual Meetings Treasure Hunt for a chance to win gift cards! Download the IARS Mtgs app from the app store to play. Complete all the IARS AUA SOCCA Treasure Hunt challenges and you’ll be entered to win one of three gift cards. The deadline to complete the Treasure Hunt is Tuesday, May 1 at 12:00 pm. The Treasure Hunt winners will be notified via email following the meeting.

Trivia Game
Play the IARS, AUA and SOCCA 2018 Annual Meeting Trivia Game each day for a chance to win prizes. Each game consists of 12 multiple-choice trivia questions, each with three options. Questions get harder as the game progresses and you only have 10 seconds to select your answer. Participants who get the most correct answers in a game will be entered in a raffle for a chance to win prizes and bragging rights. Check the leaderboard in Crystal Foyer to compare your progress against other attendees.

continued on page 8
Information

Dress Code
The dress code for the AUA 2018 Annual Meeting is business/business casual.

Electronic Devices
Please silence all electronic devices during education sessions. Videotaping and recording of sessions is not allowed without the written permission from the presenter(s).

Media Release Policy
By attending the AUA 2018 Annual Meeting or entering in the facility in which the AUA 2018 Annual Meeting takes place, you agree that AUA and/or third parties authorized by AUA may photograph or record your likeness, image, name, voice, and/or words, and may publish, display, reproduce, copy, and distribute your likeness, image, name, voice, and/or words for promotional, educational, or membership activities worldwide in all forms of media now known or later developed, including but not limited to advertising, training, websites, presentations, and marketing materials. You further acknowledge that AUA and/or third parties authorized by AUA shall have the right, but not the obligation, to identify you in connection with such media by name and/or affiliation.

Recording (Audio, Video, and Still Photography)
Copyright of the AUA 2018 Annual Meeting program is owned by AUA. AUA reserves the rights to all recordings or reproductions of presentations at this Meeting and all AUA meetings and symposia. Any photography, filming, taping, recording, or reproduction in any medium of any of the programs presented at the AUA 2018 Annual Meeting without the express written consent of AUA is strictly forbidden. Exception: Non-flash photography and audio or video recording using hand-held equipment, for strictly personal, social, or noncommercial use, are permitted if not disruptive, as determined by AUA.

No Smoking Policy
Smoking is not permitted at AUA events. We respectfully request that you abide by our smoke-free policy.

OpenAnesthesia SelfStudyPlus Info Booth
The first adaptive learning app for anesthesiologists and residents, OpenAnesthesia SelfStudyPLUS personalizes learning using novel and patented algorithms that assess and adapt to individual needs. This easy to use app provides access to over 1700 questions curated by teaching physicians at top hospitals, while fitting into the most demanding schedules. Physicians can use SelfStudyPLUS to conveniently learn CME. OpenAnesthesia is proudly sponsored by the IARS. Visit the info booth in the Regency Foyer A, West Tower in the hotel.

SmartTots Info Booth
Stop by the SmartTots booth! You’ll find a plethora of pediatric anesthesia research resources. Grab the latest info, make a donation, win a bottle of SmartTots wine, enjoy some delicious San Franciscan chocolate and more! The SmartTots info booth is located in the Regency Foyer A, Ballroom Level, West Tower.

Special Services
If you are in need of any special services, please contact AUA at auameetings@iars.org or at the Registration Desk in the Crystal Foyer, Lobby Level, West Tower.
What to Do in Chicago

Explore the city of Chicago and experience the rich culture and historical attractions. As a leader in the arts, Chicago is widely known for its state-of-the-art museums and thrives on the diversity of its neighborhoods and visitors.

Be sure to visit historical sites honoring U.S. veterans, including the National Veterans Art Museum and the John Alexander Logan Monument, and the largest collection of Impressionist and Post-Impressionist paintings outside the Louvre, at the Art Institute of Chicago.

For the more adventurous, stop by Willis Tower (formally known as the Sears Tower) for Skydeck Chicago and view the city at 1,300 feet while suspended from The Ledge, a clear glass box. Spark your curiosity and visit The Field Museum, home of Sue, the largest and most complete T. rex in the world. Indulge in the many museums, comedy shows, and live music Chicago has to offer plus so much more.

For more information on what to do in Chicago, including cultural events, historic sites, places to eat, and landmarks, please visit choosechicago.com.

Travel Information

Chicago Regional Airports

Airports: O’Hare International Airport (airport code: ORD) and Midway International Airport (airport code: MDW). Both airports offer U.S. and international flights daily.

O’Hare International Airport is 18 miles from airport to hotel or a 45-minute drive. Midway International Airport is 12 miles from airport to hotel or a 35-minute drive.

Both airports offer a variety of options for cabs, airport shuttles, and car rentals. Plus, O’Hare International Airport and Midway International Airport are both accessible via the Chicago Transit Authority (CTA) “L” train. The CTA Blue Line connects directly to O’Hare International Airport and the CTA Orange Line connects directly to Midway International Airport.

Visit choosechicago.com/plan-your-trip/transportation for more information on fare, train schedules, and routes.
Restaurant Guide

Restaurants at the Hyatt Regency Chicago

American Craft Kitchen & Bar
American (Traditional), $$
Hours: 6:00 am – 3:00 pm;
5:00 pm – 11:00 pm

BIG Bar
Lounges, American (New), $$
Hours: From 5:00 pm

The Living Room
Tapas/Small Plates, Cocktail Bars, $$
Hours: Tues-Sat 5:00 pm –
11:00 pm

Stetsons Modern Steak + Sushi
Sushi Bars, Steakhouses, $$$
Hours: Tues-Sat 5:00 pm –
10:00 pm

Market Chicago
Coffee & Tea, $$
Hours: 24-hours a day

Restaurants near the Hyatt Regency Chicago

Wildberry Pancakes and Café
Breakfast & Brunch, American (New), $$
130 E Randolph St
312-938-9777
Distance from hotel: 5 min (0.2 mi.)

Potbelly Sandwich Shop
Sandwiches, Fast Food, Soup, $
111 E Wacker Dr
312-861-0013
Distance from hotel: 3 min (0.2 mi.)

The Purple Pig
Tapas/Small Plates, Mediterranean, $$
500 N Michigan Ave
312-464-1744
Distance from hotel: 8 min (0.4 mi.)

Lou Malnati’s Pizzeria
Pizza, $$
439 N Wells St
312-828-9800
Distance from hotel: 15 min (0.8 mi.)

Giordano’s
Pizza, $$
130 E Randolph St
312-616-1200
Distance from hotel: 5 min (0.2 mi.)

Magnolia Bakery
Bakeries, Desserts, Cupcakes, $$
108 N State St
312-346-7777
Distance from hotel: 10 min (0.5 mi.)

Catch 35
Seafood, $$$
135 W Wacker Dr
312-346-3500
Distance from hotel: 9 min (0.4 mi.)

Barrio
Mexican, Bars, American (New), $$
65 W Kinzie St
312-941-9900
Distance from hotel: 14 min (0.7 mi.)

Prime & Provisions
American (Traditional), Seafood, Steakhouses, $$
222 N La Salle St
312-726-7777
Distance from hotel: 12 min (0.6 mi.)

Naf Naf Grill
Middle Eastern, Falafel, Salad, $
326 N Michigan Ave
312-263-0019
Distance from hotel: 5 min (0.2 mi.)

MingHin Cuisine
Dim Sum, Cantonese, Asian Fusion, $$
333 E Benton Pl Ste 300
312-228-1333
Distance from hotel: 5 min (0.2 mi.)

Quartino Ristorante
Italian, Wine Bars, $$
626 N State St
312-695-5000
Distance from hotel: 13 min (0.6 mi.)

continued on page 11
Restaurants near the Hyatt Regency Chicago, continued

Nando’s PERi-PERi
Portuguese, South African, Chicken Shop, $$
22 S Wabash Ave
312-589-7432
Distance from hotel: 10 min (0.5 mi.)

Brightwok Kitchen
Asian Fusion, Gluten-Free, Vegetarian, $$
21 E Adams St
312-583-0729
Distance from hotel: 13 min (0.6 mi.)

Cochon Volant Brasserie
French, Brasseries, $$
100 W Monroe St
312-754-6560
Distance from hotel: 14 min (0.7 mi.)

Yolk – Streeterville
Breakfast & Brunch, American (Traditional), Comfort Food, $$
355 E Ohio St
312-822-9655
Distance from hotel: 9 min (0.4 mi.)

Coffee near the Hyatt Regency Chicago

Two Zero Three
Coffee & Tea, Wine Bars, $
203 North Wabash Ave
312-940-4808
Distance from hotel: 8 min (0.4 mi.)

Stan’s Donuts & Coffee
Donuts, Coffee & Tea, $
181 N Michigan Ave
312-729-5480
Distance from hotel: 5 min (0.2 mi.)

Intelligentsia Coffee
Coffee & Tea, $
53 E Randolph St
312-920-9332
Distance from hotel: 6 min (0.3 mi.)

Caffe RoM
Coffee & Tea, Sandwiches, Gelato, $
180 N Stetson Ave
312-948-888
Distance from hotel: 3 min (0.1 mi.)

Other Restaurants of Note

Dusek’s Board & Beer
Bars, American (New), Breakfast & Brunch, $$$$
1227 W 18th St
312-526-385
Distance from hotel: (4.6 mi.)

Roister
American (New), $$$$ 951 W Fulton Market
Distance from hotel: 12 min car ride (2.1 mi.)

Gibsons Bar & Steakhouse
Steakhouses, Wine Bars, $$$
1028 N Rush St
312-266-8999
Distance from hotel: 8 min car ride (1.5 mi.)

Pequod’s Pizzeria
Pizza, $$
2207 N Clybourn Ave
773-327-1512
Distance from hotel: 25 min car ride (5.0 mi.)
Special Events

Thursday, April 26
AUA Social Event Reception
7:00 pm – 10:00 pm, Chicago Stock Exchange Trading Room, Art Institute of Chicago (111 S. Michigan Avenue)
The AUA Social Event Reception, presented by Host Institutions Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, will take place at the Art Institute of Chicago, the second largest art museum in the United States with nearly 300,000 works in its permanent collection. The event includes dinner and beverages, as well as access to the museum and docents.

Reception Schedule:
7:00 pm – 8:20 pm:  Reception and Dinner
8:20 pm – 8:40 pm:  Welcome from Host Institutions and Docent Presentation on the Art Institute of Chicago Trading Room
8:40 pm – 10:00 pm:  Access to Modern and American Art Wings and Docents

Pre-registration and an additional fee is required to attend this special event. Check at registration onsite for availability.

Friday, April 27
IARS, AUA, SOCCA & eSAS Scholars’ Program Mentoring and Networking Reception
6:00 pm – 7:00 pm, Hyatt Regency Chicago (151 E. Wacker Drive)
The Scholars’ Program Mentor-Trainee Reception offers trainees opportunities to be paired with mentors and network with leaders in anesthesiology.

This reception is part of the Scholars’ Program, which requires pre-registration and a $50 registration fee.

Saturday, April 28
IARS, AUA and SOCCA Alignment Reception
6:00 pm – 7:30 pm, Hyatt Regency Chicago (151 E. Wacker Drive)
Celebrate the convergence of the IARS, AUA, and SOCCA Annual Meetings and meet pioneers in all subspecialties shaping the future of anesthesiology during the Aligned Meeting Day at the IARS 2018 Annual Meeting and International Science Symposium!

This reception is part of the Aligned Meeting Day and available to AUA registrants complimentary. Pre-registration is required.

Scholars’ Program Breakfast with IARS, AUA and SOCCA Leadership and Mentors
6:15 am – 7:15 am
Network with the IARS, AUA and SOCCA Leadership and your mentor over breakfast.

This breakfast is part of the Scholars’ Program, which requires pre-registration and a $50 registration fee.
Activity Overview
Findings from new research and the evolution of anesthesiology practice based on emerging evidence create an inherent gap between existing practice and new practice models. The purpose of the Association of University Anesthesiologists (AUA) 2018 Annual Meeting is to provide an evidence-based and clinically-oriented educational activity that will improve competence and performance in the anesthesiology specialty, resulting in improved patient care and outcomes.

Target Audience
The AUA 2018 Annual Meeting is designed to address the continuing medical education needs of anesthesiologists, anesthesiologists-in-training, and anesthesia investigators in academic, clinical, and laboratory settings.

Educational Objectives
As a result of participating in this live CME activity, learners will be able to:

• Describe the latest developments in education research, measuring knowledge in the field of anesthesia.
• Consider recent research findings relative to anesthesiology and evaluate their application to the learner’s professional practice.
• Develop strategies for integrating new knowledge and behaviors into their professional practice.
• Evaluate gaps in their knowledge, behavior, and patient outcomes that may result in a need for additional education and training.

Accreditation Statement
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 International Anesthesia Research Society (IARS) and the Association of University Anesthesiologists (AUA). The IARS is accredited by the ACCME to provide continuing medical education for physicians.

CME Credit
The International Anesthesia Research Society (IARS) designates this live activity for a maximum of 14 AMA PRA Category 1 Credits.™ Physicians should claim only the credit commensurate with the extent of their participation in the activity.

continued on page 14
Continuing Medical Education (CME) Information, continued

Claiming CME Credit
The IARS will provide online program evaluation and session tracking to support claiming CME credit beginning on Wednesday, May 2. Meeting participants will have 90 days to claim CME credit.

Maintenance of Certification in Anesthesiology Program® (MOCA®)
Physicians wishing to have credits from this educational activity reported to the ABA for the ABA MOCA® Program may do so by entering their eight digit ABA identification number when claiming CME credit. The IARS forwards credits to the ABA on a quarterly basis. Sessions approved for ABA MOCA 2.0® Patient Safety CME credit are designated by •.

Disclosure
The International Anesthesia Research Society (IARS) makes every effort to develop CME activities that are independent, objective, and scientifically balanced presentations of information. The IARS has implemented mechanisms requiring everyone in a position to control content to disclose all financial relationships with commercial interests. Disclosure of any or no relationships is made available in advance of all educational activities. The IARS evaluates, and if necessary, resolves any conflicts of interest prior to the start of the activity. Individuals who refuse or fail to provide the required disclosures are disqualified from being a planning committee member, teacher, or author of CME, and cannot have control of, or responsibility for, the development, management, presentation or evaluation of the CME activity.

Disclaimer
The information provided in this CME activity is for continuing education purposes only and is not meant to substitute for the independent medical judgment of a healthcare provider relative to diagnostic and treatment options of a specific patient’s medical condition.

Commercial Support
This CME activity is supported entirely by the Association of University Anesthesiologists (AUA). There is no commercial support for this activity.
## Room Locator

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>SESSION NAME</th>
<th>ROOM NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, April 26</td>
<td>6:00 am – 6:00 pm</td>
<td>Registration</td>
<td>Crystal Foyer, Lobby Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>8:00 am – 9:00 am</td>
<td>Welcome from AUA President and Host Institution Chairs</td>
<td>Regency A, Ballroom Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>9:00 am – 10:30 am</td>
<td>Educational Advisory Board (EAB) Program Panel I: Motivation, Metacognition, and Self-Regulation</td>
<td>Regency A, Ballroom Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>10:45 am – 11:45 am</td>
<td>Scientific Advisory Board (SAB) Oral Session I</td>
<td>Regency A, Ballroom Level, West Tower</td>
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<td></td>
<td>11:45 am – 12:45 pm</td>
<td>All Attendee Lunch</td>
<td>Crystal AB, Lobby Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>11:45 am – 12:45 pm</td>
<td>President’s Lunch – &lt;em&gt;Invite Only&lt;/em&gt;</td>
<td>Crystal C, Lobby Level, West Tower</td>
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<tr>
<td></td>
<td>12:45 pm – 2:15 pm</td>
<td>Moderated Poster Discussion Session I</td>
<td>Riverside West, Exhibit Level, East Tower</td>
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<tr>
<td></td>
<td>2:15 pm – 2:30 pm</td>
<td>Break</td>
<td></td>
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<tr>
<td></td>
<td>2:30 pm – 3:30 pm</td>
<td>SAB Oral Session II</td>
<td>Regency A, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>3:30 pm – 4:00 pm</td>
<td>Break in Poster Room</td>
<td>Riverside West, Exhibit Level, East Tower</td>
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<tr>
<td></td>
<td>4:00 pm – 6:00 pm</td>
<td>President’s Panel: &lt;em&gt;Sepsis Revisited: Important Updates&lt;/em&gt;</td>
<td>Regency A, Ballroom Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>7:00 pm – 10:00 pm</td>
<td>AUA Social Event Reception*</td>
<td>The Chicago Stock Exchange Room, Art Institute of Chicago</td>
</tr>
<tr>
<td>Friday, April 27</td>
<td>6:00 am – 6:00 pm</td>
<td>Registration</td>
<td>Crystal Foyer, Lobby Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>8:00 am – 9:15 am</td>
<td>AUA Host Program Panel I</td>
<td>Regency A, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>9:15 pm – 9:30 pm</td>
<td>Break</td>
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<tr>
<td></td>
<td>9:30 am – 10:45 am</td>
<td>AUA Host Program Panel II</td>
<td>Regency A, Ballroom Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>11:00 am – 12:30 pm</td>
<td>AUA EAB Program Panel II: The Science of Longitudinal Assessment</td>
<td>Regency A, Ballroom Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>12:30 am – 1:30 pm</td>
<td>All Attendee Lunch &amp; Early-Stage Faculty, Fellow, Resident, and Medical Student Lunch – (tables will be reserved)</td>
<td>Crystal AB, Lobby Level, West Tower</td>
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<tr>
<td></td>
<td>12:30 am – 1:30 pm</td>
<td>EAB Committee Meeting – &lt;em&gt;Invite Only&lt;/em&gt;</td>
<td>Addams, Third Floor, West Tower</td>
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<tr>
<td></td>
<td>12:30 am – 1:30 pm</td>
<td>SAB Committee Meeting – &lt;em&gt;Invite Only&lt;/em&gt;</td>
<td>Wright, Third Floor, West Tower</td>
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<tr>
<td></td>
<td>1:30 pm – 3:00 pm</td>
<td>AUA Moderated Poster Discussion Session II</td>
<td>Riverside West, Exhibit Level, East Tower</td>
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<tr>
<td></td>
<td>3:00 pm – 3:15 pm</td>
<td>Break</td>
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<tr>
<td></td>
<td>3:15 pm – 4:15 pm</td>
<td>AUA SAB Oral Session III</td>
<td>Regency A, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>4:15 pm – 4:30 pm</td>
<td>Break</td>
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<tr>
<td></td>
<td>4:30 pm – 5:30 pm</td>
<td>AUA SAB Oral Session IV</td>
<td>Regency A, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>5:30 pm – 6:00 pm</td>
<td>AUA Annual Business Meeting</td>
<td>Regency A, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>6:00 pm – 7:00 pm</td>
<td>IARS, AUA, SOCCA and eSAS Scholars’ Program Mentoring and Networking Reception*</td>
<td>The Living Room &amp; Bar, Skyway Level, West Tower</td>
</tr>
</tbody>
</table>

*Ticketed Event. Check at the Registration Desk for availability.*
<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>SESSION NAME</th>
<th>ROOM NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday, April 28</td>
<td>6:00 am – 6:00 pm</td>
<td>Registration</td>
<td>Crystal Foyer, Lobby Level, West Tower</td>
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<tr>
<td></td>
<td>6:15 am – 7:15 am</td>
<td>Scholars’ Program Breakfast with IARS, AUA, &amp; SOCCA Leadership and Mentors*</td>
<td>Regency C, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>7:30 am – 9:00 am</td>
<td>Opening General Session and T.H. Seldon Memorial Lecture: Personalizing Healthcare in the Era of Big Data</td>
<td>Crystal AB, Lobby Level, West Tower</td>
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<td></td>
<td>9:00 am – 9:30 am</td>
<td>Break</td>
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<tr>
<td></td>
<td>9:30 am – 9:40 am</td>
<td>Scholar-01: Introduction to Scholars’ Program and eSAS*</td>
<td>Regency C, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>9:30 am – 12:00 pm</td>
<td>Symposium-01: AUA: Mitochondria and Bioenergetics in Health and Disease: It’s Not Just A Power Failure!</td>
<td>Crystal C, Lobby Level, West Tower</td>
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<tr>
<td></td>
<td>9:40 am – 10:30 am</td>
<td>Scholar-02: Moving from Insight to Research Program and What This is All About*</td>
<td>Regency C, Ballroom Level, West Tower</td>
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<td></td>
<td>10:45 am – 12:15 pm</td>
<td>Problem-Based Learning Discussion-05: AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee?**</td>
<td>Dusable, Third Floor, West Tower</td>
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<td></td>
<td>12:00 pm – 1:00 pm</td>
<td>Lunch on Your Own</td>
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<td></td>
<td>12:30 pm – 2:00 pm</td>
<td>Scholar-04: Lunch Session: Resilience Personified: Transitioning from Trainee to Junior Faculty and Beyond*</td>
<td>Regency C, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>2:15 pm – 3:45 pm</td>
<td>Scholar-05: Moving Fluidly Across the Translational Spectrum: Current Opioid Crisis*</td>
<td>Regency C, Ballroom Level, West Tower</td>
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<tr>
<td></td>
<td>2:30 pm – 3:30 pm</td>
<td>Problem-Based Learning Discussion-09: AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee?**</td>
<td>Ogden, Third Floor, West Tower</td>
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<td></td>
<td>3:30 pm – 4:00 pm</td>
<td>Break</td>
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<td></td>
<td>4:00 pm – 5:00 pm</td>
<td>Scholar-06: Priorities for Developing Researchers: Perspectives from the NIH and IARS*</td>
<td>Regency C, Ballroom Level, West Tower</td>
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<td></td>
<td>4:00 pm – 5:00 pm</td>
<td>Problem-Based Learning Discussion-10: AUA: Getting to the Heart of the Matter: Perioperative Focused Cardiac and Pulmonary Ultrasound, and The Hemodynamically Unstable Patient*</td>
<td>Dusable, Third Floor, West Tower</td>
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<tr>
<td></td>
<td>5:10 pm – 6:10 pm</td>
<td>Scholar-07: From the Editor’s Desk: A No-Nonsense Guide to Successful Publication*</td>
<td>Regency C, Ballroom Level, West Tower</td>
</tr>
<tr>
<td></td>
<td>6:00 pm – 7:30 pm</td>
<td>IARS, AUA &amp; SOCCA Alignment Reception</td>
<td>Regency D &amp; Foyer, Ballroom Level, West Tower</td>
</tr>
</tbody>
</table>

*Ticketed Event. Check at the Registration Desk for availability.
Planning Committee

Jeffrey L. Apfelbaum, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; The University of Chicago Medicine, Chicago, Illinois

Thomas A. Cooper
Executive Director, IARS
San Francisco, California

Robert R. Gaiser, MD
Chair, Educational Advisory Board
Professor and Chair, Anesthesiology, University of Kentucky Health Care, Lexington, Kentucky

Charles W. Hogue, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Chair, Department of Anesthesiology, and James E. Eckenhoff Professor of Anesthesiology, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Peter Nagele, MD, MSc
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; Chair, Department of Anesthesia and Critical Care, The University of Chicago Medicine, Chicago, Illinois

Y.S. Prakash, MD, PhD
Chair, Scientific Advisory Board
Professor of Anesthesiology and Physiology; Chair, Department of Physiology and Biomedical Engineering, Department of Anesthesiology and Perioperative Medicine, Mayo Clinic College of Medicine and Science, Rochester, Minnesota

Jeanine P. Wiener-Kronish, MD
President, Association of University Anesthesiologists
Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia, Department of Anaesthesia, Critical Care and Pain Medicine, Harvard Medical School, Anesthetist-in-Chief, Massachusetts General Hospital, Boston, Massachusetts

Program Faculty

John C. Alverdy, MD, FACS
Sarah and Harold Lincoln Thompson Professor of Surgery, Executive Vice Chair, Department of Surgery, The University of Chicago Medicine, Chicago, Illinois

Jeffrey L. Apfelbaum, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; The University of Chicago Medicine, Chicago, Illinois

A. Vania Apkarian, PhD
Professor of Physiology, Anesthesiology and Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Keith H. Baker, MD, PhD
Associate Professor, Anaesthesia, Harvard Medical School, Vice Chair for Education, Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Wesley B. Baker, MD
University of Pennsylvania, Philadelphia, Pennsylvania

Colleen Bartman, PhD Candidate
Department of Anesthesiology, University of Colorado Denver, Aurora, Denver

David R. Busch, PhD
Assistant Professor, Department of Anesthesiology & Pain Management and Neurology & Neurotherapeutics, University of Texas Southwestern, Dallas, Texas

continued on page 18
Program Faculty, continued

Lucy Chen, MD
Associate Professor of Anaesthesia, Harvard Medical School; Massachusetts General Hospital, Boston, Massachusetts

Lisa Eisler, MD
Columbia University Medical Center, New York, New York; Junior Faculty Travel Award Winner in Pediatric Anesthesia

Holger Eltzschig, MD, PhD
Chairman and Professor, Department of Anesthesiology, McGovern Medical School, The University of Texas Health Sciences Center at Houston, Houston, Texas

Kevin Emr, MD
Albany Medical Center, Albany, New York; Junior Faculty Travel Award Winner in Perioperative Medicine

Wendy L. Freedman, PhD
John & Marion Sullivan University Professor of Astronomy and Astrophysics, Department of Astronomy and Astrophysics, The University of Chicago Medicine, Chicago, Illinois

Robert R. Gaiser, MD
Chair, Educational Advisory Board
Professor and Chair, Anesthesiology, University of Kentucky Health Care, Lexington, Kentucky

Ann Harman, PhD
Chief Assessment Officer, The American Board of Anesthesiology, Raleigh-Durham, North Carolina

Judith Hellman, MD
Professor and Vice Chair for Research, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California

Paul Garcia, MD, PhD
Emory University School of Medicine, Atlanta, Georgia

Peter A. Goldstein, MD
Associate Professor of Medical Ethics in Medicine, Joan and Sanford I. Weill Department of Medicine, Weill Cornell Medical College, New York, New York

Charles W. Hogue, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Chair, Department of Anesthesiology, and James E. Eckenhoff Professor of Anesthesiology, Northwestern University Feinberg School of Medicine, Chicago, Illinois

H.T. Lee, MD, PhD
Assistant Professor, Department of Anesthesiology, Columbia University Medical Center, New York, New York

Jae Woo Lee, MD
Associate Professor, Anesthesia, University of California, San Francisco School of Medicine, San Francisco, California

Richard Levy, MD, FAAP
Columbia University Medical Center, New York, New York

William C. McGaghie, PhD
Professor of Medical Education and Preventive Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Peter Nagele, MD, MSc
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; Chair, Department of Anesthesia and Critical Care, The University of Chicago Medicine, Chicago, Illinois

Arun Prakash, MD, PhD
University of California, San Francisco School of Medicine, San Francisco, California

Y.S. Prakash, MD, PhD
Chair, Scientific Advisory Board
Professor of Anesthesiology and Physiology, Department of Anesthesiology and Perioperative Medicine, Chair, Department of Physiology and Biomedical Engineering, Mayo Clinic, Rochester, Minnesota

Nidia Quillinan, PhD
Assistant Professor, Department of Anesthesiology, University of Colorado Denver, Aurora, Colorado; Junior Faculty Research Award Winner

continued on page 19
Program Faculty, continued

John Rogers, PhD
Louis Simpson and Kimberly Querrey Professor of Materials Science and Engineering, Biomedical Engineering and Neurological Surgery, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Edward Sherwood, MD, PhD
Professor of Anesthesiology, Division of Multispecialty Adult Anesthesiology, Vice-Chair for Research, Vanderbilt University Medical Center, Nashville, Tennessee

Mervyn Singer, MBBS, MD, FRCP (Lon), FRCP (Edin), FFICM
Professor of Intensive Care Medicine, Head, Research Department of Clinical Physiology, University College London, London, England

Andrew Slupe, MD, PhD
C3 Resident, Oregon Health and Science University, Portland, Oregon; Resident Travel Award Winner

Andrew O. Suen, MD
Visiting Post-Doctoral Fellow, University of Maryland School of Medicine, Baltimore, Maryland; Resident Travel Award Winner

Eric Sun, MD, PhD
Assistant Professor of Anesthesiology, Perioperative and Pain Medicine (Adult-Msd) and, By Courtesy, of Health Research and Policy (Health Services Research), The Stanford University Medical Center, Stanford, California; Junior Faculty Research Award Winner

Jacob E. Sunshine, MD, MS
Assistant Professor, Department of Anesthesiology, University of Washington School Medical Center, Seattle, Washington

Norman E. Taylor, MD, PhD
Assistant Professor of Anaesthesia, Harvard Medical School; Massachusetts General Hospital, Boston, Massachusetts

Avery Tung, MD, FCCM
Professor of Anesthesia and Critical Care Quality, Chief for Anesthesia, The University of Chicago Medicine, Chicago, Illinois

Brant Wagener, MD, PhD
Assistant Professor, Department of Anesthesiology and Perioperative Medicine, Director, Medical and FAER Student Research, University of Alabama at Birmingham, Birmingham, Alabama

Jonathan Wanderer, MD
Assistant Professor of Anesthesiology and Biomedical Informatics, Medical Director of Vanderbilt Anesthesiology and Perioperative Informatics Research, Medical Director of Vanderbilt Perioperative Evaluation Clinic, Vanderbilt University School of Medicine, Nashville, Tennessee

Elizabeth L. Whitlock, MD, MSc
Postdoctoral Scholar, University of California, San Francisco School of Medicine, San Francisco, California; Margaret Wood Resident Research Award Winner

Jeanine P. Wiener-Kronish, MD
President, Association of University Anesthesiologists Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia, Department of Anesthesia, Critical Care and Pain Medicine, Harvard Medical School, Anesthetist-in-Chief, Massachusetts General Hospital, Boston, Massachusetts

Brittney Williams, MD
University of Maryland School of Medicine, Baltimore, Maryland

Laurie Zoloth, PhD
Margaret E. Burton Professor and Dean of the Divinity School, The University of Chicago Medicine, Chicago, Illinois
Program Schedule

Thursday, April 26

6:00 am — 6:00 pm  Registration

8:30 am — 9:00 am  Welcome from AUA President and Host Institution Chairs

Jeanine P. Wiener-Kronish, MD
President, Association of University Anesthesiologists (AUA)

Jeffrey L. Apfelbaum, MD, Co-Chair
Host Institution, The University of Chicago Medicine

Peter Nagele, MD, MSc, Co-Chair,
Host Institution, The University of Chicago Medicine

Charles W. Hogue, MD, Co-Chair
Host Institution, Northwestern University Feinberg School of Medicine

9:00 am — 10:30 am  Educational Advisory Board (EAB) Program Panel I: Motivation, Metacognition, and Self-Regulation

Moderator: Robert R. Gaiser, MD

• Science of Motivation
  Daniel Saddawi-Konefka, MD, MBA

• Science of Metacognition
  Avery Tung, MD, FCCM

• Science of Self-Regulation
  William C. McGaghie, PhD

Learner Objectives: After participating in this activity, the learner will be able to: (1) Discuss the differences and interactions between extrinsic and intrinsic motivation; (2) Define metacognition as a cognitive behavior and describe how such behavior currently plays a role in anesthesia practice and how focused application may facilitate safe anesthesia; (3) Restate that self-assessments of professional skills and qualities are unreliable; (4) Evaluate reliable external assessments of professional skills and qualities; and (5) Demonstrate reliable assessment data for professional improvement.

10:30 am — 10:45 am  Break

10:45 am — 11:45 am  Scientific Advisory Board (SAB) Oral Session I

Moderators: Peter Goldstein, MD and Jae Woo Lee, MD

Presenters:

• GABA Neurons in the Rostromedial Tegmental Nucleus Modulate Analgesia in Mice
  Norman E. Taylor, MD, PhD

continued on page 21
Learner Objectives: After participating in this activity, the learner will be able to: (1) Describe the latest developments in anesthesiology research in basic, clinical and population science; (2) Examine recent research findings relative to anesthesiology and evaluate their application to the learner’s own research and clinical practice; and (3) Construct strategies for integrating new knowledge into anesthesiology research programs.

Break

2:30 pm — 3:30 pm SAB Oral Session II

Moderators: Lucy Chen, MD and Edward Sherwood, MD, PhD

Presenters:

Junior Faculty Research Award

• Concurr...
Program Schedule, continued

Thursday, April 26, continued

SAB Oral Session II, continued

Margaret Wood Resident Research Award
- Derivation, Validation, and Sustained Performance of a Hospital-Wide Elective Surgery Delirium Risk Tool (AWOL-S)
  Elizabeth L. Whitlock, MD, MSc
- Mobile Detection of Simulated Opioid Overdose Events
  Jacob Sunshine, MD, MS

Junior Faculty Travel Award in Pediatric Anesthesia
- Unplanned Postoperative Intubation in Infant and Neonatal Surgical Patients: Predictors and Associated Mortality
  Lisa Eisler, MD

Learner Objectives: After participating in this activity, the learner will be able to: (1) Describe the latest bench research relevant to perioperative medicine; (2) Discuss the impact of the latest clinical research in the area of perioperative medicine; (3) Report the impact of the latest outcomes research in the area of perioperative medicine, and (4) Relate the impact of the latest bench and clinical research in pain medicine.

3:30 pm – 4:00 pm Break

4:00 pm – 6:00 pm ▼ President’s Panel: Sepsis Revisited – Important Updates
Moderator: Jeanine P. Wiener-Kronish, MD

Panelists:
- Controversies in Sepsis Management
  Mervyn Singer, MBBS, MD, FRCP (Lon), FRCP (Edin), FFICM
- Collapse of the Microbiome, Emergence of the Pathobiome and the Immunopathology of Sepsis
  John C. Alverdy, MD, FACS
- Modulation of Sepsis and Acute Inflammation by Non-Leukocyte Cell Populations
  Judith Hellman, MD

Learner Objectives: After participating in this activity, the learner will be able to: (1) Review the fundamentals of microbiome sciences and identify the emergence and mechanisms by which pathogens express virulence against the host; (2) Define and review the role of the normal intestinal microbiota to drive a recovery directed immune response; (3) Identify the new Sepsis-3 definitions; and (4) Discuss what constitutes and challenges optimal antibiotic management (e.g., the impact of timing and the duration of therapy); (5) Review the topic of sepsis driving

continued on page 23
Program Schedule, continued

Thursday, April 26, continued

novel therapeutic strategies (e.g., immune activation and personalized treatment based on subphenotype/endotype); (6) Review the role of non-leukocyte cell populations, including neurons and endothelial cells, in regulating inflammatory responses during sepsis; (7) Assess up-to-date neuro-immune mechanisms involved in down regulating sepsis-induced inflammation; and (8) Examine the role of endothelial cells and endothelial inflammatory pathways in sepsis.

7:00 pm — 10:00 pm AUA Social Event Reception*
Hosted by Northwestern University Feinberg School of Medicine and The University of Chicago Medicine
Chicago Stock Exchange Trading Room, The Art Institute of Chicago
(111 S. Michigan Avenue)
See page 12 for event details.

Friday, April 27

6:00 am — 6:00 pm Registration

8:00 am — 9:15 am Host Program Panel I
Moderators: Jeffrey L. Apfelbaum, MD, Peter Nagele, MD, MSc, and Charles W. Hogue, MD

Presenters:
• Pain in Plain Sight: Religion, Ethics and Opioid Addiction
  Laurie Zoloth, PhD
• Our Unexpected Universe – Non-CME
  Wendy L. Freedman, PhD

Learner Objectives: After participating in this activity, the learner will be able to: (1) Assess the effect of opioid addiction on current health care economics and its impact on pending governmental regulatory changes; (2) Discuss the growing problem of addiction to opioids; (3) Describe how health care economics, bioethics, the hospice movement and state policy all created the context in which opioids became such a widespread problem; and (4) Describe astronomer and physicist’s current understanding of the nature and evolution of the universe.

9:15 am — 9:30 am Break

*Ticketed Event. Check at the Registration Desk for availability.
Program Schedule, continued

Friday, April 27, continued

9:30 am — 10:45 am Host Program Panel II
Moderators: Jeffrey L. Apfelbaum, MD, Peter Nagele, MD, MSc, and Charles W. Hogue, MD

Presenters:
- **Brain Mechanisms of Chronic Pain and Novel Therapeutic Opportunities**
  A. Vania Apkarian, PhD
- **Wireless Skin-Like Sensors of Physiological Status**
  John Rogers, PhD

**Learner Objectives:** After participating in this activity, the learner will be able to:
1. Understand the latest capabilities in thin, soft wireless monitors of physiological status;
2. Learn the various use cases in clinical medicine and at-home monitoring.

10:45 am — 11:00 am Break

11:00 am — 12:30 pm EAB Program Panel II: The Science of Longitudinal Assessment
Moderator: Robert R. Gaiser, MD

Panelists:
- **Knowledge Over the Continuum**
  Ann Harman, PhD
- **Information as a Pedagogical Tool**
  Jonathan Wanderer, MD
- **The Effect of Time on Technical Skills**
  Keith H. Baker, MD, PhD

**Learner Objectives:** After participating in this activity, the learner will be able to:
1. Explain how learners fool themselves into believing that massed practice is more effective than spaced practice when learning a technical skill;
2. Design a plan for improvement in technical skills that incorporates elements of deliberate practice are implemented;
3. Formulate clinical informatics for bridging educational gaps;
4. Formulate the science of longitudinal assessment in practice improvement.

12:30 pm — 1:30 pm Lunches:
- **All Attendee Lunch**
- **Early-Stage Faculty, Fellow, Resident, and Medical Student Lunch (tables will be reserved at the All Attendee Lunch)**
- **Educational Advisory Board Committee Meeting Lunch – Invite Only**
- **Scientific Advisory Committee Meeting Board Lunch – Invite Only**

decided on page 25
1:30 pm — 3:00 pm Moderated Poster Discussion Session II

Learner Objectives: After participating in this activity, the learner will be able to: (1) Describe the latest developments in anesthesiology research in basic, clinical and population science; (2) Examine recent research findings relative to anesthesiology and evaluate their application to the learner’s own research and clinical practice; and (3) Construct strategies for integrating new knowledge into anesthesiology research programs.

3:00 pm — 3:15 pm Break

3:15 pm — 4:15 pm SAB Oral Session III

Moderators: Y.S. Prakash, MD, PhD and Holger K. Eltzschig, MD, PhD

Presenters:
- *Estrogens Alleviate Parasympathetic-induced, α7nAChR-mediated Mortality from Secondary P. Aeruginosa Lung Infection after Traumatic Brain Injury in Mice*
  Brant Wagener, MD, PhD

- *Extracellular miRNAs and Innate Immune Activation Following Polytraumatic Injury in Mice*
  Andrew Suen, MD

- *Kidney Proximal Tubular Toll-like Receptor 9 (TLR9) Exacerbates Ischemic Acute Kidney Injury in Mice*
  H.T. Lee, MD, PhD

- *Monitoring of Spinal Cord Blood Flow During Orthopedic Surgery in an Ovine Model*
  David R. Busch, PhD

Learner Objectives: After participating in this activity, the learner will be able to: (1) Describe the latest bench research relevant to perioperative medicine; (2) Discuss the impact of the latest clinical research in the area of perioperative medicine; (3) Report the impact of the latest outcomes research in the area of perioperative medicine; and (4) Relate the impact of the latest bench and clinical research in pain medicine.

4:15 pm — 4:30 pm Break

*Ticketed Event. Check at the Registration Desk for availability.*
Friday, April 27, continued

4:30 pm — 5:30 pm  SAB Oral Session IV

Moderators: Richard Levy, MD, FAAP and Paul Garcia, MD, PhD

Presenters:

- Echocardiographic Assessment Using Subxiphoid-only View (EASy) Compared to Focused Transthoracic Echocardiography (FoTE) in the Perioperative Period: A Multicenter Prospective Study
  Kevin Emr, MD

- Gut Commensal Metabolites Regulate Sterile Lung Inflammation in Mice: A Role for Acetate and Propionate
  Arun Prakash, MD, PhD

- Non-invasive Optical Quantification of Absolute Cerebral Blood Flow in Adults: Validation against MRI
  Wesley B. Baker, MD

- Role of Toll-like Receptor Signaling in Sepsis-induced Coagulopathy in Mice
  Brittney Williams, MD

Learner Objectives: After participating in this activity, the learner will be able to: (1) Describe the latest bench research relevant to perioperative medicine; (2) Discuss the impact of the latest clinical research in the area of perioperative medicine; (3) Report the impact of the latest outcomes research in the area of perioperative medicine; and (4) Relate the impact of the latest bench and clinical research in pain medicine.

5:30 pm — 6:00 pm  AUA Annual Business Meeting

6:00 pm — 7:00 pm  IARS, AUA, SOCCA and eSAS Scholars’ Program Mentoring and Networking Reception*

*The Scholars’ Program requires a separate $50 non-refundable fee and pre-registration. This fee includes education sessions, reception, breakfast and lunch. Seating is limited.

*Ticketed Event. Check at the Registration Desk for availability.
Aligned Meeting Day at the IARS 2018 Annual Meeting and International Science Symposium
Saturday, April 28

7:30 am — 9:00 am  Opening General Session and T.H. Seldon Memorial Lecture:
Personalizing Healthcare in the Era of Big Data
Presenter: Jeffrey R. Balser, MD, PhD, Dean of Vanderbilt University School of Medicine; President and CEO, Vanderbilt University Medical Center, Nashville, Tennessee

9:30 am — 12:00 pm  Symposium-01: AUA: Mitochondria and Bioenergetics in Health and Disease: It's Not Just A Power Failure!
Moderator: Y.S. Prakash, MD, PhD, Chair, Scientific Advisory Board, AUA, Professor of Anesthesiology and Physiology, Department of Anesthesiology and Perioperative Medicine, Mayo Clinic College of Medicine and Science, Rochester, Minnesota
Panelists:

- **Anesthetic Preconditioning and Mitochondria**
  Paul S. Brookes, PhD, Professor, Department of Anesthesiology & Perioperative Medicine, Research (SMD), Professor, Department of Pharmacology and Physiology (SMD), University of Rochester Medical Center, Rochester, New York

- **Brain Bioenergetics: Watch that Oxygen Level**
  Elizabeth A. Jonas, MD, Professor of Internal Medicine and Neuroscience, Division of Endocrinology, Yale University; Co-Chair, Bioenergetics Biophysical Society; Co-Chair, Status of Women in Medicine; Associate Editor, The FASEB Journal, New Haven, Connecticut

- **Taking a Closer Look at Mitochondria**
  Douglas L. Rothman, PhD, Professor of Biomedical Engineering and Radiology and Biomedical Imaging, Director, Magnetic Resonance Research Center (MRRC), Yale School of Engineering and Applied Sciences, New Haven, Connecticut

- **Mitochondria From Evolution to Disease: It's in the Genes**
  Douglas C. Wallace, PhD, Director, Center for Mitochondrial and Epigenomic Medicine (CME), Michael and Charles Barnett Endowed Chair of Pediatric Mitochondrial Medicine and Metabolic Diseases, Children’s Hospital of Philadelphia Research Institute; Professor, Department of Pathology and Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

*Ticketed Event. Check at the Registration Desk for availability. continued on page 28
Aligned Meeting Day, continued

Saturday, April 28, continued

12:00 pm — 1:00 pm  Problem-Based Learning Discussion-05: AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee?*

Presenters:
Ersne Eromo, MD, MBA, Instructor in Anaesthesia, Clerkship Director for Harvard Medical Students, Harvard Medical School, Simulation Fellow, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Daniel Saddawi-Konefka, MD, MBA, Assistant Professor in Anaesthesia, Harvard Medical School; Anesthesia Residency Program Director, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

2:30 pm — 3:30 pm  Problem-Based Learning Discussion-09: AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee? – Offered Twice!

With Drs. Ersne Eromo and Daniel Saddawi-Konefka

4:00 pm — 5:00 pm  Problem-Based Learning Discussion-10: AUA: Getting to the Heart of the Matter: Perioperative-Focused Cardiac and Pulmonary Ultrasound, and The Hemodynamically Unstable Patient*

Presenters:
Alexander S. Kuo, MD, Instructor in Anaesthesia, Harvard Medical School; Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Abraham Sonny, MD, MBBS, Faculty, Anaesthesia, Harvard Medical School; Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

6:00 pm — 7:30 pm  IARS, AUA and SOCCA Alignment Reception

AUA Attendees Invited to Attend
Hyatt Regency Chicago

Celebrate the convergence of the IARS, AUA, and SOCCA Annual Meetings and meet pioneers in all subspecialties shaping the future of anesthesiology during the Aligned Meeting Day at the IARS 2018 Annual Meeting and International Science Symposium!

*Ticketed Event. Check at the Registration Desk for availability.
Scholars’ Program

Friday, April 27 – Saturday, April 28

Friday, April 27

6:00 pm — 7:00 pm  IARS, AUA, SOCCA and eSAS Scholars’ Program Mentoring and Networking Reception*

Based on rigorous evaluation of both mentors’ expertise and trainees’ needs, trainees will be matched with a mentor and have the opportunity to interact during this reception. Sign-up to be mentored or serve as a mentor during registration, plus gain the opportunity to network with your colleagues and peers.

Saturday, April 28

6:15 am — 7:15 am  Scholars’ Program Breakfast with IARS, AUA, & SOCCA Leadership and Mentors*

9:30 am — 9:40 am  Scholar-01: Introduction to Scholars’ Program and eSAS*

Presenters:

Vivianne Tawfik, MD, PhD, Assistant Professor, Department of Anesthesiology, Perioperative and Pain Medicine (Adult Pain), Assistant Director, Fellowship in Anesthesia Research & Medicine Program (FARM), Stanford University School of Medicine, Stanford, California; Co-President, eSAS

Elizabeth L. Whitlock, MD, MSc, Clinical Instructor and T32 Fellow, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California; Co-President, eSAS

9:40 am — 10:30 am  Scholar-02: Moving from Insight to Research Program and What This is All About*

Moderator:

Katie J. Schenning, MD, MPH, Assistant Professor of Anesthesiology and Perioperative Medicine, School of Medicine, Oregon Health & Sciences University, Portland, Oregon; Co-Chair Membership, eSAS

Presenter:

Max B. Kelz, MD, PhD, David E. Longnecker Associate Professor of Anesthesiology and Critical Care, Chair of Admissions, Department of Neuroscience MD PhD Program, MSTP Program Advisor, Director for Research Education, Department of Anesthesiology and Critical Care, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

*Ticketed Event. Check at the Registration Desk for availability.
Scholars’ Program, continued

Saturday, April 28, continued

10:45 am — 12:15 pm Scholar-03: *Shine Like A Rockstar: Different Paths to Success*

**Moderators:**
Boris D. Heifets, MD, PhD, Clinical Assistant Professor, Anesthesiology, Perioperative and Pain Medicine, Stanford University School of Medicine, Stanford, California
Manoj M. Lalu, MD, PhD, FRCPC, Vice Chairman for Clinical Research and Faculty Development, Clinical Scholar, Department of Anesthesiology and Pain Medicine, The Ottawa Hospital; Associate Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada; Co-Chair Membership, eSAS

**Panelists:**

- **Academic Leadership Path**
  Peter Nagele, MD, MSc, Professor of Anesthesia & Critical Care, Chair, Department of Anesthesia & Critical Care, The University of Chicago Medicine; Co-Chair, Host Institution, AUA 2018 Annual Meeting

- **Organizational Leadership Path**
  Laureen Hill, MD, MBA, SVP COO, New York Presbyterian Hospital-Columbia; Past Chair, Department of Anesthesiology, Emory Healthcare; Past Co-Chair, Perioperative Governance Committee; Past Vice Chair and Professor of Anesthesiology and Cardiothoracic Surgery, Department of Anesthesiology, Washington University School of Medicine, New York, New York

- **Educational Leadership Path**
  Paloma Toledo, MD, MPH, Assistant Professor of Anesthesiology, Department of Anesthesiology, Northwestern University Feinberg School of Medicine, Chicago, Illinois; Associate Editor, *Anesthesia & Analgesia*

*Ticketed Event. Check at the Registration Desk for availability.

continued on page 31
Scholars’ Program, continued

Saturday, April 28, continued

12:30 pm — 2:00 pm Scholar-04: Lunch Session: Resilience Personified: Transitioning from Trainee to Junior Faculty and Beyond*

Moderator:
Elizabeth L. Whitlock, MD, MSc, Clinical Instructor and T32 Fellow, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California; Co-President, eSAS

Panelists:

- **Junior Investigator Perspective**
  Julie K. Freed, MD, PhD, Assistant Professor of Anesthesiology, Medical College of Wisconsin; Reviewer, American Heart Association (AHA); Founder; Executive Council Member, Early-Stage Anesthesia Scholars (eSAS), Milwaukee, Wisconsin

- **Senior Investigator Perspective**
  Ken Solt, MD, Associate Professor, Anaesthesia, Harvard Medical School; Associate Anesthetist, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

*Ticketed Event. Check at the Registration Desk for availability.
Scholars’ Program, continued

Saturday, April 28, continued

2:15 pm — 3:45 pm Scholar-05: Moving Fluidly Across the Translational Spectrum: Current Opioid Crisis*

Moderators:
Catherine Chen, MD, MPH, Assistant Professor, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California

Michael R. Mathis, MD, Assistant Professor, Anesthesiology, University of Michigan Medicine, Ann Arbor, Michigan; Co-Chair Events, eSAS

Panelists:
• The Role of Acute Care Prescribing in the Opioid Epidemic
  Jennifer F. Waljee, MD, MPH, MS, Associate Professor, Section of Plastic and Reconstructive Surgery, Member, Early Career Faculty Advisory Council (ECFAC), Institute for Healthcare Policy & Innovation, University of Michigan Medicine, Ann Arbor, Michigan

• Caffeine Alleviates the Increase in Postoperative Pain Sensitivity Induced by Previous Sleep Loss in Rats: An Alternative to Opioids for Pain Relief?
  Giancarlo Vanini, MD, Research Assistant, Professor of Anesthesiology, University of Michigan Medicine, Ann Arbor, Michigan

• Tapping into Patient Resilience: The Use of Innovative Self-Management Strategies to Reduce Anxiety and Pain in the Perioperative Setting
  Afton Hassett, PsyD, Associate Research Scientist and Psychologist, University of Michigan Medicine, Ann Arbor, Michigan

*Ticketed Event. Check at the Registration Desk for availability.

continued on page 33
Scholars’ Program, continued

Saturday, April 28, continued

4:00 pm — 5:00 pm  Scholar-06: Priorities for Developing Researchers: Perspectives from the NIH and IARS*

Moderator:

Julie K. Freed MD, PhD, Assistant Professor, Department of Anesthesiology, Medical College of Wisconsin, Milwaukee, Wisconsin; Co-Chair Events, eSAS

Panelists:

- **NIH Perspective**
  Alison Cole, PhD, Branch Chief, Pharmacological and Physiological Sciences Branch, Division of Pharmacology, Physiology, and Biological Chemistry, National Institute of General Medical Sciences, Bethesda, Maryland

- **IARS Perspective**
  Emery N. Brown, MD, PhD, Warren M. Zapol Professor of Anaesthesia, Harvard Medical School, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital; Edward Hood Taplin Professor of Medical Engineering, Institute for Medical Engineering and Science; Professor of Computational Neuroscience, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Boston, Massachusetts; Treasurer, IARS

5:10 pm — 6:10 pm  Scholar-07: From the Editor’s Desk: A No-Nonsense Guide to Successful Publication*

Moderator:

Jamie R. Privratsky, MD, PhD, Assistant Professor of Anesthesiology, Duke University School of Medicine, Durham, North Carolina

Panelists:

- **From the Editor’s Desk to Publication**
  Hilary P. Grocott, MD, FRCPC, Professor of Anesthesia & Perioperative Medicine; Professor, Department of Surgery; Director, Cardiac Anesthesia Fellowship Program, University of Manitoba, Winnipeg, Manitoba; Adjunct Professor, Anesthesiology, Duke University; Editor-in-Chief, Canadian Journal of Anesthesia

- **How to Successfully Publish in Anesthesia & Analgesia**
  Kate Leslie, MD, Head of Research for the Department of Anaesthesia and Pain Management, Royal Melbourne Hospital, Melbourne, Australia; Honorary Professional Fellow, University of Melbourne and Monash, Australia; Former President of the Australian and New Zealand College of Anaesthetists; Editorial Board Member, British Journal of Anaesthesia, Anesthesiology, and Anesthesia & Analgesia

*Ticketed Event. Check at the Registration Desk for availability.
Five prominent anesthesiology organizations have come together to establish a clinical trials network in the United States, focusing specifically on perioperative medicine, critical care, pain management, and peri- and post-partum care.

Please join us for this important gathering. Those interested in anesthesiology-related clinical and translational science are strongly encouraged to attend.

The agenda includes:
• Panel on innovative and efficient approaches to multicenter clinical trials
• Presentations by the Duke Clinical Research Institute (DCRI) and the Multicenter Perioperative Outcomes Group (MPOG)

There is no fee to participate in the Clinical Research Consortium; register onsite day of the event outside the session room.

For more information visit: www.iars.org/education/annual_meeting/clinical_research_consortium

Participating Organizations
• Association of University Anesthesiologists (AUA)
• Early-Stage Anesthesiology Scholars (eSAS)
• The Foundation for Anesthesia Education and Research (FAER)
• The International Anesthesia Research Society (IARS)
• The Society of Critical Care Anesthesiologists (SOCCA)
Poster General Information

Poster Room
Riverside West, Exhibits Level, East Tower

Poster Room Hours
Thursday, April 26 ............... 6:00 am – 5:00 pm
Friday, April 27 .................. 6:00 am – 5:00 pm

Poster Information and Check-In Location and Hours
Entrance to Poster Room, Riverside West, Exhibit Level, East Tower
Thursday, April 26 ............... 6:00 am – 6:00 pm
Friday, April 27 .................. 6:00 am – 6:00 pm

A staff member will be available at the Poster Information and Check-in desk to assist you in finding your poster board or with any questions. Please check-in at the desk 15 minutes prior to the start of your presentation.

Poster Pickup Location and Hours:
Riverside West, Exhibit Level, East Tower
Thursday, April 26 ............... 6:00 am – 2:00 pm
Friday, April 27 .................. 6:00 am – 2:00 pm

e-Poster Viewing, Abstracts List, and Event Search
Search and view all e-posters submitted, sessions, abstracts and speakers for the IARS, AUA and SOCCA 2018 Annual Meetings on the event site at wv3.aievolution.com/ars1801.

Moderated Poster Discussion Session Learner Objectives
After participating in this activity, the learner will be able to: (1) Describe the latest developments in anesthesiology research in basic, clinical and population science; (2) Examine recent research findings relative to anesthesiology and evaluate their application to the learner’s own research and clinical practice; and (3) Construct strategies for integrating new knowledge into anesthesiology research programs.

Setup and Breakdown Schedule

<table>
<thead>
<tr>
<th>PRESENTATION DATE</th>
<th>POSTER SETUP TIME</th>
<th>PRESENTATION TIME</th>
<th>POSTER REMOVAL TIME</th>
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<tr>
<td>Thursday, April 26</td>
<td>7:00 am – 8:00 am</td>
<td>12:45 pm – 2:15 pm</td>
<td>5:00 pm – 6:00 pm</td>
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<tr>
<td>Friday, April 27</td>
<td>7:00 am – 8:00 am</td>
<td>1:30 pm – 3:00 pm</td>
<td>5:00 pm – 6:00 pm</td>
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</table>

You are responsible for removing all your materials form the poster boards during the time interval listed above. There is no storage available for posters and any materials remaining will be discarded. Poster setup and removal times will take place on the same day as the abstract presenter’s scheduled presentation day unless otherwise noted.

continued on page 36
Abstract Presenter
Presenters are required to attend their assigned Moderated Poster Discussion Session and Scientific Advisory Board Oral Session (SAB), if applicable. During the SAB Oral Session, presenters give an 8-minute oral presentation. During the Moderated Poster Discussion Session, presenters give a 3–5 minute summary of their most important findings. The poster moderator for your Moderated Poster Discussion Session will assist with facilitating the discussion.

Assigned Poster Board Identification and Location
For identification purposes, a poster board ID is assigned to all presenting authors. The assigned IDs will be affixed to each poster board in the poster room. Poster board numbers will be placed at the end of each aisle in the poster session room.

Poster Board ID Format
The Poster Board ID format is the following:
Anesthesia Subspecialty Topic Abbreviation Poster Board # (Abstract #).
Example: AM1 (230).
See the Abstract Category Key for Anesthesia Subspecialty Topics below.

Abstract Key for Anesthesia Subspecialty Topics

<table>
<thead>
<tr>
<th>Subspecialty Abbreviations</th>
<th>Subspecialty Category</th>
<th>Subspecialty Abbreviations</th>
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<tr>
<td>AM</td>
<td>Airway Management</td>
<td>O</td>
<td>Obesity</td>
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<td>AMB</td>
<td>Ambulatory Anesthesia</td>
<td>OB</td>
<td>Obstetric Anesthesiology</td>
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<td>Anesthetic Pharmacology</td>
<td>PAP</td>
<td>Pain and Addiction Pathways</td>
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<td>Bench Science</td>
<td>PME</td>
<td>Pain Mechanisms</td>
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<td>BLD</td>
<td>Blood Management</td>
<td>PM</td>
<td>Pain Medicine</td>
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<td>CA</td>
<td>Cardiovascular Anesthesiology</td>
<td>PS</td>
<td>Patient Safety</td>
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<td>Critical Care</td>
<td>PED</td>
<td>Pediatric Anesthesiology</td>
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<td>EEP</td>
<td>Economics, Education and Policy</td>
<td>PA</td>
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<td>Geriatric Anesthesia</td>
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<td>Global Health</td>
<td>RES</td>
<td>Respiration</td>
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<td>Liver</td>
<td>SM</td>
<td>Sleep Medicine</td>
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<td>MCC</td>
<td>Medically Challenging Cases</td>
<td>TCSEM</td>
<td>Technology, Computing and Simulation, Equipment Monitoring</td>
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<td>Metabolism and Perioperative Care</td>
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<td>Trauma</td>
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<tr>
<td>NR</td>
<td>Neuroscience in Anesthesiology and Perioperative Medicine</td>
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</table>
Margaret Wood Resident Research Award

The $1,000 Margaret Wood Resident Research Award is presented to the author of the best research paper submitted by a resident or fellow and selected for an oral presentation at the Scientific Advisory Board (SAB) sessions.

PS 60 (1146)
Derivation, Validation, and Sustained Performance of a Hospital-Wide Elective Surgery Delirium Risk Tool (AWOL-S)
Elizabeth L. Whitlock, Anne L. Donovan, Matthias R. Braehler, Jennifer A. Kaplan, Emily Finlayson, Stephanie E. Rogers, Vanja C. Douglas
University of California, San Francisco School of Medicine, San Francisco, California

Resident Travel Award

Two Resident Travel Awards are awarded to the top scoring resident abstracts, including a $1,000 travel award for each winner, judged by the SAB and chosen for oral presentation at the SAB sessions.

NR 122 (1153)
The Pro-Apoptotic Protein BAX is Necessary for Neuron Death Associated with Exposure to Isoflurane General Anesthesia in a Neonatal Mouse Model
Andrew Slupe1, Laura E. Villasana1, Kevin Wright2
1Oregon Health and Science University, Portland, Oregon; 2Vollum Institute, Portland, Oregon

T 151 (768)
Extracellular miRNAs and Innate Immune Activation Following Polytraumatic Injury in Mice
Andrew O. Suen, Sheng Wang, Olivia Conn, Lin Zou, Rosemary Kozar, Catriona Miller, Wei Chao
University of Maryland School of Medicine, Baltimore, Baltimore, Maryland

continued on page 38
Abstract Award Winners, continued

Junior Faculty Travel Awards in Pediatric Anesthesia and Perioperative Medicine
Two $500 Junior Faculty Travel Awards in the specific area of pediatric anesthesia or perioperative medicine, emphasizing the work of academic anesthesiologists at the beginning of their careers, are chosen for oral presentation at the SAB sessions.

Junior Faculty Travel Awards in Pediatric Anesthesia

PED 150 (1124)
Unplanned Postoperative Intubation in Infant and Neonatal Surgical Patients: Predictors and Associated Mortality
Lisa Eisler1, Minjae Kim1, Fatemah Mamdani1, May Hua1, Guohua Li1, Lena Sun1
1Columbia University Medical Center, New York, New York, 2Columbia University College of Physicians and Surgeons, Mailman School of Public Health, New York, New York

Junior Faculty Travel Award in Perioperative Medicine

PA 141 (1408)
Echocardiographic Assessment Using Subxiphoid-Only View (EASy) Compared to Focused Transthoracic Echocardiography (FoTE) in the Perioperative Period: A Multicenter Prospective Study
Kevin Emr1, Nibras Bughrara1, Johnathan R. Renew1, Jose Diaz-Gomez2, Kirti Sahu1, Kevin Roberts1
1Albany Medical Center, Albany, New York, 2Mayo Clinic Florida, Jacksonville, Florida

Junior Faculty Research Award

Two Junior Faculty Research Awards, emphasizing the work of academic anesthesiologists at the beginning of their careers, are chosen for oral presentation at the SAB sessions.

BS 19 (1314)
Pharmacological Calcium/Calmodulin-Dependent Protein Kinase (CaMKII) Inhibition Protects Against Purkinje Cell Damage Following Cardiac Arrest and Cardiopulmonary Resuscitation in Mice
Nidia Quillinan1, Nicholas Chalmers, Katie Steklac, Paco Herson
University of Colorado Denver School of Medicine, Aurora, Colorado

EEP 53 (1227)
Concurrent Surgery and Perioperative Outcomes: A Retrospective Analysis from the Multicenter Perioperative Outcomes Group
Eric Sun1, Michelle Mello1, Christopher Rishel1, Shelley Housey2, Sachin Kheterpal2, Leif Saager2, Lee A. Fleisher3, Anupam Jena4
1Stanford University School of Medicine, Stanford, California, 2University of Michigan Medicine, Ann Arbor, Michigan, 3Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, 4Harvard Medical School, Boston, Massachusetts
## Moderated Poster Discussion Session I

**Thursday, April 26, 2018 | 12:45 pm - 2:15 pm**

<table>
<thead>
<tr>
<th>CATEGORY</th>
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<tbody>
<tr>
<td>Airway Management</td>
<td>1</td>
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<tr>
<td>Anesthetic Pharmacology</td>
<td>2-4, 6, 8-12</td>
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<tr>
<td>Bench Science</td>
<td>13-18, 20-25</td>
</tr>
<tr>
<td>Cardiovascular Anesthesiology</td>
<td>27-30, 32-35</td>
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<td>Critical Care</td>
<td>38-43, 45-50, 52-55</td>
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<tr>
<td>Economics, Education and Policy</td>
<td>61-63, 65-66</td>
</tr>
<tr>
<td>Global Health</td>
<td>59-61</td>
</tr>
<tr>
<td>Medically Challenging Cases</td>
<td>68-72, 74-79</td>
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<td>Neuroscience in Anesthesiology and Perioperative Medicine</td>
<td>81-86, 88-97, 99</td>
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<td>101-102, 104-106</td>
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<td>31, 108-114</td>
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<td>116-121</td>
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<td>123-126, 128-132</td>
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<tr>
<td>Respiration</td>
<td>56-58</td>
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<tr>
<td>Sleep Medicine</td>
<td>103, 143-149</td>
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<td>Technology, Computing and Simulation, Equipment Monitoring</td>
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<td>Trauma</td>
<td>5, 151-155</td>
</tr>
</tbody>
</table>
Moderated Poster Discussion Session I

Thursday, April 26, 2018  |  12:45 pm - 2:15 pm

Group 1: Airway Management, Cardiovascular Anesthesiology, Medically Challenging Cases, Perioperative Anesthesia, and Regional Anesthesia

Moderator: Warren Sandberg, MD, Vanderbilt University School of Medicine, Nashville, Tennessee

AM 1 (1004)
A Pilot Study of Radiological Variables to Predict Fibreoptic Intubation in Ankylosing Spondylitis with Cervical Spine Involvement
Lu Che¹, ZhuHua Zhang¹, LuJian Pei², Yuguang Huang¹
¹Peking Union Medical College Hospital, Beijing, China, ²Peking Union Medical College, Beijing, China

PA 2 (990)
CHA2DS2-VASc Score for Risk Prediction of Venous Thromboembolic Events after Total Joint Arthroplasty
Lu Che¹, Yuguang Huang¹, Hui Liu²
¹Peking Union Medical College Hospital, Beijing, China, ²Peking University, Beijing, China

AM 3 (1156)
Ultra Low Cost & Minimally Stimulating Method of Relieving Airway Obstruction During MAC
Sapan Shah, H.T. Lee
¹Columbia University Medical Center, New York, New York

MCC 4 (1140)
Anesthetic Management of Quaternary C/S in a Patient with Diffuse, Destructive Malignant Metastatic Lesions
Sapan Shah, Laurence Ring
Columbia University Medical Center, New York, New York

CA 5 (1164)
Acute Bleeding from an Aortic Pseudoaneurysm Due to Sneezing after CABG Surgery
Sapan Shah, Jacob Schaff
Columbia University Medical Center, New York, New York

RA 6 (807)
Report of Acute Delirium in a Healthy Patient with Rectus Sheath Catheters
Sapan Shah¹, Robert Maniker²
¹Columbia University Medical Center, New York, New York, ²Columbia University, New York, New York

continued on page 42
Group 2: Airway Management, Anesthetic Pharmacology, and Patient Safety

Moderator: Stephanie B. Jones, MD, Beth Israel Deaconess Medical Center, Boston, Massachusetts

AM 8 (1446)
Anaesthetic Technique, Outcome and Our Experience in Two Hundred Cases of Trans Oral Robotic Surgery [TORS]: A Retrospective Study
Itee Chowdhury, Soumi Pathak, Jitendra Dubey
Ragiv Gandhi Cancer Insitute & Research Centre, Delhi, India

AM 9 (1257)
Non-Invasive Ventilation in Perioperative Surgical Patients
Brooke LeBlanc¹, Phillip Boysen², Bobby Nossaman², Michael Townsend², Jacqueline Wilson¹
¹Ochsner Medical Center, New Orleans, Louisiana, ²Ochsner Clinic Foundation, New Orleans, Louisiana

AM 10 (790)
A Comparison of Clinical Simulation and Classical Learning for Airway Management in Medical Undergraduate Students: A Randomized Controlled Trial
David J. Romero, Maria C. Niño, Leopoldo E. Ferrer, Juan C. Díaz, Diego Aguirre
Fundación Santa Fe de Bogotá, Bogotá, Cundinamarca

PS 11 (783)
Radiological Assessment of Gastric Emptying of Water Soluble Contrast Media: New Data Security from a Cohort Study
David J. Romero, Maria C. Niño, Leopoldo E. Ferrer, Juan C. Díaz, Diego Aguirre
Fundación Santa Fe de Bogotá, Bogotá, Cundinamarca

AM 12 (1104)
Difficult Tracheal Extubation in Adult Surgical Intensive Care
Tim Ziethen¹, Phillip Boysen², Bobby Nossaman², Michael Townsend², Jacqueline Wilson¹
¹Ochsner Medical Center, New Orleans, Louisiana, ²Ochsner Clinic Foundation, New Orleans, Louisiana

AP 13 (1335)
Suppressors of Volatile Anesthetic Sensitivity in C. Elegans
Simon Johnson¹, Margaret Sedensky², Philip Morgan²
¹Seattle Children’s Research Institute, Seattle, Washington, ²University of Washington Medicine, Seattle, Washington

continued on page 43
Moderated Poster Discussion Session I, continued

Group 3: Anesthetic Pharmacology, and Bench Science

Moderator: Tobias Eckle, MD, PhD, University of Colorado Denver School of Medicine, Aurora, Colorado

AP 15 (670)
Putative Binding Site of Dexmedetomidine in Alpha-Adrenergic 2A Receptor
Thomas T. Joseph¹, Andrew McKinstry-Wu¹, Kellie Woll¹, Roderic G. Eckenhoff¹, Grace Brannigan²
¹Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ²Rutgers University, Camden, New Jersey

BS 16 (580)
Dependence of Ketamine-GPCR Interaction on Protonation States
Thomas T. Joseph¹, Weiming Bu¹, Roderic G. Eckenhoff¹, Grace Brannigan²
¹Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ²Rutgers University, Camden, New Jersey

BS 17 (1238)
Light Elicited Cardio-Protection Reveals Circadian Entrainment as a Mechanism that Requires PER2 to Mimic HIFα Mediated Metabolic Adaptation to Ischemia
Colleen M. Bartman¹, Yoshimasa Oyama¹, Tobias Eckle²
¹University of Colorado Anschutz Medical Campus, Aurora, Colorado, ²University of Colorado Denver School of Medicine, Aurora, Colorado

BS 18 (784)
Signaling in Vascular Endothelium by Varying Degrees of Mechanical Stretch
Yunbo Ke, Chenou Zhang, Yue Li, Trang Nguyen, Pratap Karki, Konstantin Birukov, Anna Birukova
University of Maryland School of Medicine, Baltimore, Maryland

BS 19 (1314)
Pharmacological Calcium/Calmodulin-Dependent Protein Kinase (CaMKII) Inhibition Protects against Purkinje Cell Damage Following Cardiac Arrest and Cardiopulmonary Resuscitation in Mice
Nidia Quillinan, Nicholas Chalmers, Katie Steklac, Paco Herson
University of Colorado Denver School of Medicine, Aurora, Colorado

continued on page 44
Group 4: Blood Management, and Technology, Computing and Simulation, Equipment Monitoring

Moderator: Michael Aziz, MD, Oregon Health & Science University, Portland, Oregon

BLD 22 (1348)  
Factors IX from Prothrombin Complex Concentrate Augments Low Tissue Factor-triggered Thrombin Generation – An Exploratory In Vitro Study

Ezeldeen Abuelkasem1, Shaheer Shaheer Hasan2, Brittney Williams2, Reney Handerson2, Michael A. Mazzeffi2, Kenichi Tanaka2
1University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, 2University of Maryland School of Medicine, Baltimore, Maryland

BLD 23 (1199)  
Efficacy of Intraoperative Cell Salvage in Spine Surgery: A Meta-analysis

Thomas Cheriyan1, Thomas Errico2, Anterpreet Dua2, Vikas Kumar3
1Augusta University Medical Center, Augusta, Georgia, 2New York University-Hospital for Joint Diseases, New York, New York, 3Augusta University, Augusta, Georgia

TCSEM 24 (743)  
Efficacy of Bispectral Index in Reducing Intraoperative Awareness: A Meta-Analysis of Randomized Controlled Studies

Thomas Cheriyan1, Kevin Bai2, Anterpreet Dua2, Vikas Kumar3
1Augusta University Medical Center, Augusta, Georgia, 2New York University-Hospital for Joint Diseases, New York, New York, 3Augusta University, Augusta, Georgia

BLD 25 (838)  
Contrasting Effects of Stored Allogeneic Red Blood Cells and Their Supernatants on Permeability and Inflammatory Responses by Human Pulmonary Artery Endothelial Cells

Junghyun Kim, Trang Nguyen, Michael A. Mazzeffi, Kenichi Tanaka, Anna Birukova, Konstantin Birukov
University of Maryland School of Medicine, Baltimore, Maryland

BLD 26 (1042)  
Impact of Reinforced, Strict Guidelines on the Usage of Packed Red Blood Cells (PRBC)

Theresa Kuhlmann, Katharina-Stefanie Haeusler, Michael Booke
Hospital of Bad Soden, Bad Soden Ts., Germany
Group 5: Cardiovascular Anesthesiology

Moderator: George Gallos, MD, Columbia University, New York, New York

CA 29 (1424)
Spinal Cord Stimulation Reduces Myocardial Ischemia Induced Ventricular Arrhythmias via GABA Receptor Mediated Pathways in a Porcine Model
Kimberly Howard-Quijano, Yukiko Kubo, Andyshea Afyouni, Jasmine Kipke, Mansoureh Eghbali, Aman Mahajan
University of California, Los Angeles David Geffen School of Medicine, Los Angeles, California

CA 30 (1242)
Impact of Methylprednisolone on the Incidence of Postoperative Complications in Cardiac Surgery Patients
Felix Balzer, Ralf F. Trauzeddel, Martin Ertmer, Torsten Geyer, Herko Grubitzsch, Sascha Treskatsch
Charite - Universitätsmedizin Berlin, Germany

CA 31 (924)
Fatigue and Dyspnea on Exertion in a Patient with Previous Aortic Valve Surgery
Chris Denny, Charles Baysinger, Randall M. Schell
University of Kentucky HealthCare, Lexington, Kentucky

CA 32 (1058)
Active Intrathoracic Pressure Regulation: A Novel Non-invasive Device to Improve Hemodynamics after Blood Loss in a Porcine Model of Hemorrhage
Anja Metzger¹, Paul Berger², Michael Lick³, Keith Lurie¹
¹University of Minnesota Medical School, St. Paul, Minnesota, ²Zoll Medical, St. Paul, Minnesota, ³Minneapolis Medical Research Foundation, Minneapolis, Minnesota

CA 33 (936)
Variant Apolipoprotein L1 (APOL1) Alleles Are Associated with Increased Risk of Post-Cardiac Surgery Acute Kidney Injury
Jamie Privratsky¹, Yi-Ju Li¹, Carol Haynes², Joseph P. Mathew², Mihai Podgoreanu², Swati Shah², Mark Stafford-Smith²
¹Duke University Medical Center, Durham, North Carolina, ²Duke University School of Medicine, Durham, North Carolina

CA 34 (932)
Cardiac Output Monitoring: A Comparative Prospective Observational Study of the Conventional Cardiac Output Monitor and a New Smartphone Based Application
Shagun B. Shah¹, Ajay K. Bhargava², Uma Hariharan², Gayatri Vishvakarma², Chamound R. Jain¹, Anamika Kansal¹
¹Rajiv Gandhi Cancer Institute and Research Centre, Delhi, India, ²Dr. Ram Manohar Lohia Hospital and PGIMER, Delhi, India
Moderated Poster Discussion Session I, continued

Group 6: Critical Care
Moderator: Ines P. Koerner, MD, PhD, Oregon Health & Science University, Portland, Oregon

**CC 37 (1258)**
The Prognostic Value of Cardiac Power Output in Septic Patients
Beliz Bilgili, Zuhal Aykac, Muserref Turker
*Marmara University, School of Medicine, Istanbul, Turkey*

**CC 38 (1088)**
Focused Transthoracic Echocardiography and In-Hospital Cardiac Arrest: A Case Series of 10 Resident-Obtained Echocardiograms in the Peri-Resuscitative Period
Susan L. Herrick, Nibras Bughrara, Kirti Sahu, Scott Groudine, Kevin Roberts
*Albany Medical College, Albany, New York*

**CC 40 (606)**
Long-Term Outcomes Following Extracorporeal Life Support for Acute Respiratory Failure
Michael D. McDonald¹, Danielle K. Sandsmark¹, Jessica Palakshappa², Mark E. Mikkelsen¹, Brian J. Anderson¹, Jacob Gutsche¹
¹Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ²Wake Forest School of Medicine, Winston-Salem, North Carolina

**CC 41 (867)**
Hyperacute Catheter-Associated Pulmonary Embolus in the Immediate Postoperative Period Following Spinal Surgery
Ergit Paparisto, Daniel Donoho, Michael Kim, Kevin Blaine
*Keck School of Medicine of University of Southern California, Los Angeles, California*

**CC 42 (1329)**
Sepsis Upregulates HIF-1 Independent of Tissue Oxygenation
Robert Thiele, Keita Ikeda, Hari Osuru, Zhiyi E. Zuo
*University of Virginia School of Medicine, Charlottesville, Virginia*

*continued on page 47*
Moderated Poster Discussion Session I, continued

Group 7: Economics, Education and Policy, and Technology, Computing and Simulation, Equipment Monitoring

Moderator: May C. M. Pian-Smith, MD, MS, Harvard Medical School; Massachusetts General Hospital; Boston, Massachusetts

EEP 45 (864)
The “Mock OSCE”: Preparing Residents for the ABA Objective Structured Clinical Examination
Marianne H. Gelter¹, Phillip Boysen², Leo Nunnink³, Robin Stedman⁴, Kelly Ural⁴, Elaine Pages-Arroyo⁴
¹Ochsner Main Campus, New Orleans, Louisiana, ²Ochsner Clinic Foundation, New Orleans, Louisiana, ³The University of Queensland, New Orleans, Louisiana, ⁴Ochsner Health System, New Orleans, Louisiana

EEP 46 (700)
Perspective on Leadership and Millennial Physicians
Marianne H. Gelter¹, Phillip Boysen²
¹Ochsner Clinic Foundation, New Orleans, Louisiana, ²University of Queensland Ochsner Clinical School, New Orleans, Louisiana

EEP 47 (591)
Metacognition Principles in a Didactic TEE Education Program
Sheldon Goldstein¹, Dennis Feierman², Ellise Delphin², Yuriy Gubenko³, Nikolas Skubas⁴
¹Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, New York, ²Maimonides Medical Center, Brooklyn, New York, ³Rutgers N. J. Medical School - Newark, Newark, New Jersey, ⁴Cleveland Clinic, Cleveland, Ohio

EEP 48 (810)
Building an Academic Anesthesiology Career Using the Medical Academic Grid (MAG©)
Sheldon Goldstein
Montefiore Medical Center Albert Einstein College of Medicine, Bronx, New York

TCSEM 49 (995)
Comparison of Pulse Oximeter Readings from Two Locations during Anesthesia
Sheldon Goldstein¹, Gabriela Samayo², Jeremy Dennis³, Alyson Dennis², Malka Stohl⁴, Sakina Nayaz³
¹Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, New York, ²Barnard College, New York, New York, ³New York Psychiatric Institute, New York, New York, ⁴University of Rochester, Rochester, New York

continued on page 48
Moderated Poster Discussion Session I, continued

Group 8: Economics, Education and Policy, and Patient Safety
Moderator: William Peruzzi, MD, Henry Ford Health System, Detroit, Michigan

EEP 51 (665)
The High Cost of Severe Pediatric Caries
Helen H. Lee¹, Luis Chacon², Cassandra Yarbrough³, Kamyar Nasseh⁴, Anthony LoSasso¹
¹University of Illinois at Chicago, Chicago, Illinois, ²American Dental Association, Chicago, Illinois

EEP 52 (806)
The Impact of Preventive Care Reimbursements on Use of Preventive and Tertiary Oral Health Services
Helen H. Lee¹, Luis Chacon², Cassandra Yarbrough³, Kamyar Nasseh⁴, Anthony LoSasso¹
¹University of Illinois at Chicago, Chicago, Illinois, ²American Dental Association, Chicago, Illinois

EEP 53 (1227)
Concurrent Surgery and Perioperative Outcomes: A Retrospective Analysis from the Multicenter Perioperative Outcomes Group
Eric Sun¹, Michelle Mello¹, Christopher Rishel¹, Shelley Housey², Sachin Kheterpal³, Leif Saager², Lee A. Fleisher⁴, Anupam Jena⁴
¹Stanford University School of Medicine, Stanford, California, ²University of Michigan Medicine, Ann Arbor, Michigan, ³Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ⁴Harvard University, Boston, Massachusetts

PS 54 (958)
Disruptive Intraoperative Behavior: Reporting to Management and Satisfaction with Management’s Response
Ian Fast¹, Alexander Villafranca², Bernadette Henrichs², Kirby Magid³, Chris Christodoulou², Eric Jacobsohn¹
¹University of Manitoba, Winnipeg, Manitoba, Canada, ²Washington University School of Medicine in St. Louis, St. Louis, Missouri

PS 55 (1284)
Disruptive Intraoperative Behavior: Reporting to Management and Satisfaction with Management’s Response: Supraclavicular Brachial Plexus Block Analgesia with or without Perineural Dexamethasone for Creation of Arteriovenous Fistula in End Stage Renal Disease Patients
Indu M. Sen, Aparna Pande, Ashish Sharma
Pgimer, Chandigarh, India

continued on page 47
Moderated Poster Discussion Session I, continued

Group 9: Geriatric Anesthesia, and Patient Safety

**Moderator:** Robert Whittington, MD, Columbia University New York Presbyterian Hospital, New York, New York

**GA 58 (785)**
Depth of Sedation as an Interventional Target to Reduce Postoperative Delirium: A Randomized Clinical Trial

**Frederick Sieber**, Karin Neufeld, Allan Gottschalk, Esther Oh, Jean Pierre Ouanes, George Bigelow, Naeyuh Wang

*Johns Hopkins Medical Institutions, Baltimore, Maryland*

**GA 59 (502)**
Dexmedetomidine with Sufentanil in Intravenous Patient-Controlled Analgesia for Relief from Postoperative Pain, Inflammation, and Delirium after Esophageal Cancer Surgery

**Chaoliang Tang**, Juan Li, Weifeng Yao, Lydia W. Tai, Si Shi, Zhongyuan Xia

*Renmin Hospital of Wuhan University, Wuhan, China, Anhui Provincial Hospital of Anhui Medical University, Hefei, Anhui, The Third Affiliated Hospital of Sun Yat-sen University, Guangzhou, Guangdong, The University of Hong Kong, Hong Kong*

**PS 60 (1146)**
Derivation, Validation, and Sustained Performance of a Hospital-Wide Elective Surgery Delirium Risk Tool (AWOL-S)

**Elizabeth L. Whitlock**, Anne L. Donovan, Matthias R. Braehler, Jennifer A. Kaplan, Emily Finlayson, Stephanie E. Rogers, Vanja C. Douglas

*University of California, San Francisco School of Medicine, San Francisco, California*

**GA 61 (1386)**
Cognitive Change after Cardiac Surgery or Cardiac Catheterization: An Epidemiological Study


*University of California, San Francisco School of Medicine, San Francisco, California*

**GA 62 (558)**
Long-Term Caregiving is Associated with Impaired Cardiovagal Baroreflex – Implications on Anesthesia Care

**Kevin K. Wu**, Taylor Bos, Brent Mausbach, Igor Grant

*Frank H. Netter MD School of Medicine at Quinnipiac University, Hamden, Connecticut, San Diego State University, San Diego, California, University of California, San Diego School of Medicine, California*

continued on page 50
Moderated Poster Discussion Session I, continued

**Group 10: Liver, Metabolism and Perioperative Care, and Obesity**

**Moderator:** Mark Rice, MD, Vanderbilt University Medical Center, Nashville, Tennessee

**L 65 (562)**
Predicting Postoperative Liver Dysfunction Using Indocyanine Green Clearance after Cardiac Surgery
Kaila Gordo¹, Gebhard Wagener²
¹Columbia University, New York, New York, ²College of Physicians and Surgeons of Columbia University Medical Center, New York, New York

**L 66 (1179)**
Novel Insights Into a Mitochondrial Immuno-Metabolism Connection Detected by RNA-Sequence Analysis of Experimental Drug-Induced Hepatitis in BALB/c Mice
Anthony Franchetti¹, Alyssa R. Padover¹, Merylin Cottagiri¹, Conover Talbot², Dolores B. Njoku¹
¹Johns Hopkins Hospital, Baltimore, Maryland, ²Johns Hopkins School of Medicine, Baltimore, Maryland

**MPC 67 (786)**
The Effects of Major Hepatobiliary Surgery and General Anesthesia on Skeletal Muscle Mitochondrial Respiration. A Pilot Study
Jia Liu Stevens¹, Daniel Martin¹, Helen McKenna³, Andrew Murray³, Gavin Jell¹

**MPC 68 (1066)**
Isoflurane, Unlike Propofol, Increases Reactive Aldehyde Metabolism in Both Wild Type Mitochondrial Aldehyde Dehydrogenase 2 (ALDH2) and ALDH2*2 Rodents
Eric R. Gross, Adriana M. Gardner, Pritam Sinharoy
Stanford University School of Medicine, Stanford, California

**MPC 69 (916)**
Increase in Minute CO₂ Removal May Be More Valuable Than Other Clinical Parameters for Clinical Diagnosis of Malignant Hyperthermia: A Case Series from a Single Large Medical Center in North America
Zeping Xu¹, Paul J. St. Jacques¹, Kevin Scharfman¹, Yandong Jiang³, Jonathan Wanderer²
¹Vanderbilt University Medical Center, Nashville, Tennessee, ³Vanderbilt University School of Medicine, Nashville, Tennessee

**O 70 (851)**
Severity and Duration of Hypoxemia During Outpatient Endoscopy in Obese Patients
Anton Laffin¹, Samir Kendale², Tessa K. Huncke²
¹New York University / NYU Health, New York, New York, ²New York University School of Medicine, New York, New York

*continued on page 51*
Moderated Poster Discussion Session I, continued

O 71 (1333)
Effect of Pediatric Obesity Pre-Anesthesia Evaluation Guidelines in Anesthetic Complications: A Multidisciplinary Effort
Vera A. Sergeeva, Amy Andersen, Brian D. Soriano, Maida L. Chen, Grace Kim, Nathalia Jimenez
Seattle Children’s Hospital, Seattle, Washington

Group 11: Medically Challenging Cases, and Perioperative Anesthesia
Moderator: Michael H. Andreee, MD, Penn State Health Milton S. Hershey Medical Center, Hershey, Pennsylvania, and Paul Picton, MD, MRCP, FRCA, University of Michigan Medicine, Ann Arbor, Michigan

MCC 75 (529)
A Novel Association of Juvenile Polyposis Syndrome with Atrial Septal Aneurysm and Patent Foramen Ovale
Kunal Karamchandani1, Melanio Bruceta2, Luisa M. De Souza2, Kunal Karamchandani1, Anthony Bonavia1, Zyad Carr1
1Penn State Health Milton S. Hershey Medical Center, Hershey, Pennsylvania, 2Penn State College of Medicine, Hershey, Pennsylvania

PA 76 (555)
Association of Preoperative Anticholinergic Medication Exposure with Postoperative Healthcare Resource Use and Outcomes: A Population-Based Cohort Study
Deric B. Diep1, Coralie Wong2, Carl van Walraven2, Daniel I. McIsaac3
1University of Ottawa, Ottawa, Ontario, Canada, 2The Ottawa Hospital Research Institute, Ottawa, Ontario, Canada, 3University of Ottawa Faculty of Medicine, Ottawa, Ontario, Canada

MCC 77 (999)
The Anesthetic Management of an Adolescent with Autism Spectrum Disorder and Super-Super Obesity: A Case Report
Deric B. Diep1, Jonathan Hooper1, Naveen Eipe2
1University of Ottawa, Ottawa, Ontario, Canada, 2University of Ottawa Faculty of Medicine, Ottawa, Ontario, Canada

MCC 78 (1217)
Anesthetic Challenges of Emergency Gynecological Surgery in a Jehovah’s Witness with Fontan Circulation: A Case Report
Deric B. Diep, Malcolm Lucy, Ashraf Fayad
University of Ottawa, Ottawa, Ontario, Canada

continued on page 52
Moderated Poster Discussion Session I, continued

MCC 79 (1220)
Transesophageal Echocardiography in the Intraoperative Management of Renal Cell Carcinoma with Inferior Vena Cava Thrombus: A Case Report
Deric B. Diep, Malcolm Lucy, Ashraf Fayad
University of Ottawa, Ottawa, Ontario, Canada

MCC 80 (637)
PICC Line Challenge
Pavel Balduyeu, Laurie Davies
University of Florida College of Medicine, Gainesville, Florida

Group 12: Medically Challenging Cases
Moderator: Annette Rebel, MD, University of Kentucky College of Medicine, Lexington, Kentucky

MCC 83 (682)
The Use of High Flow Nasal Oxygenation in the Anesthetic Management of Tracheal Stent Deployment: A Case Report
Tracey Straker¹, Valerie Armstead²
¹Montefiore Medical Center, Bronx, New York, ²Jefferson Memorial, Philadelphia, Pennsylvania

MCC 84 (792)
How Findings on Transesophageal Echocardiography Can Change the Surgical Approach for Management of a Pericardial Effusion from Penetrating Chest Trauma
Patrick J. Coleman, Matthew D. Read
San Antonio Military Medical Center, San Antonio, Texas

MCC 86 (925)
Successful Treatment of Recurrent Chronic Scrotal Pain Secondary to Post Laminectomy Syndrome with Spinal Cord Stimulation
Matthew M. Skoblar, Brian Monroe, Ahmed Shaik
Geisinger Medical Center, Danville, Pennsylvania

continued on page 53
MCC 87 (949)
Management of Scimitar Syndrome in Two Pregnant Patients
Laura Lombardi-Karl, Suzanne Mankowitz
Columbia University Medical Center, New York, New York

MCC 89 (1080)
Management of Severe Fire-related Inhalation Injury with Venovenous Extracorporeal Membrane Oxygenation: A Case Report
Grant J. Heydinger, Aalok K. Kacha, Vijal Patel
The University of Chicago Medicine, Chicago, Illinois

Group 13: Medically Challenging Cases
Moderator: Carlos Mantilla, MD, Mayo Clinic, Rochester, Minnesota

MCC 96 (1128)
A Case of Unexplained Septic Shock
Jaclyn Yeung, Laurie Mark
Rush University Medical Center, Chicago, Illinois

MCC 97 (1157)
Compartment Syndrome as a Complication of Invasive Blood Pressure Monitoring in Patients Receiving Catheter Directed Thrombolysis
Syed Z. Ali, Cheryl Richie, Joseph Bobadilla, Annette Rebel
University of Kentucky College of Medicine, Lexington, Kentucky

MCC 98 (1163)
Is the Tracheostomy Working? – Medically Challenging Case Presentation
Syed Z. Ali, Zohn Centimole
University of Kentucky College of Medicine, Lexington, Kentucky

continued on page 54
Moderated Poster Discussion Session I, continued

Group 14: Medically Challenging Cases and Perioperative Anesthesia

Moderator: Stuart A. Forman, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

MCC 101 (1361)
New Anterior Mediastinal Mass Discovered Day of Surgery: A Case Report
John Kroger, Lakshmi Gudimella
The University of Texas Medical Branch, Galveston, Texas

MCC 102 (1378)
Itching and Amniotic Fluid Embolism with Circulatory Collapse in a Full-term Pregnant Patient
1Cleveland Clinic, Cleveland, Ohio, 2Cleveland Clinic Fairview Hospital, Cleveland, Ohio

PA 103 (1416)
Quality Improvement Project: Does Pre-procedural General Cognition and Neurocognitive Diagnoses Affect Colonoscopy Preparation in Older Adults?
Franchesca Arias, Michael Rivero, Shellie-Anne Levy, Cynthia Garvan, Patrick J. Tighe, David S. Estores, Catherine Price
1University of Florida College of Medicine, Gainesville, Florida, 2Associate Professor/Paul Satz Term Professor Clinical and Health Psychology/Anesthesiology, University of Florida College of Medicine, Gainesville, Florida

MCC 104 (1422)
Current Cognitive Impairment in a Patient with a History of Delirium: A Preoperative Dilemma
Franchesca Arias, Alberto Bursian, Joshua Sappenfield, Catherine Price
1University of Florida College of Medicine, Gainesville, Florida, 2Associate Professor/Paul Satz Term Professor Clinical and Health Psychology/Anesthesiology, University of Florida College of Medicine, Gainesville, Florida

MCC 105 (1420)
Ethical Conflicts in Extracorporeal Membrane Oxygenation: A Case Report
Elizabeth McIntyre, Elio Beta, Rachel Kadar
McGaw Medical Center of Northwestern University, Chicago, Illinois

MCC 106 (1421)
Perioperative Management of a Patient with von Gierke Disease Undergoing Hepatic Surgery
Amar M. Bhatt, Floria Chae, Brandon Pruett, Sree V. Satyapriya
Wexner Medical Center at The Ohio State University, Columbus, Ohio

continued on page 55
Moderated Poster Discussion Session I, continued

Group 15: Neuroscience in Anesthesiology and Perioperative Medicine, and Pediatric Anesthesiology

Moderator: Monica S. Vavilala, MD, University of Washington Medicine, Seattle, Washington

NR 109 (1057)
Perioperative Trajectory of Alzheimer’s Disease Biomarkers in Surgical Patients and Matched Non-Surgical Controls

Yee Ching Vanessa Cheong¹, Mary Cooter², Richard L. Huang³, Heather E. Whitson⁴, Harvey J. Cohen⁴, Joseph P. Mathew⁵, Miles Berger⁶
¹Duke-NUS Medical School, Singapore, Singapore, ²Duke University Medical Center, Durham, North Carolina, ³Duke University School of Medicine, Durham, North Carolina

NR 110 (953)
Power Spectrum and Frontal Alpha Band Activity Saturation Predicts Loss of Response to Verbal Command in Older Adults during Anesthetic Induction with Propofol: a Diagnostic Test Approach

Carlos M. Fuentes, Juan C. Pedemonte, Andrea Sanchez, Martin Irani, Mohit Rana, Victor Contreras, Ignacio Cortinez
Pontificia Universidad Católica de Chile, Santiago de Chile, Chile

NR 111 (537)
Sugammadex Offers a New Option for Early Cessation of Neuromuscular Blockade to Facilitate Spinal Cord Evoked Potential Monitoring

Jackson M. Hylton, Michael Scott
Virginia Commonwealth University Health System, Richmond, Virginia

NR 112 (1325)
Discriminative Capacity of EEG Power for the Onset and Severity of Delirium in the Postoperative Period

Ying Jiang, Emma R. Trammel, Ginika Apakama, James W. Spencer, Troy Wildes, Michael Avidan, Ben Palanca
Washington University School of Medicine in St. Louis, St. Louis, Missouri

NR 113 (1418)
Serum Angiopoietin-2 in Children with Traumatic Brain Injury

Abhijit V. Lele¹, Viharika Lakireddy², Hope Clark-Bell³, Anne Moore³, Jerry Zimmerman³, Randall Chesnut³, Bill Armstead³, Monica S. Vavilala¹
¹University of Washington Medicine, Seattle, Washington, ²Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

continued on page 56
PED 114 (1317)
Prevalence and Clinical Factors Associated with Impaired Cerebral Autoregulation in Children with Mild Complex Traumatic Brain Injury
Abhijit V. Lele1, Viharika Lakireddy2, Hope Clark-Bell2, Anne Moore2, Jerry Zimmerman2, Randall Chesnut1, Bill Armstead2, Monica S. Vavilala2
1University of Washington Medicine, Seattle, Washington, 2Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

Group 16: Neuroscience in Anesthesiology and Perioperative Medicine
Moderator: Tomoki Hashimoto, MD, University of California, San Francisco School of Medicine, San Francisco, California

NR 119 (840)
Sevoflurane Interferes Cell Cycle through Inhibition of Wnt/β-Catenin Signaling Pathway in Mouse Neural Stem Cells
Shiwen Liu
Shanghai Zhongshan Hospital, Shanghai, China

NR 120 (621)
Neonatal Disruption of PSD-95 PDZ Domain-Mediated Protein-Protein Interactions Alters Dendritic Spine Morphology, Long-Term Potentiation, and Causes Deficits in Learning and Memory in Mice
Michele L. Schaefer, Meina Wang, Patric Perez, Jing Xu, Reilley P. Mathena, Roger A. Johns
Johns Hopkins University School of Medicine, Baltimore, Maryland

NR 121 (771)
The Association Between Angiotensin Converting Enzyme Inhibitors and Angiotensin Receptor Blocker Use and the Incidence of Delirium in Surgical ICU Patients
Christopher Sheerer, Jacob Ezell, Maged Y. Argalous, Wael Ali Sakr Esa, Daniel I. Sessler, Nicole Zimmerman, Ehab Farag
Cleveland Clinic Foundation, Cleveland, Ohio

NR 122 (1153)
The Pro-Apoptotic Protein BAX is Necessary for Neuron Death Associated with Exposure to Isoflurane General Anesthesia in a Neonatal Mouse Model
Andrew Slupe1, Laura E. Villasana1, Kevin Wright2
1Oregon Health and Science University, Portland, Oregon, 2Vollum Institute, Portland, Oregon

continued on page 57
Moderated Poster Discussion Session I, continued

Group 17: Medically Challenging Cases, Neuroscience in Anesthesiology and Perioperative Medicine, Obesity, Obstetric Anesthesiology, and Pediatric Anesthesiology

Moderator: Manuel C. Vallejo, MD, DMD, West Virginia University, Morgantown, West Virginia, and Jonathan Waters, MD, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania

NR 124 (1177)
Propofol Anesthesia Does Not Increase the Removal of Brain Wastes in Humans
Li Li, Deepak Sharma, Koichiro Nandate, James G. Hecker, Nathalie Bentov, Daniel Raftery, Nagana Gowda
University of Washington Medicine, Seattle, Washington

PED 125 (1172)
High-Throughput Screen for Inhibitors of Anesthetic-Induced Neurotoxicity in C. elegans
Li Li¹, Simon Johnson², Margaret Sedensky², Philip Morgan¹
¹University of Washington Medicine, Seattle, Washington, ²Seattle Children’s Research Institute, Seattle, Washington

OB 126 (753)
Transcutaneous P6 Acupoint Electrical Stimulation Prevents Both Nausea and Vomiting during Elective Cesarean Section under Combined Spinal-Epidural, a Randomized Control Clinical Trial
Danielle Levin, Shaul Cohen, Scott Mellender, Adil Mohiuddin, Rong Zhao, Geza Kiss, Enrique Pantin
Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey

OB 127 (799)
Does the Application of Scopolamine Patch with Intra-Operative Acupressure Point P6 Stimulation Increase Parturients’ Intra-Cesarean Satisfaction? Prospective Randomized Clinical Trial
Danielle Levin, Shaul Cohen, Scott Mellender, Adil Mohiuddin, Ushma Shah, Rong Zhao, Geza Kiss
Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey

O 128 (835)
Paternal BMI Affects Neonatal Weight: A Retrospective Study
Danielle Levin, Shaul Cohen, Scott Mellender, Rong Zhao, Adil Mohiuddin, Ushma Shah, Geza Kiss
Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey

MCC 129 (839)
Successful Anesthetic Management of a Patient with Multiple Trauma and Severe Hypothermia: A Case Report
Danielle Levin, Shaul Cohen, Scott Mellender, Preet Patel, Adil Mohiuddin, Ushma Shah, Geza Kiss
Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey

continued on page 58
Group 18: Pain and Addiction Pathways, Pain Mechanisms, and Pain Medicine

Moderator: Lucy Chen, MD, Massachusetts General Hospital; Harvard Medical School, Boston, Massachusetts

PM 132 (570)
Comparison of Postoperative Analgesic Effect of Preemptive Use of Tramadol Versus Ketamine in Laparoscopic Surgery

Xin Wang
The 4th Center Hospital, Tianjin, Tianjin

PME 133 (955)
GABA Neurons in the Rostromedial Tegmental Nucleus Modulate Analgesia in Mice

Norman E. Taylor1, Hu Long2, Junzhu Pei2, Phanidhar Kukutla1, Ksenia Y. Vlasov3, Ken Solt*, Gary J. Brenner4
1Massachusetts General Hospital, Boston, Massachusetts, 2West China Hospital of Stomatology, Chengdu, China, 3Massachusetts Institute of Technology, Cambridge, Massachusetts, 4Harvard Medical School, Boston, Massachusetts

PME 134 (1029)
Mobile Detection of Simulated Opioid Overdose Events

Jacob Sunshine, Rajalakshmi Nandakumar, Shyamnath Gollakota
University of Washington Medicine, Seattle, Washington

PM 135 (1235)
Role of Pain Specialists in Reducing Healthcare Costs for Patients with Chronic Pain

Jennifer Anderson1, Kathryn Komaki2, Steven Prakken2, Lance Roy1, Thomas Buchheit2, John Hunting2, Padma Gulur3
1Duke University Medical Center, Durham, North Carolina, 2Duke University School of Medicine, Durham, Washington

PME 136 (992)
Car8 Analgesia Assessed in Morphine Equivalence Using Mechanical Antinociception: Implications for Allometric Dosing and Translation from Mice to Humans

Eugene Fu, Konstantinos D. Sarantopolous, Gerald Z. Zhuang, Udita Upadhyay, Yuan Kang, Roy C. Levitt
University of Miami, Miller School of Medicine, Miami, Florida

PME 137 (793)
Are the Patients with Opioid Use Disorder Prone to Relapse to Opioids in the Postoperative Period?

Khodadad Namiranian
VA Maryland Health Care System, Baltimore, Maryland

continued on page 59
Group 19: Pain Mechanisms

Moderator: James Eisenach, MD, Wake Forest School of Medicine, Winston-Salem, North Carolina

PME 141 (883)
Analgesic Responses are Regulated by Genetic Variation of Dorsal Root Ganglia Carbonic Anhydrase-8 in Mice
Roy C. Levitt¹, Gerald Z. Zhuang¹, Yuan Kang¹, Udita Upadhyay¹, Eugene Fu¹, Tim Wiltshire², Konstantinos D. Sarantopolous¹
¹University of Miami, Miller School of Medicine, Miami, Florida, ²University of North Carolina, Chapel Hill, North Carolina

PME 142 (880)
Gain Without Pain: CA8-204 Represents a Novel Analgesic Therapeutic Candidate
Roy C. Levitt¹, Udita Upadhyay¹, Luda Diatchenko³, Gerald Z. Zhuang¹, Yuan Kang¹, Eugene Fu¹, Konstantinos D. Sarantopolous¹
¹University of Miami, Miller School of Medicine, Miami, Florida, ³McGill University, Montreal, Quebec

PME 143 (882)
Addressing a Missing Link in Pain Medicine: Preclinical Validation CA8 Biotherapeutics as Long Acting Local Analgesics/Anesthetics (LALA)
Roy C. Levitt, Gerald Z. Zhuang, Udita Upadhyay, Yuan Kang, Eugene Fu, Konstantinos D. Sarantopolous
University of Miami, Miller School of Medicine, Miami, Florida

PME 144 (1405)
Skin Overexpression of Neurturin Upregulates TNF-α in CFA Inflammation
Marsha E. Ritter Jones, Kathryn Albers, Brian Davis
University of Pittsburgh, Pittsburgh, Pennsylvania

PME 145 (994)
Muscle Sensory Dysfunction in a Rat Model of Peripheral Arterial Disease: The Role of Microglial Activation in Chronic Limb Pain
Hanjun Wang, Irving H. Zucker, Ting Li, Juan Hong, Andrew J. Patterson, Steven J. Lisco
University of Nebraska Medical Center, Omaha, Nebraska

PME 146 (910)
Ketamine Inhibits the Aversive Symptoms of Chronic Pain via Inhibition of NMDA Signaling in the Anterior Cingulate Cortex
Jing Wang, Haocheng Zhou, Erik Martinez, Qiaosheng Zhang, Kevin Liu, Eric Zhang
New York University School of Medicine, New York, New York

continued on page 60
Moderated Poster Discussion Session I, continued

**Group 20: Pediatric Anesthesiology**

**Moderator:** Richard J. Levy, MD, FAAP, Columbia University, New York, New York

**PED 150 (1124)**

Unplanned Postoperative Intubation in Infant and Neonatal Surgical Patients: Predictors and Associated Mortality

Lisa Eisler¹, Minjae Kim¹, Fatemah Mamdani¹, May Hua¹, Guohua Li², Lena Sun¹

¹Columbia University Medical Center, New York, New York, ²Columbia University College of Physicians and Surgeons, Mailman School of Public Health, New York, New York

**PED 151 (548)**

Perioperative Outcomes and Management in LeFort III Midface Advancement Surgery: A Multicenter Study from the Pediatric Craniofacial Collaborative Group

Chris D. Glover¹, Allison M. Fernandez², Henry Huang¹, Nicholas M. Dalesio³, John Zhong⁴, Wendy Binstock⁵, Paul A. Stricker⁶

¹Baylor College of Medicine, Houston, Texas, ²Johns Hopkins All Children’s Hospital, St. Petersburg, Florida, ³Johns Hopkins University, Baltimore, Maryland, ⁴Children’s Medical Center, Dallas, Texas, ⁵University of Chicago, Chicago, Illinois, ⁶The Children’s Hospital of Philadelphia / Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania

**PED 152 (847)**

Comparison of Endotracheal Intubation vs. Natural Airway during Initial Percutaneous Endoscopic Gastrostomy Insertion

Jacquelin Peck, Aditi Dey, Sorany Son, Ernest Amankwah, Anthony H. Nguyen, Michael Wilsey, Mohamed Rehman

Johns Hopkins All Children’s Hospital, St. Petersburg, Florida

**PED 153 (845)**

Comparison of Endotracheal Intubation vs. Natural Airway during Endoscopic Foreign Body Removal

Jacquelin Peck, Aditi Dey, Sorany Son, Sharon Ghazarian, Michael Wilsey, Mohamed Rehman

Johns Hopkins All Children’s Hospital, St. Petersburg, Florida

**PED 155 (1055)**

Transition from Acute to Chronic Postsurgical Pain: Trajectories of Pain, Function and Health after Adolescent Spine Surgery

Jennifer A. Rabbitts, Tonya Palermo, Chuan Zhou

University of Washington Medicine, Seattle, Washington

continued on page 61
Group 21: Perioperative Anesthesia

Moderator: Kenneth Cummings, MD, MS, Cleveland Clinic, Cleveland, Ohio, and Vijay Krishnamoorthy, MD, PhD, Duke University School of Medicine, Durham, North Carolina

PA 159 (869)
Effect of Dexamethasone on Postoperative Pain Scores in a Resource-Limited Setting: A Randomized Double-blind Placebo Controlled Clinical Trial

Nodreen C. Ayupo¹, Emmanuel Ayebale², Fred Bulamba², Arthur Kwizera²
¹Makerere University, Cleveland, Ohio, ²Makerere University, Kampala, Uganda

PA 160 (740)
The iShuddle: A Strategy to Decreases Turn-Over-Time by Improving Culture in the Operating Room

Richard J. Banchs¹, Molly Driscoll², Hokuto Nishioka²
¹University of Illinois Chicago, Chicago, Illinois, ²University of Illinois Hospital, Chicago, Illinois

PA 161 (1229)
Addition of Focused Transthoracic Echocardiography (FoTE) Learning into Existing Anesthesiology Residency Training Programs: A Prospective Multicenter Study of Blended Learning

Nibraš Bughrara³, Mercades Meuli¹, Tanya Richvalsky³, Mark Hamlin³, Kirti Sahu¹, Kevin Roberts²
¹Albany Medical Center, Albany, New York, ²University of Vermont Medical Center, Burlington, Vermont

PA 163 (1371)
Post-Operative Sepsis: What is the Current Picture?

Amber N. Campbell¹, George W. Williams², Navneet Grewal³, Velvet Patterson⁴, Daniel Contreras⁴, Robert Wegner⁴, Rabail Chaudry⁴
¹University of Texas Houston-McGovern Medical School, Houston, Texas, ²McGovern School of Medicine at the University of Texas Health Science Center, Houston, Texas, ³University of Texas, Houston, Texas, ⁴University of Toronto, Toronto, Canada

continued on page 62
Group 22: Perioperative Anesthesia

Moderator: Bhiken Naik, MBBCh, University of Virginia School of Medicine, Charlottesville, Virginia

PA 168 (1015)
A Nationwide Study of Dental Injuries in Relation to General Anesthesia
Rasmus E. Christensen, Josefine S. Baekgaard, Lars S. Rasmussen
Rigshospitalet, Copenhagen, Denmark

PA 169 (1169)
A Systematic Review and Meta-Analysis Examining the Impact of Sleep Disturbance on Post-Operative Delirium
Ayotunde B. Fadayomi¹, Reine Ibala², Hao Deng³, Michael B. Westover³, Oluwaseun Johnson-Akeju³
¹Brigham and Women's Hospital, Boston, Massachusetts, ²Massachusetts General Hospital, Boston, Massachusetts, ³Harvard Medical School, Boston, Massachusetts

PA 171 (1370)
Impact of ICU Admission on the Perioperative Trajectory of Elderly Surgical Patients
Pakeezah Saadat, Romain Jouffroy, Yannick Le Manach
McMaster University, Hamilton, Ontario, Canada

PA 173 (1444)
Stroke Volume Assessment by Invasive Arterial Blood Pressure Tracing, SpO2 and Bioreactance: A Comparative Study
Jasper Wylleman¹, Tina Maes², Roxane Cool², Michel Vervoort², Jan Poelaert²
¹UZ Brussel, Brussel, Belgium, ²Vrije Universiteit Brussel (VUB), Brussels, Belgium

Group 23: Pain Medicine, and Regional Anesthesia

Moderator: Promil Kukreja, MD, PhD, The University of Alabama at Birmingham, Birmingham, Alabama

RA 178 (907)
Early Experience with 2-Chloroprocaine for Spinal Anesthesia: A Retrospective Analysis at One Institution
David Kim, Richard Kahn, Andrew Lee, Sarah Ortolan, Jacques YaDeau, Phuong Dinh Mac, Nicole Brunetti
Hospital for Special Surgery, New York, New York

continued on page 63
RA 179 (757)
Differential Effect of Paravertebral Block Amongst Mastectomy Patients: Phenotyping Using Preoperatively Determined Psychosocial and Psychophysical Characteristics
Kristin Schreiber, Natt Zinboonyahgoon, Robert R. Edwards
Brigham and Women’s Hospital, Boston, Massachusetts

PM 180 (758)
The Impact of a Yoga-based Daily Exercise Program on Pain, Sleep, and Stress in Patients with Fibromyalgia
Kristin Schreiber, Asmina Lazaridou, Alexandra Buliteanu, Robert R. Edwards
Brigham and Women’s Hospital, Boston, Massachusetts

RA 181 (1009)
Successful Management of 73 Patients for Total Knee Arthroplasty Using a Combination of Ultrasound-Guided Nerve Block and Targeted Sedation
Man-Ling Wang¹, Yu-Juin Fan², Chia-Jung Tsai², Pei-Jian Yu¹, Ying-Lu Lee¹, Ching-Chuan Jiang², Ya-Jung Cheng¹
¹National Taiwan University Hospital, Taipei, Taiwan, ²Orthopedics, Fu-Jen Catholic University Hospital, Taipei, Taiwan

Group 24: Technology, Computing and Simulation, Equipment Monitoring, and Trauma
Moderator: Christos Koutentis, MBChB, MS, Columbia University, Mailman School of Public Health, New York, New York

TCSEM 184 (1181)
Perioperative Central Volume Status in Healthy Children and in Children with Congenital Heart Disease
David Leopold¹, Kristen Campbell², Laura Pyle³, Richard Ing³, Jane Mulligan³, Mark Twite³, Steven Moulton³
¹Children’s Hospital Colorado, Aurora, Colorado, ²University of Colorado Denver School of Medicine, Aurora, Colorado, ³Flashback Technologies, Inc., Louisville, Colorado

TCSEM 185 (1365)
Joint Modeling and the Compensatory Reserve Index: Insight into Hemodynamic Compensation during the Induction of General Anesthesia
David Leopold¹, Kristen Campbell², Laura Pyle³, Richard Ing³, Jane Mulligan³, Mark Twite³, Steven Moulton³
¹Children’s Hospital Colorado, Aurora, Colorado, ²University of Colorado Denver School of Medicine, Aurora, Colorado, ³Flashback Technologies, Inc., Louisville, Colorado
Moderated Poster Discussion Session I, continued

TCSEM 186 (1126)
Virtual Reality Use in Adult ICU to Mitigate Anxiety for a Patient on V-V ECMO: A Feasibility Trial
Gregory J. Blair¹, Sheela Pai Cole², Sam Rodriguez²
¹Stanford Hospital, Mountain View, California, ²Stanford University School of Medicine, Stanford, California

TCSEM 187 (697)
The Simulation Wars: A Competition to Increase Participation in Emergency Manuals Simulation Training and a Novel Tool for Rating Simulation Competitions
Khoa Nguyen¹, Jeffrey Huang¹
¹University of Central Florida, Orlando, Florida

T 188 (937)
Cervical Spine Clearance in Patients with Unreliable Clinical Exam: Delays and Complications
Josefine S. Baekgaard¹, Trine G. Eskesen¹, Jacob Steinmetz¹, Lars S. Rasmussen¹, David King², George C. Velmahos³
¹Rigshospitalet, Copenhagen, Denmark, ²Massachusetts General Hospital, Boston, Massachusetts

T 189 (944)
Supplemental Oxygen for Trauma Patients – Current Practice in Two Trauma Centers
Trine G. Eskesen¹, Josefine S. Baekgaard¹, Rasmus E. Christensen¹, Jae Moo Lee², George C. Velmahos³, Jacob Steinmetz¹, Lars S. Rasmussen¹
¹Rigshospitalet, Copenhagen, Denmark, ²Massachusetts General Hospital, Boston, Massachusetts
## Moderated Poster Discussion Session II

Friday, April 27, 2018  |  1:30 pm - 3:00 pm

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>POSTER BOARD NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airway Management</td>
<td>1, 3, 8-10, 12</td>
</tr>
<tr>
<td>Anesthetic Pharmacology</td>
<td>13, 15</td>
</tr>
<tr>
<td>Bench Science</td>
<td>16-19</td>
</tr>
<tr>
<td>Blood Management</td>
<td>22-23, 25-27</td>
</tr>
<tr>
<td>Cardiovascular Anesthesiology</td>
<td>5, 29-34</td>
</tr>
<tr>
<td>Critical Care</td>
<td>37-42</td>
</tr>
<tr>
<td>Economics, Education and Policy</td>
<td>45-48, 51-53</td>
</tr>
<tr>
<td>Geriatric Anesthesia</td>
<td>58-59, 61-62</td>
</tr>
<tr>
<td>Liver</td>
<td>66-66</td>
</tr>
<tr>
<td>Medically Challenging Cases</td>
<td>4, 83-84, 86-89, 92-98, 101-102, 104-106, 129</td>
</tr>
<tr>
<td>Metabolism and Perioperative Care</td>
<td>67-69, 74-75, 77-80</td>
</tr>
<tr>
<td>Neuroscience in Anesthesiology and Perioperative Medicine</td>
<td>110-113, 119-124</td>
</tr>
<tr>
<td>Obesity</td>
<td>70-71, 128</td>
</tr>
<tr>
<td>Obstetric Anesthesiology</td>
<td>126-127</td>
</tr>
<tr>
<td>Pain and Addiction Pathways</td>
<td>134, 136-137</td>
</tr>
<tr>
<td>Pain Mechanisms</td>
<td>133, 141-146</td>
</tr>
<tr>
<td>Pain Medicine</td>
<td>132, 135, 180</td>
</tr>
<tr>
<td>Pediatric Anesthesiology</td>
<td>114, 125, 150-153, 155</td>
</tr>
<tr>
<td>Perioperative Anesthesia</td>
<td>2, 76, 103, 159-163, 168-173</td>
</tr>
<tr>
<td>Patient Safety</td>
<td>11, 54-55, 60</td>
</tr>
<tr>
<td>Regional Anesthesia</td>
<td>6, 177-179, 181</td>
</tr>
<tr>
<td>Technology, Computing and Simulation, Equipment Monitoring</td>
<td>24, 49, 184-187</td>
</tr>
<tr>
<td>Trauma</td>
<td>188-189</td>
</tr>
</tbody>
</table>
Moderated Poster Discussion Session II

Friday, April 27, 2018 | 1:30 pm - 3:00 pm

Group 1: Airway Management, Anesthetic Pharmacology, and Trauma

Moderator: Michael Aziz, MD, Oregon Health & Science University, Portland, Oregon, and Lena Sun, MD, Columbia University Medical Center, New York, New York

AM 1 (703)
Comparison of Oxygenation and Ventilation in Patients Undergoing Colonoscopy during Anesthesia: A Prospective Randomized Trial

Yandong Jiang, Zeping Xu, Yiping Bai, Meera Chandrashekar, Paul J. St. Jacques, Yafen Liang, Koffi Kla
Vanderbilt University Medical Center, Nashville, Tennessee

AP 2 (730)
In Monkeys, Reversal of the Ultra-Short Acting NMBA 1759-50 by Either D- or L-cysteine is Equally Rapid. Glutathione (GSH) is Also a Rapidly-acting and Effective Antagonist

John J. Savarese¹, Jeff McGilvra³, Hiroshi Sunaga⁵, Farrell Cooke¹, Paul M. Heerdt⁴
¹Weill Cornell Medical College, New York, New York, ²Cedarbury-Hauser Pharmaceuticals, Grafton, Wisconsin, ³Jikei University School of Medicine, Tokyo, Japan, ⁴Yale University School of Medicine, New Haven, Connecticut

AP 3 (741)
Desflurane Alters Layer-Specific Neuronal Interactions in Rat Visual Cortex

Anthony Hudetz¹, Siveshigan Pillay³
¹University of Michigan Medicine, Ann Arbor, Michigan, ³Medical College of Wisconsin, Milwaukee, Wisconsin

AP 4 (782)
Volatile Anesthetics and Mitochondria: Hypoxia and Hyperoxia Modulate Toxicity of Isoflurane in a Drosophila Melanogaster Model of Leigh Syndrome

Misha Perouansky, Zacharia Olu Olufs, Carin Loewen, Barry Ganetzky, David Wassarman
University of Wisconsin-Madison, Madison, Wisconsin

AP 6 (917)
A Prokaryotic-α1β3GABA(A) Receptor Chimera is a Biochemical Model of Neurosteroid Potentiation of the α1β3GABA(A) Receptor

Wayland W. Cheng¹, Yusuke Sugasawa¹, Qiang Chen³, Douglas F. Covey¹, Pei Tang⁵, Gustav Akk¹, Alex Evers¹
¹Washington University School of Medicine in St. Louis, St. Louis, Missouri, ³University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

continued on page 67
Moderated Poster Discussion Session II, continued

**Group 2: Anesthetic Pharmacology**

**Moderator:** Mark Rice, MD, Vanderbilt University Medical Center, Nashville, Tennessee

**AP 8 (923)**
Illuminate the Structural Basis of Neurosteroid Action on GABA<sub>a</sub> Receptors Using Crystallography
Pei Tang, Qiang Chen, Palaniappa Arjunan, Marta M. Wells, Tommy S. Tillman, Yan Xu
University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

**AP 9 (956)**
Nitrous Oxide As Treatment For Tinnitus: A Randomized Crossover Trial
Peter Nagele, Helena Hong, Omar Karadaghy, Dorina Kallogjeri, Frank Brown, Branden Yee, Jay F. Piccirillo
Washington University School of Medicine in St. Louis, St. Louis, Missouri

**AP 10 (962)**
Caffeine Accelerates Emergence from Isoflurane Anesthesia in Human Volunteers
Zheng Xie, Robert Fong, Jeffrey Apfelbaum, James P. Zacny, Aaron P. Fox
The University of Chicago Medicine, Chicago, Illinois

**AP 11 (1355)**
Do Anesthetics Prevent Consciousness by Dampening Microtubule Vibrations Inside Brain Neurons?
Stuart Hameroff
Banner-University of Arizona Medical Center, Tucson, Arizona

**AP 12 (1410)**
Identification of a Modulatory Site of Action for the Volatile Anesthetic Isoflurane in TREK1 Tandem Pore Potassium Channels
Weill Cornell Medicine, New York, New York, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

continued on page 68
Moderated Poster Discussion Session II, continued

Group 3: Bench Science

Moderator: Talmage Egan, MD, University of Utah, Salt Lake City, Utah, and Stuart Forman, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

BS 13 (516)
Gut Commensal Metabolites Regulate Sterile Lung Inflammation in Mice: A Role for Acetate and Propionate
Arun Prakash, Xiaoli Tian, Judith Hellman
University of California, San Francisco School of Medicine, San Francisco, California

BS 14 (544)
Evidence of a Discrete and Targetable Mitochondrial Defect in the Developing Fragile X Syndrome Brain
Richard J. Levy¹, Keren K. Griffiths¹, Aili Wang¹, Lifei Wang¹, Matthew Tracey¹, Catarin Quinzii¹, Elizabeth A. Jonas²
¹Columbia University Medical Center, New York, New York, ²Yale School of Medicine, New Haven, Connecticut

BS 15 (748)
A Novel α2 Agonist Photolabel Reveals a Binding Site for Dexmedetomidine on the α2 Adrenergic Receptor
Andrew McKinstry-Wu, Kellie Woll, E. Railey White, Natarajan Bhanu, Benjamin Garcia, William Dailey, Roderic G. Eckenhoff
Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

BS 16 (919)
Extracellular miR-146a Binds to Toll-Like Receptor 7 and Induces Inflammatory Response in a Murine Sepsis Model
Sheng Wang, Jinjin Xu, Yan Feng, Lin Zou, Wei Chao
University of Maryland School of Medicine, Baltimore, Maryland

BS 17 (943)
Creating a Model of Anesthetic Sensitivity Using Zebrafish
Victoria Bedell, Micheal A. Pack, Max B. Kelz, Roderic G. Eckenhoff
Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

BS 18 (1103)
Genome-Wide Association Study of Heart Rate Variability
Martin I. Sigurdsson¹, Nathan H. Waldron², Andrey V. Bortsov³, Shad B. Smith¹, Gary Slade³, Luda Diatchenko⁴, William Maixner¹
¹Duke University Hospital, Durham, North Carolina, ²Duke University Medical Center, Durham, North Carolina, ³University of North Carolina, Chapel Hill, North Carolina, ⁴McGill University, Montreal, Quebec

continued on page 69
Moderated Poster Discussion Session II, continued

**Group 4: Bench Science**

**Moderator:** Tobias Eckle, MD, PhD, University of Colorado Denver School of Medicine, Aurora, Colorado

**BS 20 (1168)**

*Attenuation of Murine and Human Airway Contraction by a Gelsolin Peptide Containing the PIP2 Binding Domain*

Maya Mikami1, Jose F. Perez-Zoghbi2, Yi Zhang1, Charles W. Emala1

1Columbia University, New York, New York, 2Columbia University Medical Center, New York, New York

**BS 21 (1251)**

*Identification of Abundant and Evolutionarily Conserved Opioid Receptor Circular RNAs, and their Modulation in the Mouse Nervous System by Chronic Morphine*

Takeshi Irie, Rebecca Shum, Ioanna Deni, Roger Wilson, Gregory Fischer, Ying-Xian Pan, Gavril Pasternak

Memorial Sloan Kettering Cancer Center, New York, New York

**BS 22 (1293)**

*Ergodic Mice: Implications of Behavioral State Transitions at Constant Anesthetic Concentration*

Andrew McKinstry-Wu, Andrzej Wasilczuk, Alex Proekt

Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

**BS 23 (1301)**

*Stochastic Behavioral Transitions: Contributions to Hysteresis*

Alex Proekt, Andrzej Wasilczuk, Max B. Kelz, Andrew McKinstry-Wu

Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

**BS 24 (1322)**

*Delayed Inhibition of TRPM2 Channels Reverses Impaired Synaptic Function after Global Cerebral Ischemia*

Paco Herson, Robert Dietz, James Orfila, Guiying Deng, Nicholas Chalmers, Nidia Quillinan

University of Colorado Denver School of Medicine, Aurora, Colorado

**BS 25 (1354)**

*Rescue of Proinflammatory Rat Microglial Mitochondrial Function and IL-1β and Nitric Oxide Release by Idebenone*

Brian M. Polster, Evan A. Bortd, Sausan Jaber, Joshua L. Milstein, James P. Barrett, David J. Loane

University of Maryland School of Medicine, Baltimore, Maryland

*continued on page 70*
Moderated Poster Discussion Session II, continued

**Group 5: Cardiovascular Anesthesiology**

**Moderator:** George Gallos, MD, Columbia University, New York, New York

**CA 27 (841)**

Phenotyping Anesthesiology Providers for Hypotension Episodes during Coronary Artery Bypass Surgery

Miguel Ármengol de la Hoz, Ariel Mueller, Sarah Nabel, Balachundhar Subramaniam, Satya Krishna Ramachandran

Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts

**CA 28 (1192)**

Intraoperative Blood Pressure Thresholds and Major Adverse Events Following Cardiac Surgery: An Exploratory Analysis

Miguel Ármengol de la Hoz, Ariel Mueller, Satya Krishna Ramachandran, Sarah Nabel, Balachundhar Subramaniam

Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts

**CA 29 (1356)**

Atrial Fibrillation Ablation Induces Changes in Central Autonomic Networks

Nathan H. Waldron¹, Ashley Flynn¹, Jeffrey N. Browndyke¹, Miles Berger¹, Jonathan P. Piccini¹, Allen W. Song¹, Joseph P. Mathew²

¹Duke University Medical Center, Durham, North Carolina, ²Duke University School of Medicine, Durham, North Carolina

**CA 30 (1381)**

Epicardial Botulinum Toxin Injection Induces Early Changes in Heart Rate Dynamics

Nathan H. Waldron¹, Martin I. Sigurdsson³, Marat Fudim¹, Carmelo A. Milano¹, Jonathan P. Piccini¹, Joseph P. Mathew³

¹Duke University Medical Center, Durham, North Carolina, ³Duke University Hospital, Durham, North Carolina, ²Duke University School of Medicine, Durham, North Carolina

**PM 31 (1054)**

Is High-Frequency Heart Rate Variability Index a Marker for the Balance between Analgesia and Nociception During Laparoscopic Cholecystectomy in Adults under General Anesthesia?

Thomas A. Anderson¹, Timothy Houle⁴, Hao Deng⁵, Chihiro Toda⁵, Abdolnabi S. Sabouri⁵, Aaron S. Rudin³, Joshua R. Segaran³

¹Stanford University School of Medicine, Stanford, California, ³Massachusetts General Hospital, Boston, Massachusetts, ⁵Massachusetts Institute of Technology, Cambridge, Massachusetts

continued on page 71
Group 6: Cardiovascular Anesthesiology

Moderator: Christos Koutentis, MBChB, MS, New York, New York

CA 32 (903)
Inhibition of Histone Deacetylase 6 Activity Provides Protection against Atherogenesis: A Role for HDAC6 NEDDylation

Dan Berkowitz, Yohei Nomura, Max C. Rossberg, Anil Bhatta, Lew Romer, Deepesh Pandey

'Johns Hopkins School of Medicine, Baltimore, Maryland

CA 33 (1237)
ST Segment Variability in Coronary Allograft Vasculopathy after Pediatric Heart Transplantation

Eric L. Vu, Dean Andropoulos, William Dreyer, R. B. Easley, Kathy K. Kibler, Craig G. Rusin, Ken M. Brady

Baylor College of Medicine / Texas Children’s Hospital, Houston, Texas

CA 34 (1334)
Development of a Large Canine Model of TEVAR Resulting in Ischemic Spinal Cord Injury and Paralysis

Hamdy Awad, Sara Moore, Esmerina Tili, Katherine Binzel, Hesham Kelani, Hosam El Sayed, Michael Knopp, Ralph Beltran, Valerie Bergdall

The Ohio State University, Columbus, Ohio

CA 35 (987)
Pulmonary Thrombo-Endarterectomy (PTE) for Chronic Thromboembolic Pulmonary Hypertension (CTEPH): A Single Center 13-Year Report

Hema Nair1, Devi Shetty2, Julius Punnen2, Varun Shetty2, Bhairavi N. Bajlekar2, Kumar Belani2

1Narayana Health, Bangalore, Karnataka, 2University of Minnesota Masonic Children’s Hospital, Minneapolis, Minnesota

Group 7: Critical Care

Moderator: Tomoki Hashimoto, MD, University of California, San Francisco School of Medicine, San Francisco, California

CC 38 (1002)
Making ECMO ‘Work’: Teamwork. An Observational, Qualitative Study into Teams and Teamwork

Johnny Kent1, Ignacio Malagon2, Andrew Smith3, Maggie Mort4

1Royal Manchester Children’s Hospital, Manchester, England, 2Manchester Foundation Trust, Manchester, England, 3Royal Lancaster Infirmary, Lancaster, Lancashire, England 4Lancaster University, Lancaster, Lancashire, England

continued on page 72
Moderated Poster Discussion Session II, continued

CC 39 (1003)
Intercorporeal ‘Knowing’ for Extracorporeal Membrane Oxygenation: Constructing and Enacting a Culture of Safety. A Qualitative, Observational Study
Johnny Kenth1, Ignacio Malagon2, Maggie Mort3, Andrew Smith4
1Royal Manchester Children’s Hospital, Manchester, England, 2Manchester Foundation Trust, Manchester, England, 3Lancaster University, Lancaster, Lancashire, England, 4Royal Lancaster Infirmary, Lancaster, Lancashire, England

CC 40 (711)
The Modified Early Warning System in Unplanned SICU Admission: An Analysis in 263 Consecutive Patients
Annandita Kumar1, Hussam Ghabra1, Fiona Winterbottom1, Michael Townsend1, Phillip Boysen2, Bobby Nossaman2
1Ochsner Health Systems, New Orleans, Louisiana, 2Ochsner Clinic Foundation, New Orleans, Louisiana

CC 41 (584)
Association between Mean Arterial Pressure and Acute Kidney Injury and a Composite of Myocardial Injury and Mortality in Postoperative Critically Ill Patients
Ashish K. Khanna1, Kamal Maheshwari1, Guangmei Mao1, Edward J. Mascha1, Praneeta Chodavarapu1, Yehoshua Schacham2, Daniel I. Sessler1
1Cleveland Clinic Foundation, Cleveland, Ohio, 2University of Cincinnati, Cincinnati, Ohio

CC 42 (904)
Estrogens Alleviate Parasympathetic-induced, αnAChR-mediated Mortality from secondary P. aeruginosa Lung Infection after Traumatic Brain Injury in Mice
Brant Wagener, Jean-Francois Pittet, Angela Brandon, Cilina Evans, Rebekah Muthalaly
The University of Alabama at Birmingham, Birmingham, Alabama

CC 43 (884)
Noninvasive Venous Waveform Analysis (NIVA) Detects Blood Loss in Human Blood Donors and a Porcine Hemorrhage Model
Bret D. Alvis1, Reid McCallister2, Susan Eagle1, Franz Baudenbacher3, Richard B. Boyer2, Colleen Brophy1, Kyle M. Hocking1
1Vanderbilt University Medical Center, Nashville, Tennessee, 2Massachusetts General Hospital, Boston, Massachusetts

continued on page 73
Moderated Poster Discussion Session II, continued

Group 8: Critical Care

Moderator: Ines Koerner, MD, PhD, Oregon Health & Science University, Portland, Oregon

CC 45 (702)
Role of Toll-like Receptor Signaling in Sepsis-induced Coagulopathy in Mice
Brittney Williams, Ping Cui, Olivia Conn, Kenichi Tanaka, Lin Zou, Wei Chao
University of Maryland School of Medicine, Baltimore, Maryland

CC 46 (563)
The Use of a Succinate Prodrug to Improve Respiration in Blood Cells from Patients with Sepsis
David Eckmann, David Jang, Stephen W. Hallisey, Utsha Khatri, Antonio Davila, Shawn Oweridu, John Greenwood
Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

CC 47 (1180)
Kidney Proximal Tubular Toll-Like Receptor 9 (TLR9) Exacerbates Ischemic Acute Kidney Injury in Mice
H.T. Lee¹, Sang Jun Han², Hongmei Li², Mihwa Kim³
¹Columbia University Medical Center, New York, New York, ²Columbia University, New York, New York

CC 48 (620)
Severe Myxedema Coma - A Diagnostic Dilemma and Management Challenges
Hina Faisal¹, Navneet Grewal², Nasir Tanauli³, Farrakh Khawaja³
¹McGovern Medical School at UT Houston Science Center, Houston, Texas, ²University of Texas, Houston, Houston, Texas, ³USAP, Houston, Texas

CC 49 (1033)
Therapeutic Effects of Hyaluronic Acid Following Lung Injury Induced by E.coli Derived Extracellular Vesicles
Jae-Woo Lee, Airan Liu, Jeonghyun Park, Xiwen Zhang, Hideya Kato, Jaehoon Lee, Michael Matthay
University of California, San Francisco School of Medicine, San Francisco, California

CC 50 (1038)
Therapeutic Effect of High Molecular Weight Hyaluronic Acid in Polymicrobial Sepsis in Mice
Jaehoon Lee, Airan Liu, Hideya Kato, Qi Hao, Jae-Woo Lee
University of California, San Francisco School of Medicine, San Francisco, California

continued on page 74
Group 9: Critical Care

Moderators: Jeffrey D. White, MD, University of Florida College of Medicine, and Thomas Floyd, MD, Stony Brook University, Stony Brook, New York

CC 52 (737)
Clinical Utility of Hemodynamic Transesophageal Echocardiography (hTEE) in the Management of Unstable Cardiothoracic ICU Patients
Joshua C. Peterson¹, Brigid C. Flynn¹, Maung Hlaing², Nicholas A. Haglund¹, Hiroo Takayama³
¹University of Kansas, Kansas City, Kansas, ²University of Colorado, Denver School of Medicine, Aurora, Colorado, ³Columbia University, New York, New York

CC 53 (1018)
Risk Stratification for 30-day Mortality in Patients with Acute Kidney Injury after High-Risk General Surgery
Minjae Kim¹, Melanie Wall², Ravi Kiran¹, Guohua Li²
¹Columbia University Medical Center, New York, New York, ²Columbia University College of Physicians and Surgeons, New York, New York

CC 54 (1447)
Catheter-Associated Urinary Tract Infection in a Low Resource Intensive Care Unit
Adaobi Amucheazi, Adaobi Amucheazi, Obinna V. Ajuzieogu
University of Nigeria, Enugu, Nigeria

CC 55 (1385)
Non-invasive Optical Cerebral Blood Flow and Oxygenation Monitoring in Critically Brain-injured Patients
Wesley Baker¹, Ramani Balu¹, Lian He¹, David Busch², Arjun G. Yodh¹, Keith St. Lawrence³, William A. Kofke¹, Venkaiyah Kavuri³, Daniel Milej³, Mamadou Diop¹
¹Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ²University of Texas Southwestern, Dallas, Texas, ³University of Western Ontario, London, Ontario

continued on page 75
Group 10: Global Health, and Respiration

Moderators: Feyce Peralta, MD, Northwestern University Feinberg School of Medicine, Chicago, Illinois, and Y.S. Prakash, MD, PhD, Mayo Clinic College of Medicine and Science, Rochester, Minnesota

RES 56 (644)
Ginger and its Bioactive Component Relax Human Airway Smooth Muscle in Precision Cut Lung Slices and Inhibit Lung Inflammation in a Murine Asthma Model

Gene T. Yocum¹, Maya Mikami¹, Jose F. Perez-Zoghbi², Charles W. Emala¹
¹Columbia University, New York, New York, ²Columbia University Medical Center, New York, New York

RES 57 (1052)
Antagonism of the TMEM16A Calcium-Activated Chloride Channel Attenuates Allergic Lung Inflammation

Jennifer Danielsson, Maya Mikami, Gene T. Yocum, Aisha Kuforiji, Charles W. Emala
Columbia University, New York, New York

RES 58 (1130)
Light Mediated Relaxation of Small Airways in Precision Cut Lung Slice

Peter Yim¹, Jose F. Perez-Zoghbi², Amy Wu², Charles W. Emala¹
¹Columbia University, New York, New York, ²Columbia University Medical Center, New York, New York

GH  59 (525)
Increasing Evidence-Based Interventions for Patients with Acute Infections in a Rural Village in Rwanda

Andrew J. Patterson¹, Olivier Urayeneza², Joseph C. Farmer³, Martin Dunser⁴, Lori Harmon⁵, Julia T. Hoffman¹, Danstan Bagenda¹
¹University of Nebraska Medical Center, Omaha, New York, ²Gitwe Hospital, Los Angeles, California, ³Mayo Clinic, Phoenix, Arizona, ⁴University College London, London, England, ⁵Society of Critical Care Medicine, Mount Prospect, Illinois

GH  60 (493)
Factors Limiting the Provision of Safe Obstetric Anaesthesia in Low-Income Countries: A Cross-Sectional Survey of 64 Hospitals in Uganda

Isabella Epiu
University of California Global Health Institute, Nairobi

continued on page 76
Moderated Poster Discussion Session II, continued

Group 11: Economics, Education and Policy

Moderator: Annette Rebel, MD, University of Kentucky Health Care, Lexington, Kentucky

EEP 62 (1132)
Perception of Educational Environment and its Association with In-Training Examination Scores in an Anesthesiology Residency Program
Allen Kwong¹, Minjae Kim², Shuang Wang², Parwane Pagano¹
¹Columbia University Medical Center, New York, New York, ²Mailman School of Public Health at Columbia University, New York, New York

EEP 63 (899)
Effectiveness of a Flipped Classroom Model Compared to a Traditional Format in Anesthesiology Education
Brian Egan¹, Jonathan Hastie¹, Meiko Lin², Danielle Ludwin², Maya Hastie¹
¹Columbia University Medical Center, New York, New York, ²Teachers College, New York, New York

EEP 65 (1152)
Novel Recycling Practices in Anesthesiology
Laura Pasternack¹, Seema Ghandi²
¹Drexel College of Medicine, Philadelphia, Pennsylvania, ²University of California, San Francisco School of Medicine, San Francisco, California

EEP 66 (1382)
The Status of Women in Academic Anesthesiology: A Ten-Year Update
Paloma Toledo, Martha Bissing, Elizabeth M. Lange, Cynthia Wong, Robert McCarthy, Wilmer Davila, M. C. Stock
Northwestern University Feinberg School of Medicine, Chicago, Illinois

Group 12: Medically Challenging Cases

Moderator: Promil Kukreja, MD, PhD, The University of Alabama at Birmingham, Birmingham, Alabama

MCC 68 (519)
Postoperative Migration of Functioning Epidural Catheter to Intrathecal Space Following Fetoscopic Myelomeningocele Repair: A Case Report
Caitlin D. Sutton¹, Titilope Aina²
¹Baylor College of Medicine, Houston, Texas, ²Texas Children’s Hospital/Baylor College of Medicine, Houston, Texas

continued on page 77
MCC 69 (1036)
Loss of Secure Airway after Difficult Intubation in a Patient with Osteogenesis Imperfecta Undergoing Cesarean Delivery

Caitlin D. Sutton¹, Allison McDonald², Brendan Carvalho³
¹Baylor College of Medicine, Houston, Texas, ²Stanford University School of Medicine, Stanford, California, ³Kaiser Permanente, San Jose, California

MCC 70 (1343)
The Best Awake Fiberoptic Airway Technique

Afia Ohemeng, Gennadiy Voronov, Brandon Isler
John H. Stroger Hospital of Cook County, Chicago, Illinois

MCC 71 (1246)
Case Report: Novel Use of Thromboelastography to Diagnose Hypercoagulability and Enoxaparin Failure Despite Therapeutic anti-FXa activity in a Patient with Bladder Cancer

Alexander Hawson
University of California, San Francisco School of Medicine, San Francisco, California

MCC 72 (1022)
Perioperative Pain Management Emphasizing Peripheral Nerve Blockade in a Homozygous Sickle Cell Disease Patient Undergoing Total Hip Arthroplasty

Francisco Perese¹, Jinlei Li², Lee Rubin², Daniel Carlyle¹
¹Yale New Haven Hospital, New Haven, Connecticut, ²Yale University School of Medicine, New Haven, Connecticut

Group 13: Medically Challenging Cases

Moderator: Carlos B. Mantilla, MD, Mayo Clinic, Rochester, Minnesota

MCC 74 (825)
Cesarean Section and Subsequent Ventriculostomy in a Parturient with Pre-Eclampsia and Obstructive Hydrocephalus: A True Anesthetic Challenge

Daniel Garcia, Liang Huang, Jeffrey Bernstein, David Adams, Sergey Pisklakov
Albert Einstein College of Medicine, Bronx, New York

MCC 75 (1092)
Erector Spinae Plane Block for Minimally Invasive Pectus Excavatum Repair: A Case Series

Eugene Chung¹, Caitlin D. Sutton², Craig Belon¹, Adam C. Adler³, Nihar V. Patel⁴
¹Baylor College of Medicine; ²Texas Children’s Hospital, Houston, Texas, ³Baylor College of Medicine, Houston, Texas, ⁴Texas Childrens Hospital, Houston, Texas

continued on page 78
Moderated Poster Discussion Session II, continued

MCC 76 (1014)
Anesthetic Management of Staged Thoracoabdominal Aortic Aneurysm Repair Complicated by Neck Hematoma: A Medically-Challenging Case Report
Jeffrey D. Davis, Marshall Lee
Oregon Health & Science University, Portland, Oregon

MCC 77 (908)
Perioperative Management of an Adult with Severe Aortic Coarctation Presenting for TEVAR
Katie Barnett, Nadine Odo, Vaibhav Bora
Augusta University, Augusta, Georgia

MCC 78 (1186)
A Case Series of Anesthetic management of 3 Patients with Wolf Parkinson White Syndrome
Mario Leandre, Debbie Chandler, Shilpadevi Patil, Chizoba N. Mosieri
Louisiana State University Health, New Orleans, Louisiana

MCC 79 (1026)
Caudal Anesthesia and Natural Airway for Ambulatory Urologic Surgery in Infant with Epidermolysis Bullosa
Pulsar Li, Omar Al-Qudsi
Loyola University Medical Center, Maywood, Illinois

Group 14: Neuroscience in Anesthesiology and Perioperative Medicine
Moderator: Paul Picton, MD, MRCP, FRCA, University of Michigan Medicine, Ann Arbor, Michigan

NR 81 (646)
Measuring Post-Operative Cognitive Dysfunction in Older Adults Using the Dalhousie Computerized Attention Battery
Yaeesh Sardiwalla, Gail Eskes, Ronald B. George, Michael Schmidt
Dalhousie University, Halifax, Nova Scotia

NR 82 (695)
Non-invasive Optical Quantification of Absolute Cerebral Blood Flow in Adults: Validation against MRI
Wesley B. Baker¹, Daniel Milej², Mamadou Diop², Ramani Balu¹, John A. Detre¹, Arjun G. Yodh¹, Keith St. Lawrence², Lian He¹, Androu Abdalalak³, Sudipto Durlé³, Udunna Anazodo³, Venkaiah Kavuri³, William Pavlosky³, Olivia Amendolia³, Francis Quattrone³
¹Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ²University of Western Ontario, London, Ontario, ³University of Western Ontario, London, Ontario

continued on page 79
NR 83 (940)
Preliminary Evidence of Neural Inertia in Human Subjects Undergoing Xenon Anesthesia
Charles W. Carspecken, Andrew McKinstry-Wu, Alexander Proekt, Max B. Kelz
Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

NR 84 (954)
Adult-Born Hippocampal Neurons Drive Recurrent Excitatory Circuits During Epileptogenesis in Mice
Eric Schnell¹, William D. Hendricks², Gary L. Westbrook³
¹Oregon Health & Science University, Portland, Oregon, ²Vollum Institute, Portland, Oregon

NR 85 (957)
Auditory Novelty Detection in Awake and Anesthetized States: An Intracranial Electrophysiology Study
Matthew Banks¹, Kirill V. Nourski², Ariane E. Rhone³, Mitchell Steinschneider³, Hiroto Kawasaki³, Matthew A. Howard³
¹University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, ²University of Iowa, Iowa City, Iowa, ³Albert Einstein College of Medicine, New York, New York

Group 15: Neuroscience in Anesthesiology and Perioperative Medicine
Moderator: Robert Whittington, MD, Columbia University Medical Center; New York–Presbyterian Hospital, New York, New York

NR 88 (1039)
Adolescent Rats Display Long-Lasting Abnormalities in REM Sleep Quantity and Structure after Postnatal Anesthesia
Nadia Lunardi, Ryan Sica, Navya Atluri, Zhiyi E. Zuo
University of Virginia School of Medicine, Charlottesville, Virginia

NR 89 (1040)
Defining Subareas of the Ventral Respiratory Column Functionally with AMPA and DAMGO Injections in Adult Rabbits In Vivo
Astrid Stucke¹, Justin R. Miller¹, Eckehard A. Stuth¹, Francis A. Hopp¹, Edward J. Zuperku¹
¹Medical College of Wisconsin, Milwaukee, Wisconsin, ²Carthage College, Kenosha, Wisconsin, ³Zablocki VA Medical Center, Milwaukee, Wisconsin

NR 90 (1077)
Ketamine’s Antidepressant Effect is blocked by a µ-Opioid Receptor Antagonist in Humans and Mice
Boris D. Heifets, Nolan Williams, Keith Sudheimer, Heather Pankow, Chrstine Blasey, David Lyons, Alan F. Schatzberg
Stanford University School of Medicine, Stanford, California

Moderated Poster Discussion Session II, continued
Moderated Poster Discussion Session II, continued

NR 91 (1137)
Can EEG Metrics Collected Prior to Laryngoscopy Predict Isolated Forearm Test Responsiveness after Laryngoscopy? A Secondary Analysis of the Conscious Study

Robert Sanders¹, Amy Gaskell², Darren F. Hight², Vincent Bonhomme*, Jamie Sleigh²
¹University of Wisconsin-Madison, Madison, Wisconsin, ²Waikato Hospital, Hamilton, New Zealand, *Waikato Clinical School, Hamilton, Waikato, ³Coma Science Center, Liege, Belgium

NR 92 (1158)
Pain after Craniotomy and the Development of Long-Term Headaches after These Procedures: Can We Improve Outcomes?

Walter S. Jellish, Tewodrose Aseffa
Loyola University Medical Center, Maywood, Illinois

NR 93 (1190)
Differential Methylation of Hippocampal DNA Three Weeks after Exposure to Surgery and Anesthesia in Aging Mice

Katie J. Schenning, Brett Davis, Lucia Carbone, Daniel Hong, Joseph Quinn, Nabil Alkayed
Oregon Health & Science University, Portland, Oregon

Group 16: Neuroscience in Anesthesiology and Perioperative Medicine, and Technology, Computing and Simulation, Equipment Monitoring

Moderator: Helene Benveniste, MD, PhD, Yale School of Medicine, New Haven, Connecticut

NR 94 (1205)
Can National Surgical Quality Improvement Program (NSQIP) Risk Scores Aid in the Prediction of Patients at Risk of Postoperative Delirium? A Preliminary Analysis of the IPOD-B3 Study

Sara Twadell¹, Heidi Lindroth², Jane Kildow², Lily Turner², Wesley Chang², Robert Sanders²
¹University of Wisconsin Madison, Madison, Wisconsin, ²University of Wisconsin Hospital and Clinics, Madison, Wisconsin

NR 95 (1277)
A Novel Theoretical Basis for Anesthetic Hysteresis

Andrew Hudson¹, Alex Proekt²
¹University of California, Los Angeles David Geffen School of Medicine, Los Angeles, California, ²Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

continued on page 81
Moderated Poster Discussion Session II, continued

NR 96 (1300)
Value of Early Myocardial Workload Following Severe Traumatic Brain Injury
Vijay Krishnamoorthy¹, Ali Rowhani-Rahbar², Nophanan Chaikittisilpa², Abhijit V. Lele², Edward Gibbons², Monica S. Vavilala²
¹Duke University School of Medicine, Durham, North Carolina, ²University of Washington Medicine, Seattle, Washington

NR 97 (1393)
Optical Neuromonitoring Detects Brain Hypoxia
David R. Busch¹, Wesley Baker², Wensheng Guo², Ramani Balu², Keith St. Lawrence³, Arjun G. Yodh³, William A. Kofke³, Lian He², Mamadou Diop⁴, Daniel Milej³
¹University of Texas Southwestern, Dallas, Texas, ²Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, ³University of Western Ontario, London, Ontario

TCSEM 98 (1215)
Monitoring of Spinal Cord Blood Flow during Orthopedic Surgery in an Ovine Model
David R. Busch¹, Wei Lin², Alissa Cutrone², Jakub Tatka², Arjun G. Yodh³, James Barsi³, Thomas F. Floyd¹
¹University of Texas Southwestern, Dallas, Texas, ²Stony Brook University, Stony Brook, New York, ³Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

NR 99 (1400)
Sevoflurane and Isoflurane Exposure in Aged Male Mice Leads to Synaptic Alterations in the Hippocampus
Matthew B. Friese, Xinling Xu, Deborah J. Culley, Gregory Crosby
Harvard Medical School/Brigham and Women’s Hospital, Boston, Massachusetts

Group 17: Obstetric Anesthesiology, and Sleep Medicine
Moderator: Jonathan Waters, MD, University of Pittsburgh, Pittsburgh, Pennsylvania

OB 102 (1176)
6-Shogaol (Bioactive Metabolite of Zingiber Officinale) Attenuates Human Uterine Smooth Muscle (USM) Contractility
Shunsuke Hyuga, Wen Fu, Elvedin Lukovic, Joy Vink, Charles W. Emala, George Gallos
Columbia University, New York, New York

continued on page 82
Moderated Poster Discussion Session II, continued

SM 103 (1265)
Surface Ultrasound as a Screening Tool for Obstructive Sleep Apnea (OSA): A Systemic Review of Literature
Mandeep Singh1, David Song1, Arvind Tuteja2, Akash Goel2, Aditya Trivedi2, Vincent Chan2
1University of Toronto, Toronto, Ontario, Canada 2University Health Network, Toronto, Ontario, Canada

OB 104 (1282)
The Pattern and Distribution of Body Fluid During Pregnancy: A Systemic Review
Mandeep Singh1, Julia Pasquale2, Mrinalini Balki2, Sally Hu1
1University of Toronto, Toronto, Ontario, Canada, 2Mount Sinai Hospital, Toronto, Canada

OB 105 (1296)
Do Obstetric Anesthesiologists Provide More Guideline-Concordant Care for Patients Undergoing Cesarean Delivery?
Benjamin Cobb1, Meghan Lane-Fall1, Richard C. Month1, Onyi C. Onuoha2, Sindhu Srinivas3, Mark D. Neuman1
1Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, 3Leonard Davis Institute for Health Economics, Philadelphia, Pennsylvania

OB 106 (1434)
Emotional Burden and Psychophysical Predictors of Labor Pain
Grace Lim1, Lia M. Farrell1, Andrea Gillman2, Robert R. Edwards3, Ajay D. Wasan1
1University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, 2Brigham and Women’s Hospital, Boston, Massachusetts

Group 18: Pain Medicine
Moderator: Shireen Ahmad, MD, Northwestern University Feinberg School of Medicine, Chicago, Illinois

PM 108 (596)
Squamous Cell Carcinoma of the Nasopharynx: Successfully Achieving Pain Control in a Newly Diagnosed Cancer
Raymond E. Kennedy
University of Wisconsin, Madison, Wisconsin

PM 109 (597)
Long-Term Pain Control in Severe Lumbar Spinal Stenosis Prior to Surgical Intervention
Raymond E. Kennedy
University of Wisconsin, Madison, Wisconsin

continued on page 83
PM 111 (805)
Predictors of Moderate-to-Severe Acute Pain after Video-Assisted Thoracoscopic Surgery
Emine O. Bayman, Kaplaj R. Parekh, John C. Keech, Tim Brennan
University of Iowa, Iowa City, Iowa

PM 112 (1059)
Rafael Vazquez, Joseph McDowell, Vanessa Kurzweil, Dan B. Ellis, Brinda B. Kamdar, Melvin Omodon, Ronald S. Arellano
Massachusetts General Hospital, Boston, Massachusetts

PM 113 (1165)
Molecular Interactions of Dexmedetomidine with Kappa Opioid Receptor
Renyu Liu, Jiafu Ji, Jin Xi, Hasan Babazada, Si Zeng, Thomas T. Joseph
Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania

PM 114 (1397)
The Application of Bayes’ Theorem for Diagnosing Herniated Nucleus Pulposus (HNP) Based on Physical Exam Findings
Maunak Rana¹, Luis Soliz²
¹University of Chicago, Chicago, Illinois, ²Rush University Medical Center, Chicago, Illinois

Group 19: Patient Safety
Moderator: Manuel Vallejo, MD, DMD, West Virginia University School of Medicine, Morgantown, West Virginia

PS 116 (560)
Burnout in Certified Anesthesiologist Assistants
Henry Kroll¹, Michelle T. Jesse¹, Katherine S. Monroe², Nikolas Davies³
¹Henry Ford Health System, Detroit, Michigan, ²Emory University School of Medicine, Atlanta, Georgia, ³Memorial Hospital West, Pembroke Pines, Florida

PS 117 (633)
Burnout in Certified Registered Nurse Anesthetists
Henry Kroll, Michelle T. Jesse, Joshua Olson
Henry Ford Health System, Detroit, Michigan
Moderated Poster Discussion Session II, continued

PS 118 (729)
Safety of Anesthesia for Percutaneous Endoscopic Gastrostomy in Patients with Amyotrophic Lateral Sclerosis
Andrew Moss¹, Eric J. Heyer², Andrea N. Miltiades²
¹Columbia University College of Physicians and Surgeons, New York, New York, ²Columbia University Medical Center, New York, New York

PS 119 (733)
Impact of Implementation of the Integrated Pulmonary Index (IPI) in Low-Acuity Inpatients
Robert E. Freundlich¹, Jeremy P. Walco¹, Dorothee Mueller¹, Adam Kingeter², Marcos G. Lopez¹, Liza M. Weavind¹
¹Vanderbilt University Medical Center, Nashville, Tennessee, ²Vanderbilt University School of Medicine, Nashville, Tennessee

PS 120 (878)
Identifying Risky Practices Related to Perioperative Phenylephrine Infusions: An Audit-based Approach to Link Root Cause Analysis (RCA) to Quality Improvement (QI)
Kellie Jaremko², Jeremi Mountjoy³, Aalok V. Agarwala¹, Allison Doney², May C. Pian-Smith¹
¹Massachusetts General Hospital, Boston, Massachusetts, ²Harvard Medical School, Boston, Massachusetts

PS 121 (989)
Laparoscopic Specimen Bag Designs – Impact on Patient Safety
Asha Mohammed, Matthew Molyneux, Joshua Heslop
University of Bristol, Bristol, England

Group 20: Pediatric Anesthesiology
Moderator: Richard Levy, MD, FAAP, Columbia University, New York, New York

PED 123 (542)
Perioperative Outcomes Comparing High Surgical Volume vs. Low Surgical Volume Centers for Complex Cranial Vault Reconstruction: A Multicenter Study from the Pediatric Craniofacial Collaborative Group
Srijaya K. Reddy¹, Allison M. Fernandez², Heather Gordish-Dressman³, Bridget L. Muldowney⁴, Jose L. Martinez⁵, Franklin Chiao⁶, Paul A. Stricker⁷
¹Monroe Caroll Jr. Children’s Hospital / Vanderbilt University Medical Center, Nashville, Tennessee, ²Johns Hopkins All Children’s Hospital, St. Petersburg, Florida, ³Children’s National Health System / The George Washington School of Medicine and Health Sciences, Washington, District of Columbia, ⁴University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, ⁵CHU Sainte-Justine / University of Montreal, Montreal, Quebec, ⁶Weill Cornell Medical College, New York, New York, ⁷The Children’s Hospital of Philadelphia / Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania

continued on page 85
PED 124 (607)
Retrospective Review of Anesthetic Dose and Duration for Brain MRI in Children Less Than 3 Years of Age
Jamie W. Sinton¹, Dean Andropoulos², Andres Jimenez¹, Marcia K. Kukreja¹, Huirong Zhu¹
¹Baylor College of Medicine, Houston, Texas, ²Baylor College of Medicine / Texas Children’s Hospital, Houston, Texas

PED 125 (608)
Retrospective Review of Indications and Diagnostic Yield of Brain MRI with Anesthesia in Children Fewer Than 3 Years of Age
Jamie W. Sinton¹, Dean Andropoulos², Andres Jimenez¹, Marcia K. Kukreja¹, Huirong Zhu², Eduardo Medellin¹
¹Baylor College of Medicine, Houston, Texas, ²Baylor College of Medicine / Texas Children’s Hospital, Houston, Texas

Group 21: Pediatric Anesthesiology

Moderator: Lucy Chen, MD, Massachusetts General Hospital; Harvard Medical School, Boston, Massachusetts

PED 128 (1115)
Trajectories of Brain Lactate Do Not Contribute to Aerobic Glycolysis across Childhood
Sabah Rid¹, Zvi Jacob², Rany Makaryus³, Fahmeed Hyder¹, Gerald Dienel¹, Douglas L. Rothman⁴, Helene Benveniste¹
¹Yale School of Medicine, New Haven, Connecticut, ²Stony Brook University, Stony Brook, New York, ³University of New Mexico, Albuquerque, New Mexico, ⁴Yale School of Engineering and Applied Sciences, New Haven, Connecticut

PED 129 (1125)
Reducing Postoperative Opioid Use in Children after Adenotonsillectomy
Amanda Lorin¹, Maria Grig², Thanh Nguyen¹, Shilin Zhao², Chelsea Bodystun³
¹Vanderbilt University Medical Center, Nashville, Tennessee, ²Vanderbilt University School of Medicine, Nashville, Connecticut, ³Weill Cornell Medicine, New York City, New York

PED 130 (1248)
Children and Adults with Univentricular Hearts Score Lower on Full Scale Intelligence Testing Compared to Children with Biventricular Congenital Heart Disease: A Meta-analysis
William M. Jackson¹, Nicholas Davis¹, Johanna Calderon², David C. Bellinger³, Lena Sun¹
¹Columbia University College of Physicians and Surgeons, New York, New York, ²Boston Children’s Hospital, Boston, Massachusetts
Moderated Poster Discussion Session II, continued

PED 132 (1430)
Dosing Variation in Pediatric Regional Blockade: A PRAN Database Study
David M. Polaner¹, Matthew Hoyt², Andreas Taenzer³
¹University of Colorado Denver School of Medicine, Aurora, Colorado, ²Dartmouth Medical School, Lebanon, New Hampshire, ³Dartmouth-Hitchcock Medical Center, Hanover, New Hampshire

Group 22: Perioperative Anesthesia
Moderator: Bhiken Naik, MBBCh, University of Virginia School of Medicine, Charlottesville, Virginia

PA 134 (587)
Opioid Administration and the Interaction of Patient Race and Sex in the Emergency Room
Julia M. Rosenbloom¹, Sara M. Burns¹, Eugene Kim³, David August¹, Vilma Ortiz¹, Timothy Houle¹
¹Massachusetts General Hospital, Boston, Massachusetts, ²Harvard Medical School, Boston, Massachusetts, Beth Israel Deaconess Medical Center, Boston Massachusetts

PA 135 (605)
Perception of Disparities in the Perioperative Setting: A Survey Study at a Large Tertiary-Care Institution
Jaleesa Jackson, Julia M. Rosenbloom, Jaleesa Jackson, Kiara Alvarez, Margarita Alegria
Massachusetts General Hospital, Boston, Massachusetts

PA 136 (618)
A New EPOCH: Enhanced Perioperative Oncologic Care Holistically
Joshua A. Bloomstone
Envision Healthcare, Phoenix, Arizona

PA 137 (638)
Design of a Tool for Resident Education When Planning Anesthetics for Intracranial Neurosurgical Procedures
Robert A. Peterfreund³, Pamela S. Jones⁵, Michele D. Szabo⁵, Oluwaseun Johnson-Akeju⁵, Meerim (Cindy) Kim⁵
¹Massachusetts General Hospital, Boston, Massachusetts, ²Harvard Medical School, Boston, Massachusetts

continued on page 87
Moderated Poster Discussion Session II, continued

**Group 23: Perioperative Anesthesia**

**Moderator:** John F. Butterworth IV, MD, Virginia Commonwealth University School of Medicine, Richmond, Virginia, and Holger K. Eltzschig, MD, PhD, University of Texas, Houston, Texas

**PA 138 (766)**

*Effect of Lidocaine on Src Kinase Activity in Circulating Tumor Cells Isolated from KPC Mice with Pancreatic Cancer*

Effrossyni G. Votta-Velis¹, Sandeep Kumar², Alain Borgeat², Ajay Rana⁴

¹University of Illinois at Chicago, Chicago, Illinois, ²Balgrist University Hospital, Zurich, Switzerland

**PA 139 (977)**

*Postoperative Hypoxemic Events are Independently Associated with Increased Mortality within One Year from the Date of Surgery*

Ana Fernandez-Bustamante¹, Leslie Jameson¹, Ken Bullard¹, Alexander M. Kaizer², Karsten Bartels¹

¹University of Colorado Denver School of Medicine, Aurora, Colorado, ²University of Colorado-Anschutz Medical Campus, Denver, Colorado

**PA 140 (1310)**

*The Triple Variable Index Reveals Shared Patterns of Physiology that Broaden the Utility of Common Intraoperative Monitoring Systems to Capture Risk Information Not Identified by Established Models*

Michael P. Schnetz¹, David Danks², Douglas Landsittel¹, Keith M. Vogt¹, James W Ibinson¹, Steven Whitehurst⁴, Ata M. Kaynar¹

¹University of Pittsburgh, Pittsburgh, Pennsylvania, ²Carnegie Mellon University, Pittsburgh, Pennsylvania, ³University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania

**PA 141 (1408)**

*Echocardiographic Assessment Using Subxiphoid-Only View (EASy) Compared to Focused Transthoracic Echocardiography (FoTE) in the Perioperative Period: A Multicenter Prospective Study*

Kevin Emr¹, Nibras Bughrara², Johnathan R. Renew³, Jose Diaz-Gomez³, Kirti Sahu¹, Kevin Roberts²

¹Albany Medical Center, Albany, New York, ²Albany Medical College, Albany, New York, ³Mayo Clinic Florida, Jacksonville, Florida
Moderated Poster Discussion Session II, continued

Group 24: Sleep Medicine

Moderator: Stephanie B. Jones, MD, Beth Israel Deaconess Medical Center, Boston, Massachusetts

SM 145 (684)
Association between Difficult Airway and Obstructive Sleep Apnea in Patients Undergoing Surgery: A Systematic Review and Bayesian Meta-Analysis of Prospective and Retrospective Cohort Studies
Mahesh Nagappa1, David Wong2, Crispiana Cozowicz3, Satya Krishna Ramachandran*, Stavros G. Memtsoudis2, Frances F. Chung3
1Western University, London, Ontario, Canada, 2University of Toronto, Toronto, Ontario, Canada, 3Hospital for Special Surgery, New York, New York, *Harvard Medical School at Beth Israel Deaconess Medical Center, Boston, Massachusetts, 5University of Toronto Faculty of Medicine, Toronto, Ontario, Canada

SM 146 (1166)
Risk Factors for Obstructive Sleep Apnea during Pregnancy: A Meta-Analysis
Mahesh Nagappa1, Sebastian Borowiec1, Yamin Subramani1, Frances F. Chung2
1Western University, London, Ontario, Canada, 2University of Toronto Faculty of Medicine, Toronto, Ontario

SM 148 (1064)
Familial Advanced Sleep Phase Mutant PER2 and CK1d Mouse Models Provide Potential Insight into the Coupling of the Homeostatic Sleep Process to Circadian Rhythm
Philip A. Kurien, Jacy Leon, Ying Hui Fu, Louis Ptacek, David Wu
1University of California, San Francisco School of Medicine, San Francisco, California

SM 149 (1219)
Is Obstructive Sleep Apnea Associated with Postoperative Delirium and Cognitive Decline?
Michael Devinney1, Yee Ching Vanessa Cheong2, Victoria Wickenheisser3, Mary Cooter4, Jennifer Domínguez5, Miles Berger5
1Duke University Hospital, Durham, North Carolina, 2Duke University Medical Center, Durham, North Carolina

continued on page 89
Moderated Poster Discussion Session II, continued

Group 25: Trauma

Moderator: Edward Sherwood, MD, Vanderbilt University Medical Center, Nashville, Tennessee

T 151 (768)
Extracellular miRNAs and Innate Immune Activation Following Polytraumatic Injury in Mice
Andrew O. Suen, Sheng Wang, Olivia Conn, Lin Zou, Rosemary Kozar, Catriona Miller, Wei Chao
University of Maryland School of Medicine, Baltimore, Maryland

T 152 (897)
Air-Evacuation-Relevant Hypobaria Following Traumatic Brain Injury Plus Hemorrhagic Shock Increases Lung and Gut Injury and Mortality
Gary Fiskum, Juliana Medina, Parisa Rangghran, Julie Proctor, Ashley Moore, Rosemary Kozar
University of Maryland School of Medicine, Baltimore, Maryland

T 153 (1167)
Inhibition of miR-155 Attenuates Neurotoxic Neuroinflammation and Improves Functional Recovery after Experimental Traumatic Brain Injury in Mice
Rebecca J. Henry, Sarah Doran, James P. Barrett, Boris Sabirzhanov, Bogdan A. Stoica, Alan I. Faden, David J. Loane
University of Maryland School of Medicine, Baltimore, Baltimore, Maryland

T 154 (1262)
Chronic Alterations in Systemic Immune Function after Experimental Traumatic Brain Injury in Mice
David Loane, Sarah Doran, James P. Barrett, Rebecca J. Henry, Elise Ma, Alan I. Faden, Rodney Ritzel
University of Maryland School of Medicine, Baltimore, Maryland

T 155 (1425)
Type I Interferons Drive Pro-Inflammatory Activation and Neurodegeneration Following Experimental Traumatic Brain Injury in Mice
James P. Barrett, Rebecca Henry, Kari Ann Shirey, Bogdan A. Stoica, Alan I. Faden, Stefanie Vogel, David J. Loane
University of Maryland School of Medicine, Baltimore, Maryland
Abstract Category Index

Airway Management

A Pilot Study of Radiological Variables to Predict Fibreoptic Intubation in Ankylosing Spondylitis with Cervical Spine Involvement
MPDS-I • AM 1 (1004)

Ultra Low Cost and Minimally Stimulating Method of Relieving Airway Obstruction during MAC
MPDS-I • AM 3 (1156)

Anaesthetic Technique, Outcome and Our Experience in Two Hundred Cases of Trans Oral Robotic Surgery [TORS] A Retrospective Study.
MPDS-I • AM 8 (1446)

Non-Invasive Ventilation in Perioperative Surgical Patients
MPDS-I • AM 9 (1257)

A Comparison of Clinical Simulation and Classical Learning for Airway Management in Medical Undergraduate Students: A Randomized Controlled Trial
MPDS-I • AM 10 (790)

Difficult Tracheal Extubation in Adult Surgical Intensive Care
MPDS-I • AM 12 (1104)

Comparison of Oxygenation and Ventilation in Patients Undergoing Colonoscopy during Anesthesia: A Prospective Randomized Trial
MPDS-II • AM 1 (703)

Anesthetic Pharmacology

Suppressors of Volatile Anesthetic Sensitivity in C. elegans
MPDS-I • AP 13 (1335)

Putative Binding Site of Dexmedetomidine in Alpha-Adrenergic 2A Receptor
MPDS-I • AP 15 (670)

In Monkeys, Reversal of the Ultra-Short Acting NMBA 1759-50 By Either D- or L-cysteine is Equally Rapid. Glutathione (GSH) is Also a Rapidly-Acting and Effective Antagonist
MPDS-II • AP 2 (730)

Desflurane Alters Layer-Specific Neuronal Interactions in Rat Visual Cortex
MPDS-II • AP 3 (741)

Volatile Anesthetics and Mitochondria: Hypoxia and Hyperoxia Modulate Toxicity of Isoflurane in a Drosophila Melanogaster Model of Leigh Syndrome
MPDS-II • AP 4 (782)

A Prokaryotic-α1β3GABAA Receptor Chimera is a Biochemical Model of Neurosteroid Potentiation of the α1β3GABAA Receptor
MPDS-II • AP 6 (917)

continued on page 91
### Abstract Category Index, continued

**Anesthetic Pharmacology, continued**

Illuminate the Structural Basis of Neurosteroid Action on GABAA Receptors Using Crystallography  
**MPDS-II • AP 8 (923)**

Nitrous Oxide As Treatment For Tinnitus: A Randomized Crossover Trial  
**MPDS-II • AP 9 (956)**

Caffeine Accelerates Emergence from Isoflurane Anesthesia in Human Volunteers  
**MPDS-II • AP 10 (962)**

Do Anesthetics Prevent Consciousness by Dampening Microtubule Vibrations Inside Brain Neurons?  
**MPDS-II • AP 11 (1355)**

Identification of a Modulatory Site of Action for the Volatile Anesthetic Isoflurane in TREK1 Tandem Pore Potassium Channels  
**MPDS-II • AP 12 (1410)**

**Bench Science**

Dependence of Ketamine-GPCR Interaction on Protonation States  
**MPDS-I • BS 16 (580)**

Light Elicited Cardio-Protection Reveals Circadian Entrainment as a Mechanism that Requires PER2 to Mimic HIF1α Mediated Metabolic Adaptation to Ischemia  
**MPDS-I • BS 17 (1238)**

Signaling in Vascular Endothelium by Varying Degrees of Mechanical Stretch  
**MPDS-I • BS 18 (784)**

Pharmacological Calcium/Calmodulin-Dependent Protein Kinase (CaMKII) Inhibition Protects against Purkinje Cell Damage Following Cardiac Arrest and Cardiopulmonary Resuscitation in Mice  
**MPDS-I • BS 19 (1314)**

Gut Commensal Metabolites Regulate Sterile Lung Inflammation in Mice: A Role for Acetate and Propionate  
**MPDS-II • BS 13 (516)**

Evidence of a Discrete and Targetable Mitochondrial Defect in the Developing Fragile X Syndrome Brain  
**MPDS-II • BS 14 (544)**

A Novel α2 Agonist Photolabel Reveals a Binding Site for Dexmedetomidine on the α2A Adrenergic Receptor  
**MPDS-II • BS 15 (748)**

Extracellular miR-146a Binds to Toll-like Receptor 7 and Induces Inflammatory Response in a Murine Sepsis Model  
**MPDS-II • BS 16 (919)**

Creating a Model of Anesthetic Sensitivity Using Zebrafish  
**MPDS-II • BS 17 (943)**

Genome-Wide Association Study of Heart Rate Variability  
**MPDS-II • BS 18 (1103)**

*continued on page 92*
Abstract Category Index, continued

Bench Science, continued

Attenuation of Murine and Human Airway Contraction by a Gelsolin Peptide Containing the PIP2 Binding Domain
MPDS-II • BS 20 (1168)

Identification of Abundant and Evolutionarily Conserved Opioid Receptor Circular RNAs, and their Modulation in the Mouse Nervous System by Chronic Morphine
MPDS-II • BS 21 (1251)

Ergodic Mice: Implications of Behavioral State Transitions at Constant Anesthetic Concentration
MPDS-II • BS 22 (1293)

Stochastic Behavioral Transitions: Contributions to Hysteresis
MPDS-II • BS 23 (1301)

Delayed Inhibition of TRPM2 Channels Reverses Impaired Synaptic Function after Global Cerebral Ischemia
MPDS-II • BS 24 (1322)

Rescue of Proinflammatory Rat Microglial Mitochondrial Function and IL-β and Nitric Oxide Release by Idebenone
MPDS-II • BS 25 (1354)

Blood Management

Factor IX from Prothrombin Complex Concentrate Augments Low Tissue Factor-Triggered Thrombin Generation – “An Exploratory In Vitro Study”
MPDS-I • BLD 22 (1348)

Efficacy of Intraoperative Cell Salvage in Spine Surgery: A Meta-analysis
MPDS-I • BLD 23 (1199)

Contrasting Effects of Stored Allogeneic Red Blood Cells and Their Supernatants on Permeability and Inflammatory Responses by Human Pulmonary Artery Endothelial Cells
MPDS-I • BLD 25 (838)

Impact of Reinforced, Strict Guidelines on the Usage of Packed Red Blood Cells (PRBC)
MPDS-I • BLD 26 (1042)

Cardiovascular Anesthesiology

Acute Bleeding from an Aortic Pseudoaneurysm Due to Sneezing after CABG Surgery
MPDS-I • CA 5 (1164)

Spinal Cord Stimulation Reduces Myocardial Ischemia Induced Ventricular Arrhythmias via GABA Receptor Mediated Pathways in a Porcine Model
MPDS-I • CA 29 (1424)

Impact of Methylprednisolone on the Incidence of Postoperative Complications in Cardiac Surgery Patients
MPDS-I • CA 30 (1242)

continued on page 93
Abstract Category Index, continued

Cardiovascular Anesthesiology, continued

Fatigue and Dyspnea on Exertion in a Patient with Previous Aortic Valve surgery  
MPDS-I • CA  31 (924)

Active Intrathoracic Pressure Regulation: A Novel Non-invasive Device to Improve Hemodynamics after Blood Loss in a Porcine Model of Hemorrhage  
MPDS-I • CA  32 (1058)

Variant Apolipoprotein L1 (APOL1) Alleles Are Associated With Increased Risk of Post-Cardiac Surgery Acute Kidney Injury  
MPDS-I • CA  33 (936)

Cardiac Output Monitoring: A Comparative Prospective Observational Study of the Conventional Cardiac Output Monitor and a New Smartphone Based Application  
MPDS-I • CA  34 (932)

Phenotyping Anesthesiology Providers for Hypotension Episodes during Coronary Artery Bypass Surgery  
MPDS-II • CA  27 (841)

Intraoperative Blood Pressure Thresholds and Major Adverse Events Following Cardiac Surgery: An Exploratory Analysis  
MPDS-II • CA  28 (1192)

Atrial Fibrillation Ablation Induces Changes in Central Autonomic Networks  
MPDS-II • CA  29 (1356)

Epicardial Botulinum Toxin Injection Induces Early Changes in Heart Rate Dynamics  
MPDS-II • CA  30 (1381)

Inhibition of Histone Deacetylase 6 Activity Provides Protection against Atherogenesis: A Role for HDAC6 NEDDylation  
MPDS-II • CA  32 (903)

ST Segment Variability in Coronary Allograft Vasculopathy after Pediatric Heart Transplantation  
MPDS-II • CA  33 (1237)

Development of a Large Canine Model of TEVAR Resulting in Ischemic Spinal Cord Injury and Paralysis  
MPDS-II • CA  34 (1334)

Pulmonary Thrombo-Endarterectomy (PTE) For Chronic Thromboembolic Pulmonary Hypertension (CTEPH): A Single Center 13-Year Report  
MPDS-II • CA  35 (987)

Critical Care

The Prognostic Value of Cardiac Power Output in Septic Patients  
MPDS-I • CC  37 (1258)

Focused Transthoracic Echocardiography and In-Hospital Cardiac Arrest: A Case series of 10 Resident-Obtained Echocardiograms in the Peri-Resuscitative Period  
MPDS-I • CC  38 (1088)

continued on page 94
Abstract Category Index, continued

Critical Care, continued

Long-Term Outcomes Following Extracorporeal Life Support for Acute Respiratory Failure
MPDS-I • CC 40 (606)

Hyperacute Catheter-Associated Pulmonary Embolus in the Immediate Postoperative Period Following Spinal Surgery
MPDS-I • CC 41 (867)

Sepsis Upregulates HIF-1 Independent of Tissue Oxygenation
MPDS-I • CC 42 (1329)

Making ECMO ‘Work’: Teamwork: An Observational, Qualitative Study into Teams and Teamwork
MPDS-II • CC 38 (1002)

Intercorporeal ‘Knowing’ for Extracorporeal Membrane Oxygenation: Constructing and Enacting a Culture of Safety: A Qualitative, Observational Study
MPDS-II • CC 39 (1003)

The Modified Early Warning System in Unplanned SICU Admission: An Analysis in 263 Consecutive Patients
MPDS-II • CC 40 (711)

Association between Mean Arterial Pressure and Acute Kidney Injury and a Composite of Myocardial Injury and Mortality in Postoperative Critically Ill Patients
MPDS-II • CC 41 (584)

Estrogens Alleviate Parasympathetic-induced, α7nAChR-mediated Mortality from secondary P. Aeruginosa Lung Infection after Traumatic Brain Injury in Mice
MPDS-II • CC 42 (904)

Noninvasive Venous Waveform Analysis (NIVA) Detects Blood Loss in Human Blood Donors and a Porcine Hemorrhage Model
MPDS-II • CC 43 (884)

Role of Toll-like Receptor Signaling in Sepsis-Induced Coagulopathy in Mice
MPDS-II • CC 45 (702)

The Use of a Succinate Prodrug to Improve Respiration in Blood Cells from Patients with Sepsis
MPDS-II • CC 46 (563)

Kidney Proximal Tubular Toll-Like Receptor 9 (TLR9) Exacerbates Ischemic Acute Kidney Injury in Mice
MPDS-II • CC 47 (1180)

Severe Myxedema Coma - A Diagnostic Dilemma and Management Challenges
MPDS-II • CC 48 (620)

Therapeutic Effects of Hyaluronic Acid Following Lung Injury Induced by E. Coli Derived Extracellular Vesicles
MPDS-II • CC 49 (1033)

Therapeutic Effect of High Molecular Weight Hyaluronic Acid in Polymicrobial Sepsis in Mice
MPDS-II • CC 50 (1038)

continued on page 95
Abstract Category Index, continued

**Critical Care, continued**

Clinical Utility of Hemodynamic Transesophageal Echocardiography (hTEE) in the Management of Unstable Cardiothoracic ICU Patients  
MPDS-II • CC 52 (737)

Risk Stratification for 30-day Mortality in Patients with Acute Kidney Injury after High-Risk General Surgery  
MPDS-II • CC 53 (1018)

Catheter-Associated Urinary Tract Infection in a Low Resource Intensive Care Unit  
MPDS-II • CC 54 (1447)

Non-Invasive Optical Cerebral Blood Flow and Oxygenation Monitoring in Critically Brain-injured Patients  
MPDS-II • CC 55 (1385)

**Economics, Education and Policy**

The “Mock OSCE”: Preparing Residents for the ABA Objective Structured Clinical Examination  
MPDS-I • EEP 45 (864)

Perspective on Leadership and Millennial Physicians  
MPDS-I • EEP 46 (700)

Metacognition Principles in a Didactic TEE Education Program  
MPDS-I • EEP 47 (591)

Building an Academic Anesthesiology Career Using the Medical Academic Grid (MAG©)  
MPDS-I • EEP 48 (810)

The High Cost of Severe Pediatric Caries  
MPDS-I • EEP 51 (665)

The Impact of Preventive Care Reimbursements on Use of Preventive and Tertiary Oral Health Services  
MPDS-I • EEP 52 (806)

Concurrent Surgery and Perioperative Outcomes: A Retrospective Analysis from the Multicenter Perioperative Outcomes Group  
MPDS-I • EEP 53 (1227)

Perception of Educational Environment and its Association with In-Training Examination Scores in an Anesthesiology Residency Program  
MPDS-II • EEP 62 (1132)

Effectiveness of a Flipped Classroom Model Compared to a Traditional Format in Anesthesiology Education  
MPDS-II • EEP 63 (899)

Novel Recycling Practices in Anesthesiology  
MPDS-II • EEP 65 (1152)

The Status of Women in Academic Anesthesiology: A Ten-Year Update  
MPDS-II • EEP 66 (1382)
Abstract Category Index, continued

**Geriatric Anesthesia**

Depth of Sedation as an Interventional Target to Reduce Postoperative Delirium: A Randomized Clinical Trial  
MPDS-I • GA  58 (785)

Dexmedetomidine with Sufentanil in Intravenous Patient-Controlled Analgesia for Relief from Postoperative Pain, Inflammation, and Delirium after Esophageal Cancer Surgery  
MPDS-I • GA  59 (502)

Cognitive Change after Cardiac Surgery or Cardiac Catheterization: An Epidemiological Study  
MPDS-I • GA  61 (1386)

Long-Term Caregiving is Associated with Impaired Cardiovagal Baroreflex - Implications on Anesthesia Care  
MPDS-I • GA  62 (558)

**Global Health**

Increasing Evidence-based Interventions for Patients with Acute Infections in a Rural Village in Rwanda  
MPDS-II • GH  59 (525)

Factors Limiting the Provision of Safe Obstetric Anaesthesia in Low-Income Countries: A Cross-Sectional Survey of 64 Hospitals in Uganda  
MPDS-II • GH  60 (493)

**Liver**

Predicting Postoperative Liver Dysfunction Using Indocyanine Green Clearance after Cardiac Surgery  
MPDS-I • L  65 (562)

Novel Insights into a Mitochondrial Immuno-Metabolism Connection Detected by RNA-Sequence Analysis of Experimental Drug-Induced Hepatitis in BALB/c Mice  
MPDS-I • L  66 (1179)

**Medically Challenging Cases**

Anesthetic Management of Quaternary C/S in a Patient with Diffuse, Destructive Malignant Metastatic Lesions  
MPDS-I • MCC 4 (1140)

A Novel Association of Juvenile Polyposis Syndrome with Atrial Septal Aneurysm and Patent Foramen Ovale  
MPDS-I • MCC 75 (529)

The Anesthetic Management of an Adolescent with Autism Spectrum Disorder and Super-Super Obesity: A Case Report  
MPDS-I • MCC 77 (999)

continued on page 97
Abstract Category Index, continued

Medically Challenging Cases, continued

Anesthetic Challenges of Emergency Gynecological Surgery in a Jehovah’s Witness with Fontan Circulation: A Case Report
MPDS-I • MCC 78 (1217)

Transesophageal Echocardiography in the Intraoperative Management of Renal Cell Carcinoma with Inferior Vena Cava Thrombus: A Case Report
MPDS-I • MCC 79 (1220)

PICC Line Challenge
MPDS-I • MCC 80 (637)

The Use of High Flow Nasal Oxygenation in the Anesthetic Management of Tracheal Stent Deployment: A Case Report
MPDS-I • MCC 83 (682)

How Findings on Transesophageal Echocardiography Can Change the Surgical Approach for Management of a Pericardial Effusion from Penetrating Chest Trauma
MPDS-I • MCC 84 (792)

Successful Treatment of Recurrent Chronic Scrotal Pain Secondary to Post Laminectomy Syndrome with Spinal Cord Stimulation
MPDS-I • MCC 86 (925)

Management of Scimitar Syndrome in Two Pregnant Patients
MPDS-I • MCC 87 (949)

Management of Severe Fire-Related Inhalation Injury with Venovenous Extracorporeal Membrane Oxygenation: A Case Report
MPDS-I • MCC 89 (1080)

A Case of Unexplained Septic Shock
MPDS-I • MCC 96 (1128)

Compartment Syndrome as a Complication of Invasive Blood Pressure Monitoring in Patients Receiving Catheter Directed Thrombolysis
MPDS-I • MCC 97 (1157)

Is the Tracheostomy Working? Medically Challenging Case Presentation
MPDS-I • MCC 98 (1163)

New Anterior Mediastinal Mass Discovered Day of Surgery: A Case Report
MPDS-I • MCC 101 (1361)

Itching and Amniotic Fluid Embolism with Circulatory Collapse in a Full-term Pregnant Patient
MPDS-I • MCC 102 (1378)

Current Cognitive Impairment in a Patient with a History of Delirium: A Preoperative Dilemma
MPDS-I • MCC 104 (1422)

Ethical Conflicts in Extracorporeal Membrane Oxygenation: A Case Report
MPDS-I • MCC 105 (1420)
Abstract Category Index, continued

Medically Challenging Cases, continued

Perioperative Management of a Patient with von Gierke Disease Undergoing Hepatic Surgery
MPDS-I • MCC 106 (1421)

Successful Anesthetic Management of a Patient with Multiple Trauma and Severe Hypothermia: A Case Report
MPDS-I • MCC 129 (839)

Postoperative Migration of Functioning Epidural Catheter to Intrathecal Space Following Fetoscopic Myelomeningocele Repair: A Case Report
MPDS-II • MCC 68 (519)

Loss of Secure Airway after Difficult Intubation in a Patient with Osteogenesis Imperfecta Undergoing Cesarean Delivery
MPDS-II • MCC 69 (1036)

The Best Awake Fiberoptic Airway Technique
MPDS-II • MCC 70 (1343)

Case Report: Novel Use of Thromboelastography to Diagnose Hypercoagulability and Enoxaparin Failure Despite Therapeutic anti-FXa activity in a Patient with Bladder Cancer
MPDS-II • MCC 71 (1246)

Perioperative Pain Management Emphasizing Peripheral Nerve Blockade in a Homozygous Sickle Cell Disease Patient Undergoing Total Hip Arthroplasty
MPDS-II • MCC 72 (1022)

Cesarean Section and Subsequent Ventriculostomy in a Parturient with Pre-Eclampsia and Obstructive Hydrocephalus - A True Anesthetic Challenge
MPDS-II • MCC 74 (825)

Erector Spinae Plane Block for Minimally Invasive Pectus Excavatum Repair: A Case Series
MPDS-II • MCC 75 (1092)

Anesthetic Management of Staged Thoracoabdominal Aortic Aneurysm Repair Complicated by Neck Hematoma: A Medically-Challenging Case Report
MPDS-II • MCC 76 (1014)

Perioperative Management of an Adult with Severe Aortic Coarctation Presenting for TEVAR
MPDS-II • MCC 77 (908)

A Case Series of Anesthetic Management of 3 Patients with Wolf Parkinson White Syndrome
MPDS-II • MCC 78 (1186)

Caudal Anesthesia and Natural Airway for Ambulatory Urologic Surgery in Infant with Epidermolysis Bullosa
MPDS-II • MCC 79 (1026)

continued on page 99
Abstract Category Index, continued

Metabolism and Perioperative Care

The Effects of Major Hepatobiliary Surgery and General Anesthesia on Skeletal Muscle Mitochondrial Respiration: A Pilot Study
MPDS-I • MPC 67 (786)

Isoflurane, Unlike Propofol, Increases Reactive Aldehyde Metabolism in Both Wild Type Mitochondrial Aldehyde Dehydrogenase 2 (ALDH2) and ALDH2*2 Rodents
MPDS-I • MPC 68 (1066)

Increase in Minute CO2 Removal May Be More Valuable Than Other Clinical Parameters for Clinical Diagnosis of Malignant Hyperthermia: A Case Series from a Single Large Medical Center in North America
MPDS-I • MPC 69 (916)

Neuroscience in Anesthesiology and Perioperative Medicine

Perioperative Trajectory of Alzheimer’s Disease Biomarkers in Surgical Patients and Matched Non-Surgical Controls
MPDS-I • NR 109 (1057)

Power Spectrum and Frontal Alpha Band Activity Saturation Predicts Loss of Response to Verbal Command in Older Adults during Anesthetic Induction with Propofol: A Diagnostic Test Approach
MPDS-I • NR 110 (953)

Sugammadex Offers a New Option for Early Cessation of Neuromuscular Blockade to Facilitate Spinal Cord Evoked Potential Monitoring
MPDS-I • NR 111 (537)

Discriminative Capacity of EEG Power for the Onset and Severity of Delirium in the Postoperative Period
MPDS-I • NR 112 (1325)

Serum Angiopoietin-2 in Children with Traumatic Brain Injury
MPDS-I • NR 113 (1418)

Sevoflurane Interferes Cell Cycle through Inhibition of Wnt/β-Catenin Signaling Pathway in Mouse Neural Stem Cells
MPDS-I • NR 119 (840)

Neonatal Disruption of PSD-95 PDZ Domain-Mediated Protein-Protein Interactions Alters Dendritic Spine Morphology, Long-term Potentiation, and Causes Deficits in Learning and Memory in Mice
MPDS-I • NR 120 (621)

The Association between Angiotensin Converting Enzyme Inhibitors and Angiotensin Receptor Blocker Use and the Incidence of Delirium in Surgical ICU Patients
MPDS-I • NR 121 (771)

The Pro-Apoptotic Protein BAX is Necessary for Neuron Death Associated with Exposure to Isoflurane General Anesthesia in a Neonatal Mouse Model
MPDS-I • NR 122 (1153)

continued on page 100
Abstract Category Index, continued

Neuroscience in Anesthesiology and Perioperative Medicine, continued

Propofol Anesthesia Does Not Increase the Removal of Brain Wastes in Humans
MPDS-I • NR 124 (1177)

Measuring Post-Operative Cognitive Dysfunction in Older Adults Using the Dalhousie Computerized Attention Battery
MPDS-II • NR 81 (646)

Non-invasive Optical Quantification of Absolute Cerebral Blood Flow in Adults: Validation against MRI
MPDS-II • NR 82 (695)

Preliminary Evidence of Neural Inertia in Human Subjects Undergoing Xenon Anesthesia
MPDS-II • NR 83 (940)

Adult-Born Hippocampal Neurons Drive Recurrent Excitatory Circuits during Epileptogenesis in Mice
MPDS-II • NR 84 (954)

Auditory Novelty Detection in Awake and Anesthetized States: An Intracranial Electrophysiology Study
MPDS-II • NR 85 (957)

Adolescent Rats Display Long-Lasting Abnormalities in REM Sleep Quantity and Structure after Postnatal Anesthesia
MPDS-II • NR 88 (1039)

Defining Subareas of the Ventral Respiratory Column Functionally with AMPA and DAMGO Injections in Adult Rabbits In Vivo
MPDS-II • NR 89 (1040)

Ketamine’s Antidepressant Effect is Blocked by a Mu-Opioid Receptor Antagonist in Humans and Mice
MPDS-II • NR 90 (1077)

Can EEG Metrics Collected Prior to Laryngoscopy Predict Isolated Forearm Test Responsiveness after Laryngoscopy? A Secondary Analysis of the Conscious Study
MPDS-II • NR 91 (1137)

Pain after Craniotomy and the Development of Long-Term Headache after These Procedures: Can We Improve Outcomes?
MPDS-II • NR 92 (1158)

Differential Methylation of Hippocampal DNA Three Weeks after Exposure to Surgery and Anesthesia in Aging Mice
MPDS-II • NR 93 (1190)

Can National Surgical Quality Improvement Program (NSQIP) Risk Scores Aid in the Prediction of Patients at Risk of Postoperative Delirium? A Preliminary Analysis of the IPOD-B3 Study
MPDS-II • NR 94 (1205)

A Novel Theoretical Basis for Anesthetic Hysteresis
MPDS-II • NR 95 (1277)

Value of Early Myocardial Workload Following Severe Traumatic Brain Injury
MPDS-II • NR 96 (1300)
Abstract Category Index, continued

Neuroscience in Anesthesiology and Perioperative Medicine, continued

Optical Neuromonitoring Detects Brain Hypoxia  
MPDS-II • NR  97 (1393)

Sevoflurane and Isoflurane Exposure in Aged Male Mice Leads to Synaptic Alterations in the Hippocampus  
MPDS-II • NR  99 (1400)

Obesity

Severity and Duration of Hypoxemia during Outpatient Endoscopy in Obese Patients  
MPDS-I • O  70 (851)

Effect of Pediatric Obesity Pre-Anesthesia Evaluation Guidelines in Anesthetic Complications: A Multidisciplinary Effort  
MPDS-I • O  71 (1333)

Paternal BMI Affects Neonatal Weight: A Retrospective Study  
MPDS-I • O  128 (835)

Obstetric Anesthesiology

Transcutaneous P6 Acupoint Electrical Stimulation Prevents Both Nausea and Vomiting during Elective Cesarean Section under Combined Spinal-Epidural: A Randomized Control Clinical Trial  
MPDS-I • OB  126 (753)

Does the Application of Scopolamine Patch with Intra-operative Acupressure Point P6 Stimulation Increase Parturients’ Intra-Cesarean Satisfaction? Prospective Randomized Clinical Trial  
MPDS-I • OB  127 (799)

Use of Intrathecal Hydromorphone in Elective Cesarean Deliveries  
MPDS-II • OB  101 (619)

6-Shogaol (Bioactive Metabolite of Zingiber Officinale) Attenuates Human Uterine Smooth Muscle (USM) contractility  
MPDS-II • OB  102 (1176)

The Pattern and Distribution of Body Fluid During Pregnancy: A Systematic Review  
MPDS-II • OB  104 (1282)

Do Obstetric Anesthesiologists Provide More Guideline-Concordant Care for Patients Undergoing Cesarean Delivery?  
MPDS-II • OB  105 (1296)

Emotional Burden and Psychophysical Predictors of Labor Pain  
MPDS-II • OB  106 (1434)

continued on page 102
### Pain and Addiction Pathways

**Mobile Detection of Simulated Opioid Overdose Events**  
MPDS-I • PAP 134 (1029)

**Car8 Analgesia Assessed in Morphine Equivalence Using Mechanical Antinociception: Implications for Allometric Dosing and Translation From Mice to Humans**  
MPDS-I • PAP 136 (992)

**Are the Patients with Opioid Use Disorder Prone to Relapse to Opioids in the Postoperative Period?**  
MPDS-I • PAP 137 (793)

### Pain Mechanisms

**GABA Neurons in the Rostromedial Tegmental Nucleus Modulate Analgesia in Mice**  
MPDS-I • PME 133 (955)

**Analgesic Responses Are Regulated by Genetic Variation of Dorsal Root Ganglia Carbonic Anhydrase-8 in Mice**  
MPDS-I • PME 141 (883)

**Gain Without Pain: CA8-204 Represents A Novel Analgesic Therapeutic Candidate**  
MPDS-I • PME 142 (880)

**Addressing A Missing Link in Pain Medicine: Preclinical Validation CA8 Biotherapeutics as Long-Acting Local Analgesics/Anesthetics (LALA)**  
MPDS-I • PME 143 (882)

**Skin Overexpression of Neurturin Upregulates TNF-α in CFA Inflammation**  
MPDS-I • PME 144 (1405)

**Muscle Sensory Dysfunction in a Rat Model of Peripheral Arterial Disease: The Role of Microglial Activation in Chronic Limb Pain**  
MPDS-I • PME 145 (994)

**Ketamine Inhibits the Aversive Symptoms of Chronic Pain via Inhibition of NMDA Signaling in the Anterior Cingulate Cortex**  
MPDS-I • PME 146 (910)

### Pain Medicine

**Comparison of Postoperative Analgesic Effect of Preemptive Use of Tramadol versus Ketamine in Laparoscopic Surgery**  
MPDS-I • PM 132 (570)

**Role of Pain Specialists in Reducing Healthcare Costs for Patients with Chronic Pain**  
MPDS-I • PM 135 (1235)

---

*continued on page 103*
Abstract Category Index, continued

Pain Medicine, continued

The Impact of a Yoga-based Daily Exercise Program on Pain, Sleep, and Stress in Patients with Fibromyalgia
MPDS-I • PM 180 (758)

Is High-Frequency Heart Rate Variability Index a Marker for the Balance between Analgesia and Nociception During Laparoscopic Cholecystectomy in Adults under General Anesthesia?
MPDS-II • PM 31 (1054)

Squamous Cell Carcinoma of the Nasopharynx: Successfully Achieving Pain Control in a Newly Diagnosed Cancer
MPDS-II • PM 108 (596)

Long Term Pain Control in Severe Lumbar Spinal Stenosis Prior to Surgical Intervention
MPDS-II • PM 109 (597)

Predictors of Moderate-to-Severe Acute Pain after Video-Assisted Thoracoscopic Surgery
MPDS-II • PM 111 (805)

MPDS-II • PM 112 (1059)

Molecular Interactions of Dexmedetomidine with Kappa Opioid Receptor
MPDS-II • PM 113 (1165)

The Application of Bayes’ Theorem for Diagnosing Herniated Nucleus Pulposus (HNP) Based on Physical Exam Findings
MPDS-II • PM 114 (1397)

Patient Safety

Radiological Assessment of Gastric Emptying of Water Soluble Contrast Media: New Data Security from a Cohort Study
MPDS-I • PS 11 (783)

Disruptive Intraoperative Behavior: Reporting to Management and Satisfaction with Management’s Response
MPDS-I • PS 54 (958)

Supraclavicular Brachial Plexus Block Analgesia with or without Perineural Dexamethasone for Creation of Arteriovenous Fistula in End Stage Renal Disease Patients
MPDS-I • PS 55 (1284)

Derivation, Validation, and Sustained Performance of a Hospital-Wide Elective Surgery Delirium Risk Tool (AWOL-S)
MPDS-I • PS 60 (1146)

Burnout in Certified Anesthesiologist Assistants
MPDS-II • PS 116 (560)

Burnout in Certified Registered Nurse Anesthetists
MPDS-II • PS 117 (633)

continued on page 104
Abstract Category Index, continued

Patient Safety, continued

Safety of Anesthesia for Percutaneous Endoscopic Gastrostomy in Patients with Amyotrophic Lateral Sclerosis
MPDS-II • PS 118 (729)

Impact of Implementation of the Integrated Pulmonary Index (IPI) in Low-Acuity Inpatients
MPDS-II • PS 119 (733)

Identifying Risky Practices Related to Perioperative Phenylephrine Infusions: An Audit-based Approach to Link Root Cause Analysis (RCA) to Quality Improvement (QI)
MPDS-II • PS 120 (878)

Laparoscopic Specimen Bag Designs - Impact on Patient Safety
MPDS-II • PS 121 (989)

Pediatric Anesthesiology

Prevalence and Clinical Factors Associated with Impaired Cerebral Autoregulation in Children with Mild Complex Traumatic Brain Injury
MPDS-I • PED 114 (1317)

High-Throughput Screen for Inhibitors of Anesthetic-Induced Neurotoxicity in C. elegans
MPDS-I • PED 125 (1172)

Unplanned Postoperative Intubation in Infant and Neonatal Surgical Patients: Predictors and Associated Mortality
MPDS-I • PED 150 (1124)

Perioperative Outcomes and Management in LeFort III Midface Advancement Surgery: A Multicenter Study from the Pediatric Craniofacial Collaborative Group
MPDS-I • PED 151 (548)

Comparison of Endotracheal Intubation vs. Natural Airway during Initial Percutaneous Endoscopic Gastrostomy Insertion
MPDS-I • PED 152 (847)

Comparison of Endotracheal Intubation vs. Natural Airway during Initial Percutaneous Endoscopic Foreign Body Removal
MPDS-I • PED 153 (845)

Transition from Acute to Chronic Postsurgical Pain: Trajectories of Pain, Function and Health after Adolescent Spine Surgery
MPDS-I • PED 155 (1055)

Perioperative Outcomes Comparing High Surgical Volume vs. Low Surgical Volume Centers for Complex Cranial Vault Reconstruction: A Multicenter Study from the Pediatric Craniofacial Collaborative Group
MPDS-II • PED 123 (542)

Retrospective Review of Anesthetic Dose and Duration for Brain MRI in Children Less Than 3 Years of Age
MPDS-II • PED 124 (607)

continued on page 105
Abstract Category Index, continued

**Pediatric Anesthesiology, continued**

Retrospective Review of Indications and Diagnostic Yield of Brain MRI with Anesthesia in Children Less Than 3 Years of Age
MPDS-II • PED 125 (608)

Trajectories of Brain Lactate Do Not Contribute to Aerobic Glycolysis across Childhood
MPDS-II • PED 128 (1115)

Reducing Postoperative Opioid Use in Children after Adenotonsillectomy
MPDS-II • PED 129 (1125)

Children and Adults with Univentricular Hearts Score Lower on Full Scale Intelligence Testing Compared to Children with Biventricular Congenital Heart Disease: A Meta-analysis
MPDS-II • PED 130 (1248)

Intravenous Fluid Administration in Pediatric Patients Undergoing Colectomy: Retrospective Analysis
MPDS-II • PED 131 (1398)

Dosing Variation in Pediatric Regional Blockade: A PRAN Database Study
MPDS-II • PED 132 (1430)

**Perioperative Anesthesia**

CHA2DS2-VASc Score for Risk Prediction of Venous Thromboembolic Events after Total Joint Arthroplasty
MPDS-I • PA 2 (990)

Association of Preoperative Anticholinergic Medication Exposure with Postoperative Healthcare Resource Use and Outcomes: A Population-Based Cohort Study
MPDS-I • PA 76 (555)

Quality Improvement Project: Does Pre-procedural General Cognition and Neurocognitive Diagnoses affect Colonoscopy Preparation in Older Adults?
MPDS-I • PA 103 (1416)

Effect of Dexamethasone on Postoperative Pain Scores in a Resource-Limited Setting: A Randomized Double Blind Placebo-Controlled Clinical Trial
MPDS-I • PA 159 (869)

The iShuttle: A Strategy to Decreases Turn-Over-Time by Improving Culture in the Operating Room
MPDS-I • PA 160 (740)

Addition of Focused Transthoracic Echocardiography (FoTE) Learning into Existing Anesthesiology Residency Training Programs: A Prospective Multicenter Study of Blended Learning
MPDS-I • PA 161 (1229)

Echocardiographic Assessment Using Subxiphoid-only View (EASy) Compared to Focused Transthoracic Echocardiography (FoTE): A Multicenter Prospective Study
MPDS-I • PA 162 (1160)

continued on page 106
Abstract Category Index, continued

**Perioperative Anesthesia, continued**

Post-Operative Sepsis: What is the Current Picture?  
MPDS-I • PA 163 (1371)

A Nationwide Study of Dental Injuries in Relation to General Anesthesia  
MPDS-I • PA 168 (1015)

A Systematic Review and Meta-Analysis Examining the Impact of Sleep Disturbance on Post-Operative Delirium  
MPDS-I • PA 169 (1169)

Impact of ICU Admission on the Perioperative Trajectory of Elderly Surgical Patients  
MPDS-I • PA 171 (1370)

Stroke Volume Assessment by Invasive Arterial Blood Pressure Tracing, SpO2 and Bioreactance: A Comparative Study  
MPDS-I • PA 173 (1444)

A New EPOCH: Enhanced Perioperative Oncologic Care Holistically  
MPDS-II • PA 136 (618)

Design of a Tool for Resident Education when Planning Anesthetics for Intracranial Neurosurgical Procedures  
MPDS-II • PA 137 (638)

Effect of Lidocaine on Src Kinase Activity in Circulating Tumor Cells Isolated from KPC Mice with Pancreatic Cancer  
MPDS-II • PA 138 (766)

Postoperative Hypoxemic Events are Independently Associated with Increased Mortality within One Year from the Date of Surgery  
MPDS-II • PA 139 (977)

The Triple Variable Index Reveals Shared Patterns of Physiology that Broaden the Utility of Common Intraoperative Monitoring Systems to Capture Risk Information Not Identified by Established Models  
MPDS-II • PA 140 (1310)

Echocardiographic Assessment Using Subxiphoid-only View (EASy) Compared to Focused Transthoracic Echocardiography (FoTE) in the Perioperative Period: A Multicenter Prospective Study  
MPDS-II • PA 141 (1408)

**Regional Anesthesia**

Report of Acute Delirium in a Healthy Patient with Rectus Sheath Catheters  
MPDS-I • RA 6 (807)

Use of Ultrasound Guided Quadratus Lumborum Block for Post-Operative Analgesia for Total Hip Arthroplasty: A Retrospective Study  
MPDS-I • RA 177 (1193)

Early Experience with 2-Chloroprocaine for Spinal Anesthesia: A Retrospective Analysis at One Institution  
MPDS-I • RA 178 (907)

continued on page 107
Abstract Category Index, continued

Regional Anesthesia, continued

Differential Effect of Paravertebral Block amongst Mastectomy Patients: Phenotyping Using Preoperatively Determined Psychosocial and Psychophysical Characteristics
MPDS-I • RA 179 (757)

Successful Management of 73 Patients for Total Knee Arthroplasty Using a Combination of Ultrasound-Guided Nerve Block and Targeted Sedation
MPDS-I • RA 181 (1009)

Respiration

Ginger and Its Bioactive Component Relax Human Airway Smooth Muscle in Precision Cut Lung Slices and Inhibit Lung Inflammation in a Murine Asthma Model
MPDS-II • RES 56 (644)

Antagonism of the TMEM16A Calcium-Activated Chloride Channel Attenuates Allergic Lung Inflammation
MPDS-II • RES 57 (1052)

Light Mediated Relaxation of Small Airways in Precision Cut Lung Slice
MPDS-II • RES 58 (1130)

Sleep Medicine

Surface Ultrasound as a Screening Tool for Obstructive Sleep Apnea (OSA): A Systemic Review of Literature
MPDS-II • SM 103 (1265)

Association between Difficult Airway and Obstructive Sleep Apnea in Patients Undergoing Surgery: A Systemic Review and Bayesian Meta-Analysis of Prospective and Retrospective Cohort Studies
MPDS-II • SM 145 (684)

Risk Factors for Obstructive Sleep Apnea during Pregnancy: A Meta-analysis
MPDS-II • SM 146 (1166)

Familial Advanced Sleep Phase Mutant PER2 and CK1δ Mouse Models Provide Potential Insight into the Coupling of the Homeostatic Sleep Process to Circadian Rhythm.
MPDS-II • SM 148 (1064)

Is Obstructive Sleep Apnea Associated with Postoperative Delirium and Cognitive Decline?
MPDS-II • SM 149 (1219)

Technology, Computing and Simulation, Equipment Monitoring

Efficacy of Bispectral Index in Reducing Intraoperative Awareness: A Meta-Analysis of Randomized Controlled Studies
MPDS-I • TCSEM 24 (743)

Comparison of Pulse Oximeter Readings From Two Locations during Anesthesia
MPDS-I • TCSEM 49 (995)
Abstract Category Index, continued

Technology, Computing and Simulation, Equipment Monitoring, continued

Perioperative Central Volume Status in Healthy Children and in Children with Congenital Heart Disease
MPDS-I • TCSEM 184 (1181)

Joint Modeling and the Compensatory Reserve Index: Insight Into Hemodynamic Compensation during the Induction of General Anesthesia
MPDS-I • TCSEM 185 (1365)

Virtual Reality Use in Adult ICU to Mitigate Anxiety for a Patient on V-V ECMO: A Feasibility Trial
MPDS-I • TCSEM 186 (1126)

The Simulation Wars: A Competition to Increase Participation in Emergency Manuals Simulation Training and a Novel Tool for Rating Simulation Competitions
MPDS-I • TCSEM 187 (697)

Monitoring of Spinal Cord Blood Flow during Orthopedic Surgery in an Ovine Model
MPDS-II • TCSEM 98 (1215)

Trauma

Cervical Spine Clearance in Patients with Unreliable Clinical Exam: Delays and Complications
MPDS-I • T 188 (937)

Supplemental Oxygen for Trauma Patients - Current Practice in Two Trauma Centers
MPDS-I • T 189 (944)

Anesthetics Influence Mortality in a Drosophila Blunt Trauma Model
MPDS-II • T 5 (821)

Extracellular miRNAs and Innate Immune Activation Following Polytraumatic Injury in Mice
MPDS-II • T 151 (768)

Air-Evacuation-Relevant Hypobaria Following Traumatic Brain Injury plus Hemorrhagic Shock Increases Lung and Gut Injury and Mortality
MPDS-II • T 152 (897)

Inhibition of miR-155 Attenuates Neurotoxic Neuroinflammation and Improves Functional Recovery after Experimental Traumatic Brain Injury in Mice
MPDS-II • T 153 (1167)

Chronic Alterations in Systemic Immune Function after Experimental Traumatic Brain Injury in Mice
MPDS-II • T 154 (1262)

Type I Interferons Drive Pro-Inflammatory Activation and Neurodegeneration Following Experimental Traumatic Brain Injury in Mice
MPDS-II • T 155 (1425)
Abstract Author Index

Abuelkasem, Ezeldeen
MPDS-I BLD 22 (1348)

Ali, Syed
MPDS-I MCC 97 (1157)
MPDS-I MCC 98 (1163)

Alvis, Bret
MPDS-II CC 43 (884)

Amucheazi, Adaobi
MPDS-II CC 54 (1447)

Anderson, Thomas
MPDS-II PM 31 (1054)

Arias, Franchesca
MPDS-I MCC 104 (1422)
MPDS-I PA 103 (1146)

Armengol de la Hoz, Miguel
MPDS-II CA 27 (841)
MPDS-II CA 28 (1192)

Awad, Hamdy
MPDS-II CA 34 (1334)
AYUPO, NODRENE
MPDS-I PA 159 (869)

Baekgaard, Josefine
MPDS-I T 188 (937)

Baker, Wesley
MPDS-II CC 55 (1385)
MPDS-II NR 82 (695)

Balduyeu, Pavel
MPDS-I MCC 80 (637)

Balzer, Felix
MPDS-I CA 30 (1242)

Banchs, Richard
MPDS-I PA 160 (740)

Banks, Matthew
MPDS-II NR 85 (957)

Barnett, Katie
MPDS-II MCC 77 (908)

Barrett, James
MPDS-II T 155 (1425)

Bartman, Colleen
MPDS-I BS 17 (1238)

Bayman, Emine
MPDS-II PM 111 (805)

Bedell, Victoria
MPDS-II BS 17 (943)

Berkowitz, Dan
MPDS-II CA 32 (903)

Bigili, Beliz
MPDS-I CC 37 (1258)

Blair, Gregory
MPDS-I TCSEM 186 (1126)

Bloomstone, Joshua
MPDS-II PA 136 (618)

Busch, David
MPDS-II NR 97 (1393)
MPDS-II TCSEM 98 (1215)

Campbell, Amber
MPDS-I PA 163 (1371)

Carspecken, Charles
MPDS-II NR 83 (940)

Che, Lu
MPDS-I AM 1 (1004)
MPDS-I PA 2 (990)

Cheng, Wayland
MPDS-II AP 6 (917)

Cheong, Yee Ching Vanessa
MPDS-I NR 109 (1057)

Cheriyan, Thomas
MPDS-I BLD 23 (1199)
MPDS-I TCSEM 24 (743)

Chowdhury, Itee
MPDS-I AM 8 (1446)

Christensen, Rasmus
MPDS-I PA 168 (1015)

Chung, Eugene
MPDS-II MCC 75 (1092)

continued on page 110
<table>
<thead>
<tr>
<th>Name</th>
<th>MPDS Category</th>
<th>Page Number</th>
<th>Abstract String</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobb, Benjamin</td>
<td>MPDS-II OB</td>
<td>105 (1296)</td>
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<td>Coleman, Patrick</td>
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<td>Danielsson, Jennifer</td>
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<td>Davis, Jeffrey</td>
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continued on page 111
<table>
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<td>MPDS-II CC</td>
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<td>178 (907)</td>
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<td>Kim, Junghyun</td>
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<td>25 (838)</td>
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<td>53 (1018)</td>
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<td>Krishnamoorthy, Vijay</td>
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<td>96 (1300)</td>
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<td>Kroger, John</td>
<td>MPDS-I MCC</td>
<td>101 (1361)</td>
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<td>Kroll, Henry</td>
<td>MPDS-II PS</td>
<td>116 (560)</td>
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<td>MPDS-II PS</td>
<td>117 (633)</td>
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<td>Kuhlmann, Theresa</td>
<td>MPDS-I BLD</td>
<td>26 (1042)</td>
</tr>
<tr>
<td>Kumar, Annandita</td>
<td>MPDS-II CC</td>
<td>40 (711)</td>
</tr>
<tr>
<td>Kurien, Philip</td>
<td>MPDS-II SM</td>
<td>148 (1064)</td>
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<tr>
<td>Kwong, Allen</td>
<td>MPDS-II EEP</td>
<td>62 (1132)</td>
</tr>
<tr>
<td>Laffin, Anton</td>
<td>MPDS-I O</td>
<td>70 (851)</td>
</tr>
<tr>
<td>Leandre, Mario</td>
<td>MPDS-II MCC</td>
<td>78 (1186)</td>
</tr>
<tr>
<td>LeBlanc, Brooke</td>
<td>MPDS-I AM</td>
<td>9 (1257)</td>
</tr>
</tbody>
</table>

continued on page 111
Lee, H.T.  
MPDS-II CC 47 (1180)

Lee, Helen  
MPDS-I EEP 51 (665)  
MPDS-I EEP 52 (806)

Lee, Jae Woo  
MPDS-II CC 49 (1033)

Lee, Jaehoon  
MPDS-II CC 50 (1038)

Lele, Abhijit  
MPDS-I NR 113 (1418)  
MPDS-I PED 114 (1317)

Leopold, David  
MPDS-I TCSEM 184 (1181)  
MPDS-I TCSEM 185 (1365)

Levin, Danielle  
MPDS-I MCC 129 (839)  
MPDS-I O 128 (835)  
MPDS-I OB 126 (753)  
MPDS-I OB 127 (799)

Levitt, Roy  
MPDS-I PME 141 (883)  
MPDS-I PME 142 (880)  
MPDS-I PME 143 (882)

Levy, Richard  
MPDS-II BS 14 (544)

Li, Li  
MPDS-I NR 124 (1177)  
MPDS-I PED 125 (1172)

Li, Pulsar  
MPDS-II MCC 79 (1026)

Lim, Grace  
MPDS-II OB 106 (1434)

Liu, Renyu  
MPDS-II PM 113 (1165)

Liu, Shiwen  
MPDS-I NR 119 (840)

Loane, David  
MPDS-II T 154 (1262)

Lombardi-Karl, Laura  
MPDS-I MCC 87 (949)

Lorinc, Amanda  
MPDS-II PED 129 (1125)

Lunardi, Nadia  
MPDS-II NR 88 (1039)

McDonald, Michael  
MPDS-I CC 40 (606)

McIntyre, Elizabeth  
MPDS-I MCC 105 (1420)

McKinstry-Wu, Andrew  
MPDS-II BS 15 (748)  
MPDS-II BS 22 (1293)

Metzger, Anja  
MPDS-I CA 32 (1058)

Meuli, Mercades  
MPDS-I PA 161 (1229)

Mikami, Maya  
MPDS-II BS 20 (1168)

Mohammed, Asha  
MPDS-II PS 121 (989)

Moss, Andrew  
MPDS-II PS 118 (729)

Nagappa, Mahesh  
MPDS-II SM 145 (684)  
MPDS-II SM 146 (1166)

Nagele, Peter  
MPDS-II AP 9 (956)

Nair, Hema  
MPDS-II CA 35 (987)

Namiranian, Khodadad  
MPDS-I PAP 137 (793)

Nguyen, Khoa  
MPDS-I TCSEM 187 (697)

Niazi, Azfar  
MPDS-I MCC 102 (1378)

Ohemeng, Afia  
MPDS-II MCC 70 (1343)

continued on page 113
Abstract Author Index, continued

<table>
<thead>
<tr>
<th>Name</th>
<th>MPDS-I/II Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paparisto, Ergit</td>
<td>CC 41 (867)</td>
</tr>
<tr>
<td>Pasternack, Laura</td>
<td>EEP 65 (1152)</td>
</tr>
<tr>
<td>Patterson, Andrew</td>
<td>GH 59 (525)</td>
</tr>
<tr>
<td>Peck, Jacqualin</td>
<td>PED 152 (847)</td>
</tr>
<tr>
<td></td>
<td>PED 153 (845)</td>
</tr>
<tr>
<td>Perese, Francisco</td>
<td>MCC 72 (1022)</td>
</tr>
<tr>
<td>Perouansky, Misha</td>
<td>AP 4 (782)</td>
</tr>
<tr>
<td></td>
<td>T 5 (821)</td>
</tr>
<tr>
<td>Peterfreund, Robert</td>
<td>PA 137 (638)</td>
</tr>
<tr>
<td>Peterson, Joshua</td>
<td>AP 12 (1410)</td>
</tr>
<tr>
<td>Polaner, David</td>
<td>PED 132 (1430)</td>
</tr>
<tr>
<td>Polster, Brian</td>
<td>BS 25 (1354)</td>
</tr>
<tr>
<td>Prakash, Arun</td>
<td>BS 13 (516)</td>
</tr>
<tr>
<td>Privratsky, Jamie</td>
<td>CA 33 (936)</td>
</tr>
<tr>
<td>Proekt, Alex</td>
<td>BS 23 (1301)</td>
</tr>
<tr>
<td>Pruett, Brandon</td>
<td>MCC 106 (1421)</td>
</tr>
<tr>
<td>Quillinan, Nidia</td>
<td>BS 19 (1314)</td>
</tr>
<tr>
<td>Rabbitts, Jennifer</td>
<td>PED 155 (1055)</td>
</tr>
<tr>
<td>Rana, Maunak</td>
<td>PM 114 (1397)</td>
</tr>
<tr>
<td>Reddy, Srijaya</td>
<td>PED 123 (542)</td>
</tr>
<tr>
<td>Rid, Sabah</td>
<td>PED 128 (1115)</td>
</tr>
<tr>
<td>Riegelhaupt, Paul</td>
<td>AP 12 (1410)</td>
</tr>
<tr>
<td>Ritter Jones, Marsha</td>
<td>PME 144 (1405)</td>
</tr>
<tr>
<td>Romero, David</td>
<td>AM 10 (790)</td>
</tr>
<tr>
<td></td>
<td>PS 11 (783)</td>
</tr>
<tr>
<td>Sanders, Robert</td>
<td>NR 91 (1137)</td>
</tr>
<tr>
<td>Sanford, Ethan</td>
<td>PED 131 (1398)</td>
</tr>
<tr>
<td>Sardiwalla, Yaeesh</td>
<td>NR 81 (646)</td>
</tr>
<tr>
<td>Savarese, John</td>
<td>AP 2 (730)</td>
</tr>
<tr>
<td>Schaefer, Michele</td>
<td>NR 120 (621)</td>
</tr>
<tr>
<td>Schenning, Katie</td>
<td>NR 93 (1190)</td>
</tr>
<tr>
<td>Schnell, Eric</td>
<td>NR 84 (954)</td>
</tr>
<tr>
<td>Schnetz, Michael</td>
<td>PA 140 (1310)</td>
</tr>
<tr>
<td>Schreiber, Kristin</td>
<td>PM 180 (758)</td>
</tr>
<tr>
<td></td>
<td>RA 179 (757)</td>
</tr>
<tr>
<td>Sen, Indu</td>
<td>PS 55 (1284)</td>
</tr>
<tr>
<td>Sergeeva, Vera</td>
<td>O 71 (1333)</td>
</tr>
</tbody>
</table>

continued on page 114
Abstract Author Index, continued

Shah, Sapan  
MPDS-I AM 3 (1156)  
MPDS-I CA 5 (1164)  
MPDS-I MCC 4 (1140)  
MPDS-I RA 6 (807)  

Shah, Shagun  
MPDS-I CA 34 (932)  

Sheerer, Christopher  
MPDS-I NR 121 (771)  

Sieber, Frederick  
MPDS-I GA 58 (785)  

Sigurdsson, Martin  
MPDS-II BS 18 (1103)  

Singh, Mandeep  
MPDS-II OB 104 (1282)  
MPDS-II SM 103 (1265)  

Sinton, Jamie  
MPDS-II PED 124 (607)  
MPDS-II PED 125 (608)  

Skoblar, Matthew  
MPDS-I MCC 86 (925)  

Slupe, Andrew  
MPDS-I NR 122 (1153)  

Stevens, Jia Liu  
MPDS-I MPC 67 (786)  

Stiles, Katherine  
MPDS-II OB 101 (619)  

Straker, Tracey  
MPDS-I MCC 83 (682)  

Stucke, Astrid  
MPDS-II NR 89 (1040)  

Suen, Andrew  
MPDS-II T 151 (768)  

Sun, Eric  
MPDS-I EEP 53 (1227)  

Sunshine, Jacob  
MPDS-I PAP 134 (1029)  

Sutton, Caitlin  
MPDS-II MCC 68 (519)  
MPDS-II MCC 69 (1036)  

Tang, Chaoliang  
MPDS-I GA 59 (502)  

Tang, Pei  
MPDS-II AP 8 (923)  

Taylor, Norman  
MPDS-I PME 133 (955)  

Thiele, Robert  
MPDS-I CC 42 (1329)  

Toledo, Paloma  
MPDS-II EEP 66 (1382)  

Twadell, Sara  
MPDS-II NR 94 (1205)  

Vazquez, Rafael  
MPDS-II PM 112 (1059)  

Votta-Velis, Effrossyni  
MPDS-II PA 138 (766)  

Vu, Eric  
MPDS-II CA 33 (1237)  

Wagener, Brant  
MPDS-II CC 42 (904)  

Wagener, Gebhard  
MPDS-II L 65 (562)  

Waldron, Nathan  
MPDS-II CA 29 (1356)  
MPDS-II CA 30 (1381)  

Wang, Hanjun  
MPDS-I PME 145 (994)  

Wang, Jing  
MPDS-I PME 146 (910)  

Wang, Man-Ling  
MPDS-I RA 181 (1009)  

Wang, Sheng  
MPDS-II BS 16 (919)  

continued on page 115
Abstract Author Index, continued

Wang, Xin
MPDS-I PM 132 (570)

Whitlock, Elizabeth
MPDS-I GA 61 (1386)
MPDS-I PS 60 (1146)

Williams, Brittney
MPDS-II CC 45 (702)

Wu, Kevin
MPDS-I GA 62 (558)

Wylleman, Jasper
MPDS-I PA 173 (1444)

Xie, Zheng
MPDS-II AP 10 (962)

Xu, Zeping
MPDS-I MPC 69 (916)

Yeung, Jaclyn
MPDS-I MCC 96 (1128)

Yim, Peter
MPDS-II RES 58 (1130)

Yocum, Gene
MPDS-II RES 56 (644)

Ziethen, Tim
MPDS-I AM 12 (1104)
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continued on page 117
Abstract Reviewer Index, continued

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continued on page 118
Abstract Reviewer Index, continued

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