

INTERCHANGE

Society of Critical Care Anesthesiologists Newsletter Volume 29 | Number 2 | SUMMER 2018

PRESIDENT'S CORNER

Hopefully this edition of SOCCA *Interchange* you well and enjoying summer. There has been considerable discussion and deliberation by the leadership of SOCCA that will be of interest.

The 2018 SOCCA Annual Meeting and Critical Care Update occurred on April 27th in Chicago. It has been several years since our annual meeting was aligned with the International Anesthesia Research Society (IARS) annual meeting. Over 300 attendees participated in a day devoted to critical care education as well as having access to critical care content embedded in the IARS Annual Meeting that followed April 28-May 01. In addition to the educational content delivered, SOCCA leadership transitioned. A special thanks to immediate past-president Dr. Avery Tung for his outstanding service to SOCCA. His prose will certainly be missed in the President's Corner.

It is not too early to save the date for next year's meeting. The SOCCA 2019 Annual Meeting will be held on May 17, 2019 at the Fairmont Queen Elizabeth Hotel in Montreal, Quebec, Canada. SOCCA, the Association of University Anesthesiologists and IARS will hold aligned meetings May 16-21, 2019. May should be a fantastic time of year in Montreal and the SOCCA Annual Meeting Committee, including Drs. Sheila Pai Cole and Peter Von Homeyer, is already developing a program that



**Daniel R. Brown, MD,
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President
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promises to deliver state of the art content presented by experts in the field. If you have a topic or speaker ideas, please consider reaching out to either Drs. Cole or Von Homeyer or submitting a proposal to the IARS meeting by visiting <https://www.aievolution.com/ars1901> (IARS deadline is July 9, 2018).

Elections for SOCCA Officer and Board of Director positions were recently held. There was

considerable member interest in becoming involved in SOCCA, far more than available elected leadership positions. The deep talent pool is a strength of the society and we need to provide the avenues for members to contribute. In order to channel this effort, the structure of the society needs to facilitate accomplishing goals determined by the membership. As our relationship with IARS has matured, it became clear to the Board of Directors that our society by-laws were in need of revision. It was also noted that the society would benefit from an assessment of our vision and value that we provide members. To this end, the Board of Directors will be conducting a strategic planning meeting in early fall. We will be working to finalize a set of by-laws that serve the society, align efforts with deliverable outcomes and serve to enhance the value that SOCCA provides its members.

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JOB BOARD

Have you visited SOCCA's Job Board recently? Recent listings include positions with Anesthesia Associates of Morristown, New Jersey; American Anesthesiology of Atlanta, Georgia; and Midwest Physician Anesthesia Services of Columbus, Ohio. Read more of the members-only job posts and, if you would like to post a job on this site, please email a description and /or flyer to SOCCA Society Manager, Vivian Abalama, CAE at vabalama@iars.org.

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CLINICAL RESEARCH CONSORTIUM

Clinical Trials Network

Leaders of academic anesthesiology organizations have recognized that there is a need to conduct large pragmatic trials in order to answer important questions in anesthesiology-related research. Although there are several successful anesthesiology clinical trial networks around the world, there is no collaborative network in the United States. There are several factors that enable anesthesiology researchers today to conduct large and efficient trials, in line with recommendations of the National Institutes of Health.

(1) There are highly developed, specialized infrastructures already in place that can provide meaningful support to investigators and increase the likelihood of both successful funding and completion of research projects. Examples of these infrastructures include the Multicenter Perioperative Outcomes Group (www.mpog.org), the Duke Clinical Research Institute (www.dcri.org), and the NIH funded Clinical and Translational Science network.

(2) With the near universal adoption of electronic health records in the US, it has become possible to conduct trials entirely within the context of routine care. For example clinically relevant outcomes such as respiratory failure, renal failure and delirium can often be reliably ascertained from the EHR. This potentially negates the need for dedicated trial-related visits.

(3) We have access to multiple national registries with granular data from the HER, as well as information on complications and patient-reported outcomes. This obviates the need for a new, costly infrastructures to track patient outcomes. For anesthesiology related research, the establishment of MPOG approximately a decade ago was a great service to the field and now provides a valuable resource to clinical and translational scientists.

In an initial attempt to address this important opportunity, a consortium of academic anesthesiology organizations launched an initiative last year to stimulate pragmatic research. This effort was conceptualized and endorsed by organizations,



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which have as a common goal the advancement of knowledge in anesthesiology and the enhancement of care in perioperative medicine, critical care, pain management, and peri- and post-partum care. These organizations included the Association of University Anesthesiologists (AUA), early stage Anesthesiology scholars (eSAS), Foundation for Anesthesia education and Research (FAER), International Anesthesia Research society (IARS), and society of Critical Care Anesthesiologists (SOCCA). It was hoped that the pragmatic envisioned trials would (i) foster international collaboration, (ii) leverage big data and precision medicine, (iii) include multi-disciplinary teams, and (iv) adopt innovative and efficient designs.

The AUA Council energized this process by offering three start-up grants of \$15,000 each, which would allow investigators to refine their proposals and compete for grants to pursue an ambitious research project. A call for letters of intent was made towards the end of 2017, and seventeen high quality applications were received. In order to conduct fair and rigorous peer review, a study section of experts was assembled, all of whom generously devoted considerable time and effort to this initiative. Hannah Wunsch and Duminda Wijeyesundera, both at University of Toronto, headed up the study section. Other members were Jeanine Winer-Kronish (AUA), Jim Eisenach (FAER), John Butterworth (IARS), Avery Tung (SOCCA), Elizabeth Whitlock (eSAS), Paul Wischmeyer (DCRI) and Tim Houle (statistician). Six finalists were selected, and from these three winners were chosen.

On 1st May 2018, the first meeting of the Clinical Trials Network was held after the AUA, SOCCA and IARS meetings in Chicago. The agenda for this meeting was full and exciting. Kate Stoney from the National Heart Lung and Blood Institute provided valuable information on pragmatic trials from an NIH perspective. Eric Jacobsohn described how Canadian anesthesiology researchers have successfully launched and sustained a clinical trials collaborative. Sachin Kheterpal reported on the impressive growth of MPOG, and announced that MPOG was establishing an Infrastructure for Multicenter Pragmatic Anesthesiology Clinical Trials (IMPACT). With a

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strong track record of success in observational research and quality improvement through ASPIRE (Anesthesiology Performance Improvement and Reporting Exchange), IMPACT is a logical expansion for MPOG. Paul Wischmeyer from the DCRI delivered an inspiring talk, which included moving accounts of his experiences as a critical ill surgical patient. He passionately conveyed the importance of perioperative rigorous anesthesiology research, and illustrated the many ways that the DCRI can advance this important agenda and assist researchers.

A highlight of the meeting was the announcement of the three successful proposals and discussions around these. The winners with the titles of their proposals were (in no particular order):

1. Michael Aziz, Oregon Health and Science University, Optimized Opioid Management or Usual Treatment to Reduce Persistent Opioid Use Following Surgery (OPT-OUT)
2. Randal Blank, University of Virginia School of Medicine, Individualized Intraoperative Protective Ventilation using an Open Lung Approach with Driving Pressure Limitation

3. Frederic T. (Josh) Billings, Vanderbilt University Medical Center, Intraoperative Normoxia versus Hyperoxia during Maintenance Anesthesia to Reduce Postoperative Complications

Hannah Wunsch and Duminda Wijeyesundera chaired a science garage (grant review boot camp). Interestingly, all three applications proposed to use IMPACT (MPOG) as the logical infrastructure to conduct their research. More information on these projects can be found on the MPOG site: <https://mpog.org/ctn/>

I would like to thank Jeanine Wiener-Kronish for her tremendous efforts in helping to launch this initiative. I also want to thank Hannah Wunsch, Duminda Wijeyesundera as well as all the other members of the study section. And in particular, I am grateful to Vivian Abalama, who is a member of the IARS/AUA/SOCCA administrative team. Without her dedication, professionalism and organization, this initiative would not have been a success. In order to build on these initial achievements, we hope to have a follow-up symposium at next year's AUA/SOCCA/IARS meeting in Montreal. It is likely that we will be showcasing impactful pragmatic trials and having educational presentations from world leaders in clinical and translational research. 🏛️

PRESIDENT'S CORNER *continued from the cover*

As part of revising the workings of the society, we will continue to focus on education. In order to do this most effectively and to engage those newer to the field, we will be asking for greater involvement by our newest members. The manner in which we learn and communicate is constantly evolving and we will look to those new in their careers to help keep us on the cutting edge. It is our goal to increase involvement in all aspects of the society and it is the responsibility of the leadership to channel the energy and talent of our members to improve the society as a whole. Please contact me directly (brown.daniel@mayo.edu) if you would like to be involved. You may wish to review the new by-laws, once approved, to appreciate the structure of the society and how your interests intersect with SOCCA activities.

Research is another historical focus of SOCCA. Research presented at the annual meeting continues to increase in terms of both quantity and quality. While primary funding is beyond the scope of SOCCA alone, please note the

developing effort with IARS, SOCCA and other specialty societies in funding research (discussed in Dr. Tung's [winter newsletter contribution](#)). In addition, there has been a grass roots call for work describing anesthesiologist intensivist models of care, scope of practice etc. that relies less on funding than involvement in order to accomplish. Be on the lookout for future opportunities to contribute.

Finally, please keep SOCCA in mind this fall. We plan on holding a social gathering this October in San Francisco. Details will be forthcoming but the hope is to further position SOCCA as the premier society for anesthesiologist intensivists. To accomplish this, we need people to be involved, share ideas and support one another. Increasingly, we are being asked by our institutions and employers to assume a larger role in delivery of care to the sickest patients. Working together, we can build on this strong foundation and take the next steps forward. 🏛️

MEMBER SPOTLIGHT

A Brief Conversation with...Sean Josephs



Dr. Sean Josephs, MD is an Associate Professor of Clinical Anesthesia at the University of Cincinnati in Cincinnati, OH. He is board certified in Anesthesiology and Critical Care Medicine.

to the use of desirable intraoperative tidal volumes. These drivers included provider knowledge of the benefit of protective ventilation, provider awareness of their current deficiency in ventilator practice, and the use of technologies to change individual practice provider. Our QI team then implemented a series of interventions based on these key drivers to improve intraoperative tidal volume, including:

- Department-wide education about the benefits of intraoperative lower tidal volume ventilation during a Grand Rounds Presentation
- Creation and adoption of a Department-wide intraoperative ventilation policy
- Vocal support from the Department Chair
- Primary outcomes were periodically shared during Grand Rounds Presentations
- Changes to default ventilator settings on all anesthesia machines (600 mL to 500 mL)

Q. Can you briefly describe your recently published study?

A: Well, it's not really a research study. It is a description of a series of steps we took as part of a quality improvement (QI) project that we undertook at the University of Cincinnati. The main project was designed to get intraoperative physician residents and faculty, as well as, nurse anesthetists and student nurse anesthetists to utilize low tidal volume ventilation during surgery. It started when one of our critical care faculty noticed that the intraoperative tidal volume was frequently set very high. We, therefore, decided to take this on as a QI project and perform it in such a way that it could be eventually published. After the project was completed we saw improvements in provider adherence to protective ventilation strategies and we were fortunate enough to be able to publish the results.

Q. That's fantastic! How did you implement this quality improvement project?

A: Our QI team used a number of improvement methods that I learned from the Intermediate Improvement Science Series (I2S2) course I completed at Cincinnati Children's Hospital Medical Center. These included the use of statistical process control charts to track data over time and a "key driver diagram" to help guide our proposed changes. We identified several key processes, or drivers, that we thought would lead

Q. Whew! That's a lot of work. I hope you were able to demonstrate that all that hard work produced some benefit.

A: It was a lot of work! One of the first steps was to try to limit the data collection to a very specific subgroup of operative patients so that we could eliminate confounders that might be due to the operation or other related factors. Then, we further limited our evaluation to just 3 three time points. We recorded the tidal volume at the surgical "time out", 1 hour after that and then 1 more hour after that. If we hadn't limited the data collection to these points, the amount of data we could collect from our

anesthesia information management system was going to be overwhelming. In the final analysis, we saw sustained decreases in the intraoperative tidal volume, as well as, the rate of failure to use intraoperative lung-protective ventilation, at all three of these time points. We believe that we demonstrated a successful QI process and approach for reducing intraoperative tidal volume.



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Q. What was the most important lesson you learned from all this hard work?

A: I think we learned to really nail down what we were trying to accomplish before we started any of the data collection or QI interventions. May

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people go into a QI project with a “pet idea” about the best way to solve a problem. QI, though, is fundamentally about the outcome...not the intervention. In this way, we started with the end goal (decrease tidal volume used) and worked from there on ideas that would lead to that end goal. We tried to have an open mind about what would work—even though I had my own ideas about what was needed. We then worked in a systematic way, monitoring the outcomes along the way trying to determine whether we were accomplishing our goal with our system changes. To this day, I’m not entirely sure which intervention made the biggest impact. We do know, taken together, our interventions led to sustained decreases in the intraoperative tidal volume in our hospital.

Q. What, other than the QI process that you used, can we learn from your successful project?

A: For us, we learned that the IRB process did not have to be difficult and, in fact, I think our IRB was genuinely trying to be helpful. Even though we were planning to do a QI project, we wanted to make sure that the IRB would allow us to review patient data to assess the success of our project. Our IRB has a separate pathway to determine whether projects are

“human subjects research” requiring IRB oversight. We wrote a detailed QI protocol for the IRB specifically using language and methodology supported by the SQUIRE guidelines so as to be ready for potential future publication. The IRB reviewed our project and determined it to not be human subjects research so we were allowed to proceed with the project as quality improvement work without IRB oversight. They provided us a letter of approval for our QI project which was important when we decided to publish in Anesthesia and Analgesia.

Q. What advice do you have for fellows, junior faculty or other critical care anesthesiologists?

A: I think more people should look to initiate, complete and publish the results of their QI projects. Many of us are already doing QI with our trainees or for our own hospital departments or practices. It is an excellent way to promote yourself and your successes, especially if you work in an environment that is not highly resourced for traditional basic or translational scientific research. It is a great way to meld your department’s needs with your own academic productivity or interests...and it doesn’t take that much more effort to do the work in a robust enough way to get it published as either an abstract or manuscript. 🏢

ANNOUNCEMENTS

CCEeXAM – Test Date Set

Dear SOCCA Community:

The National Board of Echocardiography (NBE) is ready to administer the very first edition of the Examination of Special Competence in Critical Care Echocardiography (CCEeXAM).

The test date has been set at the 15th of January, 2019. This will be the first step in a much-needed uniform certification process for competence in trans thoracic echocardiography, a vital tool and skill set in the ICU. Please encourage your peers, faculty and trainees to register and take the test.

More information on exam content outline and related details is available at:

http://www.echoboards.org/EchoBoards/News/2019_Adult_Critical_Care_Echocardiography_Exam.aspx

I’m happy to answer any specific questions or concerns; or reach out to the NBE at info@echoboards.org.

On behalf of the exam writing committee for the NBE - CCEeXAM

Best regards,
Ashish

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FEATURED ARTICLES

The Role of Intensivists in the Management of Chimeric Antigen Receptor T Cell Related Toxicities

Chimeric Antigen Receptor (CAR) T cell therapy is a promising novel cancer treatment modality recently approved by the Food and Drug Administration for relapsed/refractory B cell liquid tumors. Though its use is currently limited to a few designated centers across the US, if this line of therapy continues to deliver on the hype and new indications continue to arise as expected, it is likely that in the coming years it will be coming to a hospital (and an ICU) near you.



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CAR T cells are manufactured by harvesting T cells from patients and genetically modifying them in a laboratory using a viral vector. A chimeric T cell receptor gene is introduced. This chimeric receptor is comprised of a variable domain derived from the immunoglobulin molecule targeting a specific antigen present on the surface of cancer cells, as well as built-in co-stimulatory and signal transduction domains that are designed to activate T cells independent from Major Histocompatibility Complex (MHC).

CAR T cells are designed to enhance the immune system's natural response to attack cancer. Tumor cells can evade immune response by various mechanisms including secretion of inhibitory factors which suppress the cytotoxic activity of immune cells, directly binding to inhibitory sites on T Cells, and even hiding recognizable tumor antigens from their surface. CAR T cells overcome these adaptive mechanisms by targeting known expressed antigens and not requiring co-stimulation by antigen presenting cells. Once CAR T cells are activated, they rapidly proliferate and release inflammatory cytokines, in turn recruiting other immune cells such as macrophages and natural killer cells to the tumor microenvironment. CAR T cells also exert cytotoxic effects by secreting granzyme and perforin granules, and directly stimulating apoptosis via fas/fas-L among other pathways.

Clinical trials to date have been promising, demonstrating markedly improved median survival times and remission rates when compared to patients on traditional treatment regimens. CAR T therapy, however, is associated with dangerous and potentially life-threatening side effects including what we now refer to as cytokine release syndrome (CRS) and neurotoxicity (NT). CRS is seen within days following infusion and is likely the result of over-stimulation of CAR T cells by tumor leading to excessive release of pro-inflammatory cytokines. Its presentation can vary from a mild systemic inflammatory response with fevers and tachycardia to refractory distributive shock and multiorgan failure. NT may be related to

penetration of pro-inflammatory cytokines into brain, direct CAR T infiltration of CNS, or other yet undescribed mechanism. It may present with mild symptoms including headache and disorientation and in severe cases progress to obtundation, cerebral edema and refractory status epilepticus. Death from cerebral herniation has occurred.

Our adult oncologic ICU has been treating patients with CAR T associated toxicities for years and our approach has evolved as we learn more about these distinct processes.

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Initial management for all patients include supportive therapies and close monitoring. Those who progress may be treated with agents that bind soluble IL 6 as well as moderate dose corticosteroids when appropriate. Antiepileptic agents are used prophylactically and therapeutically when NT is suspected. Life-threatening cases can be treated with pulse dose steroids, attenuating the immune response. Some experimental CAR T constructs have built-in “kill switches” which may be activated in the event of life-threatening toxicities. However, given the enormous cost associated with these therapies (the commercial price for a single CAR T treatment is about half a million dollars currently), administering any therapy that may hamper treatment efficacy is a difficult decision to make. To complicate things further, CAR T products are constructed differently depending on manufacturer and indication. The products we use today are third and fourth generation CAR Ts, both commercially available and experimental. From our experience, each product exhibits unique toxicity profiles – some with more prominent CRS, others associated with profound NT, and some can be quite benign.

There is ongoing debate and little outcome evidence regarding appropriate use of anti-IL 6 directed therapies and

corticosteroids, as well as their potential impact on CAR T cell anti-tumor effect. Studies have suggested long term outcome is dependent on high ratio of CAR T expansion to tumor burden, however it is unclear if long term CAR T proliferation is requisite for durable remission, and to what extent this is affected by our interventions. Though treatment protocols for management of toxicities have been put forth by various manufacturers and institutions including ours, a simple algorithmic approach for all CAR T related toxicities does not sufficiently encapsulate the factors that must be accounted for when managing these patients. Ultimately until more data is available, the best management decisions are made at the bedside by a dedicated multidisciplinary team knowledgeable on the features of a given CAR T product and its unique side effect profile.

Two commercially available CAR T products are currently on the market, and others will follow. We can expect the number of patients afflicted by CAR T toxicity to rapidly increase in the coming years. It is crucial for intensivists to familiarize themselves with these novel agents as they will play a major role in their institution and expansion into hospitals across the US. 🏥

MEMBER SURVEY — COMING IN JULY

SOCCA wants to hear from you!

We'll be collecting feedback on how SOCCA can better serve its members. Keep on the lookout for the member survey –it's coming out in July and one survey participant will be awarded a free 2019 Annual Meeting registration!

2018 ANNUAL MEETING



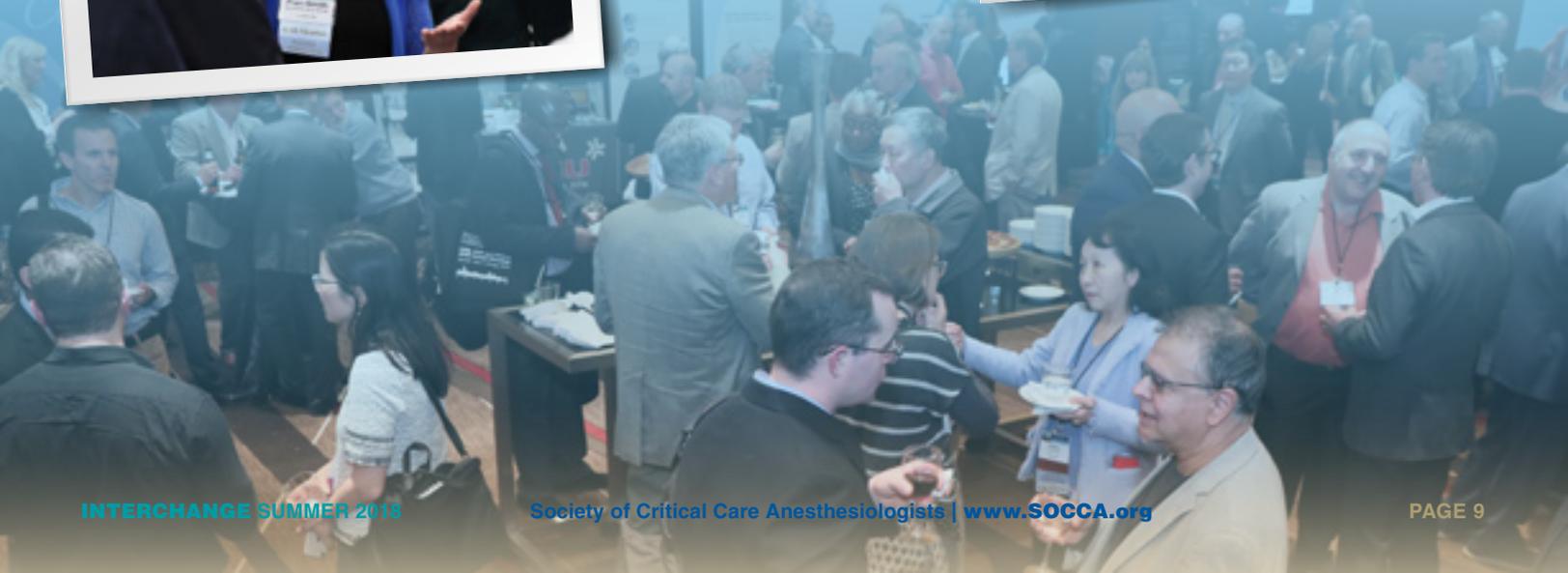
More photos from the SOCCA Annual Meeting here!





More photos from the SOCCA Annual Meeting here!

2018 ANNUAL MEETING



2018 ANNUAL MEETING

On-Demand Session Videos

WELCOME ADDRESS AND INTRODUCTION

Avery Tung, MD, FCCM –
President, Society of Critical Care
Anesthesiologists

Adam S. Evans, MD –
Chair, Committee on Education

[View Video](#)

SOCCA LIFETIME ACHIEVEMENT AWARD PRESENTATION

[View Video](#)

SOCCA YOUNG INVESTIGATOR AWARDS PRESENTATION

Moderator: Daryl J. Kor, MD, MSc

[View Video](#)

BREAKFAST PANEL: EMERGING PRACTICE PARADIGMS IN CRITICAL CARE PRACTICE

Anesthesiologist Intensivist in Private Practice

Todd Kelly, MD

CVICU

Jacob Gutsche, MD

Hospital Administration

Mark Nunnally, MD, FCCM

[View Video](#)

EDUCATION SESSION I: METABOLIC SUPPORT FOR THE POSTOPERATIVE PATIENT IN THE ICU

Moderator: Adam S. Evans, MD

Presenters:

A Call to Action for Anesthesia-Intensivists

Jeffrey I. Mechanick, MD

Feeding the Postoperative Patient- Challenges and Opportunities

Christian Stoppe, MD

Perioperative Glycemic Control

Leila Hosseinian, MD

Targeting the Microbiome in the ICU

Paul E. Wischmeyer, MD, EDIC

[View Video](#)

EDUCATION SESSION II: ENHANCING RECOVERY FROM CRITICAL ILLNESS AND LIFE THEREAFTER

Moderator: Peter Von Homeyer, MD, FASE

Presenters:

Metabolic Decay and Rehabilitation During and Post-ICU

Inigo San Millan, PhD

Early Rehab

Matthias Eikermann, MD, PhD

Post ICU Recovery Clinics

Pratik Pandharipande, MD, MSCI

[View Video](#)

EDUCATION SESSION III: WELLNESS FOR THE ANESTHESIOLOGIST-INTENSIVIST

Moderator: Sheela Pai Cole, MD

Presenters:

Preventing Burnout

Cortessa Russell, MD

Improving Resilience

Sheela Pai Cole, MD

Dealing with Grief

Audrey Shafer, MD

[View Video](#) (This video is audio only.)

EDUCATION SESSION IV: INNOVATIVE USES OF ULTRASOUND IN THE ICU

Moderator: Saijid Shahul, MD, MPH

Respiratory Failure

Michael Lanspa, MD, MS

Optic US for ICP Monitoring

Venkatakrishna Rajajee, MBBS

Nutrition

Paul E. Wischmeyer, MD, EDIC

RV Strain

Saijid Shahul, MD, MPH

[View Video](#)

About SOCCA



The Society of Critical Care Anesthesiologists (SOCCA) is the sole organization dedicated to the continuation of the role of anesthesiologists in providing critical care services. You do not have to be an intensivist to benefit from membership in this organization. Critical care practices are utilized in the post anesthesia care unit, intermediate care unit, emergency department/trauma center as well as the intensive care unit. Practitioners with clinical case loads that are dominated by cardiac, neurosurgical, and transplant procedures may be frequently involved in the daily perioperative care of critically ill patients. Patients in all of these care areas may require aggressive monitoring and state of the art perioperative care. The continued enhancement of critical care services throughout the perioperative period is a founding goal of SOCCA.

ADVOCACY

SOCCA is an educational organization that fosters the role of anesthesiologists as perioperative specialists and provides for continuing education and interchange of ideas

The Society provides representation for the practice of critical care medicine in the ASA House of Delegates

SOCCA provides input to the ASA and Society of Critical Care Medicine on key issues related to their advocacy for patient care and reimbursement

BENEFITS OF MEMBERSHIP

Discounted pricing for the SOCCA Annual Meeting a forum for the specialist with broad-based interests, including respiratory therapy, postoperative cardiac surgical, neurological and transplant management, and trauma care

Discounted membership in the IARS, which includes access to two peer-reviewed journals-Anesthesia & Analgesia and A&A Case Reports, free journal CME, and eligibility to apply for IARS research grants

FREE ICU RESIDENT'S GUIDE

Free quarterly newsletter Interchange, which covers ethically controversial issues, survey of practice patterns, and historical aspects of anesthesiology

MEMBERSHIP LEVELS

Active Member | \$160.00 / year

Active members shall be physicians who should be members of the ASA and have an interest in critical care medicine. Each Active member shall have one vote on any matter on which Active members are entitled to vote by law or that is submitted to a vote of the membership, and shall enjoy all rights and privileges of membership.

Affiliate Member | \$110.00 / year

Affiliate members shall be physicians or scientists who are active in training programs or research relating to critical care medicine, but who do not fulfill the definition of Active member.

Educational Members | \$25.00 / year

Educational members shall be residents or fellows in full-time training in an accredited school of medicine in the United States or abroad.

Medical Student Members | Complimentary Membership

Medical Student members shall be individuals in full-time training in an accredited school of medicine in the United States or abroad.

Retired Members | Complimentary Membership

Retired members shall be individuals who have been Active members of the Society for ten (10) or more years and have completely retired from professional practice.

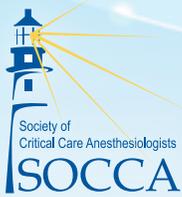
Affiliate, Educational, Medical Students and Retired members shall have all rights and privileges of Active members, except that they may not vote, attend corporate business meetings (including, without limitation, the Annual Business Meeting) except by invitation, or serve as an officer or a director of the Corporation. Such members may serve on committees if requested by the Board of Directors.

MEMBERSHIP PROCESS

SOCCA membership does not require formal sponsorship and can be applied for online.

[Click here to Join.](#)

[Click here to Renew.](#)



SOCCA Information

EMAIL

Meetings: [SOCCAm eeting s@iars.org](mailto:SOCCAm meetings@iars.org)

Membership information: SOCCA@iars.org

VISIT THE SOCCA WEBSITE at:
www.SOCCA.org

MEMBERSHIP

Membership in SOCCA is open to all anesthesiologists who have an interest in critical care medicine; nonanesthesiologist-physicians and scientists who are active in teaching or research relating to critical care medicine; residents and fellows in approved anesthesiology programs; and full-time medical students in an accredited school of medicine.

MEMBERSHIP BENEFITS

Discounted pricing for the SOCCA Annual Meeting, a forum for the specialist with broad-based interests, including respiratory therapy, postoperative cardiac surgical, neurological and transplant management, and trauma care

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Free ICU Residents' Guide

Free quarterly newsletter Interchange, which covers ethically controversial issues, survey of practice patterns, and historical aspects of anesthesiology

Renew or join today at www.SOCCA.org/membership.php

EDITORIAL NOTES

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Fellowship Program Reviews

If you would like to contribute a review for a Fellowship Program at your institution in a future issue of the SOCCA Interchange, please contact: Vivian Abalama, CAE at vabalama@iars.org.

Editorial Policy

The opinions presented are those of the authors only, not of SOCCA. Drug dosages, accuracy and completeness of content are not guaranteed by SOCCA.

CALL FOR ARTICLES



If you have an interesting case report, an idea for a pro-con discussion, a review idea, or an opinion on a recently published article, please submit your proposal/article to Vivian Abalama, CAE, at vabalama@iars.org on or before September 10, 2018. If your article is chosen for the newsletter, we will contact you for editing and formatting. Thank you.

SOCCA Board of Directors

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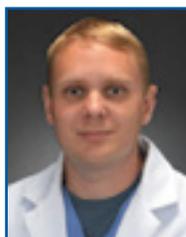
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