SOCIETY OF CRITICAL CARE ANESTHESIOLOGISTS
SOCCA

INTERCHANGE

Society of Critical Care Anesthesiologists Newsletter Volume 33 | Issue 4 | December 2022

PRESIDENT'S MESSAGE

Michael H. Wall, MD, FCCM
President, SOCCA
University of Minnesota
Minneapolis, MN

Colleagues,I hope you all had a happy Thanksgiving and have a happy and healthy holiday season (so far), avoiding COVID, RSV, adenovirus, and Influenza. Good Grief.

The education committee has planned an extraordinary annual meeting which will take place in **Denver, Colorado on April 14, 2023**. On **Saturday April 15th**, there is an impressive lineup of educational events during the IARS, AUA, and SOCCA-aligned meeting day. Most importantly, I hope you plan to attend the SOCCA Women in Critical Care and SOCCA Early Career group meet-up and networking events between **7:00-9:00 PM on Thursday, April 13**. There is also a reception on **Friday, April 14, from 7:30-9:30 PM**. It will be great to see everyone in person again.

The opportunities for membership engagement in SOCCA continue to expand. We now have an Early Career workgroup, a Medical Student, Resident and Fellows workgroup, the Physicians in Practice workgroup, Women in Critical Care workgroup, Diversity Equity and Inclusion workgroup, Critical Care Ultrasound workgroup, and a Research and Medical Education workgroup. These groups are open to all SOCCA members, including medical students, residents, and fellows.

We have also formed a new Clinical Practice Committee chaired by George Williams and vice-chaired by Gozde Demiralp. This new committee consists of several workgroups tasked with increasing collaboration and interactions with other societies and committees. These workgroups are also open to all SOCCA members. They include the Transplant Critical Care workgroup, Mechanical Circulatory Support/ECMO/CTICU workgroups, the Physiologically Difficult Airway task force, the Quality and Safety workgroup, and the Neurocritical Care Workgroup.

We have also started a new Service Chiefs Advisory Council chaired by Craig Jabaley, vice-chaired by Anne Drewry, and Sheida Tabaie as the secretary. This group is also open to all SOCCA members. Still, it will focus on challenges and opportunities for those in critical care leadership positions in both academic and private practice such as academic division directors, medical directors, service line directors, executive medical directors, etc. This will be an enjoyable group for folks to get involved with.

We will spend the calendar year 2023 getting all of these new workgroups and taskforces organized and giving them the time to choose what they would like to focus on.

If you have any other ideas or suggestions on improving the value of SOCCA to our current and future members, please do not hesitate to let me, the Board of Directors or the Committee Chairs know.

See you soon!.

Click here to view or print the SOCCA INTERCHANGE newsletter.

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Committee on Education

As we approach the new year, we look forward to providing educational content to all of our SOCCA members and to the critical care community at large. The annual meeting subcommittee has been busy compiling a fantastic program with an outstanding group of speakers for what will hopefully be our first in person annual meeting in many years. We strive to ensure a meeting that will highlight the recent advances in critical care medicine and are also working with the research committee to bring the latest in cutting edge research to the meeting attendees.

The webinar program that started during the pandemic continues to engage the membership, and we recently concluded the 2022 webinar series with sessions highlighting the management of peripartum cardiomyopathy in the ICU and infections in the postoperative cardiothoracic surgical patient. The subcommittee on webinars has formulated another year of fantastic educational content, and in 2023, we will have a series of six webinars that span topics ranging from investigations into the origins of critical care, discussions around the challenges associated with caring for transplant patients to discussions around the expanding roles of the anesthesia intensivist. If you happened to miss any of our webinars, you may access recordings and earn CME credit on the SOCCA website: SOCCA eLearning CME link.

In September, we had another successful board review course. We had a total of 30 early career faculty members present on board relevant topics, and the course was attended by more than 80 participants. Recordings are available for all SOCCA members on the SOCCA website: SOCCA 2022 Board Review Course link. Whether you are a trainee preparing for exams or a seasoned faculty member, everyone can benefit from this high yield refresher.

Finally, we want to express our gratitude to all our speakers and moderators who have contributed to the SOCCA annual meeting, webinar series and board review course. We are so thankful for the dedication and hard work of all the members of the education committee and the outstanding leadership of each of the education subcommittees. Thank you for all of your ingenuity and hard work that has culminated in our superb offerings!

We look forward to an exciting assortment of educational offerings next year and wish you all a very happy and prosperous 2023!

Allison Dalton, MD
Chair, SOCCA Committee on Education
University of Chicago
Chicago, IL

Kunal Karamchandani, MD, FCCM
Vice-Chair, SOCCA Committee on Education
UT Southwestern Medical Center
Dallas, TX

SOCCA Call for Volunteers is Open!

SOCCA COMMITTEES

The strength of SOCCA is the wealth of talent and energy of its members. One of the ways to serve the Society is through volunteer activities.

For SOCCA Committees, this year, we will be looking for committee volunteers for our communication, education, membership, and research, as well as the new clinical practice committee. To view committee descriptions and submit an application, visit SOCCA's Volunteer page.

Please review the Volunteer Leadership Selection Criteria prior to submitting an application.

You may submit an application for a SOCCA Committee until **December 31, 2022**.

If you have questions about any of the opportunities available within SOCCA, please contact SOCCA Society Director Vivian Abalama, IOM, CAE who will ensure you are in touch with the appropriate SOCCA resource.

ANNOUNCEMENT

Introducing the SOCCA Service Chiefs' Advisory Council

As a professional organization dedicated to the support and development of anesthesiologists who care for critically ill patients, SOCCA's aims include fostering community and advocacy. SOCCA has therefore organized and promoted efforts to better understand the national anesthesiology critical care practice landscape. Two such efforts—respective surveys of the SOCCA and American Society of Anesthesiologists membership—have yielded valuable insights[1,2]. However, our conceptualization of the national landscape remains incomplete. Organizational membership surveys, by definition, reach only members of those organizations and reflect only the responses of those who choose to participate, which serves to introduce bias. For example, compensation as self-reported in such surveys will be naturally weighted to reflect the prevailing standards at the institutions with the most respondents, and those standards themselves will be highly influenced by local or regional market forces and institutional culture.

Additionally, as an organization, SOCCA has a vested interest in understanding national clinical, operational, and administrative challenges informed by those who are tackling such problems. For SOCCA and other national professional organizations, committees composed of member volunteers form the backbone of such efforts but risk losing valuable perspectives from those without an organizational affiliation or those otherwise without a seat at the table owing to myriad factors. Committees may therefore not offer truly representative viewpoints.

In response to these challenges, SOCCA has aimed to create a nationally inclusive, organizationally representative body that we have termed the Service Chiefs' Advisory Council. Patterned off the anesthesiology critical care medicine fellowship Program Directors Advisory Council (PDAC), the approach was to identify the one or two individuals at each institution with the broadest operational or administrative purview over their institutional anesthesiology critical care practice. Depending on the size and scope of the local practice, this might be a critical care organization (e.g., center or department) leader, a departmental vice chair for critical care, a division head, a unit medical director, or a senior physician in smaller practices. In contrast to the PDAC, there is no centralized repository of individuals in these roles (e.g., akin to a program director listing maintained by the ACGME), so one had to be created.

The aforementioned survey data suggests that the majority of anesthesiologists practicing critical care are in academic settings. Additionally, the ACGME mandates that anesthesiology trainees complete four months of critical care training with at least two of those including exposure to faculty anesthesiologists experienced in critical care. As such, we began by assuming that each ACGME-accredited anesthesiology training program would have a non-zero critical care practice. Identifying community anesthesiology critical care practices and ensuring their representation on the Council remains an important but incomplete next step.

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Craig S. Jabaley, MD
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Anne Drewry, MD
Vice Chair, SOCCA SCAC
Washington University
St. Louis, MO

Sheida Tabaie, MD
Secretary, SOCCA SCAC
Weill Cornell Medicine
New York, NY

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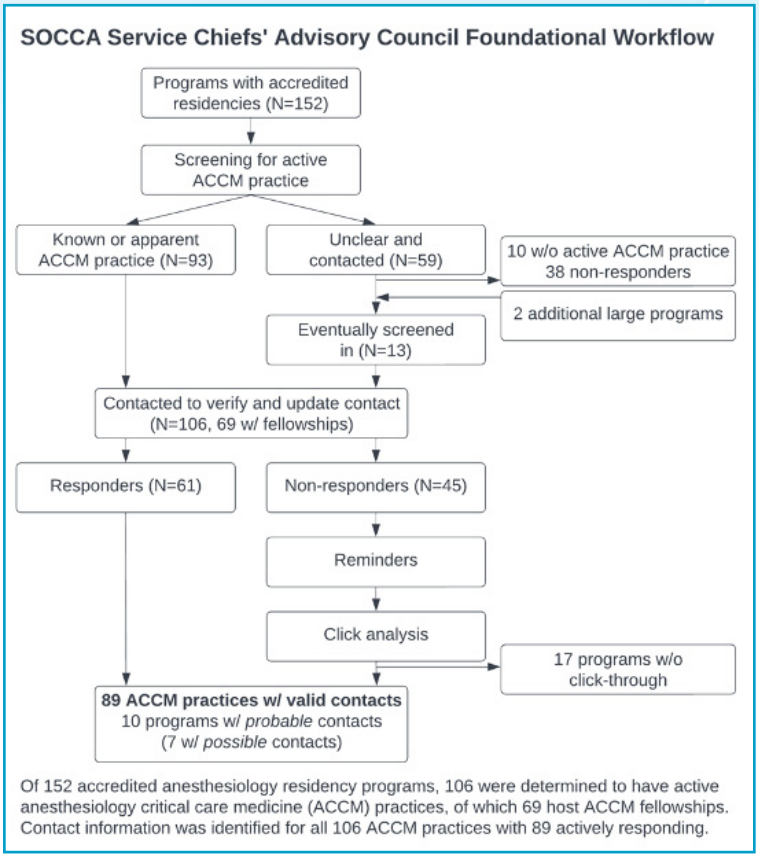
Figure 1

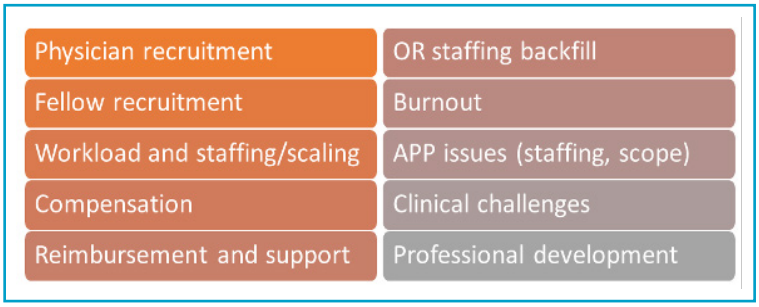


Of 152 accredited anesthesiology residency programs, 106 were determined to have active anesthesiology critical care medicine (ACCM) practices, of which 69 host ACCM fellowships. Contact information was identified for all 106 ACCM practices with 89 actively responding.

This effort ultimately yielded contact information for 106 active anesthesiology critical care practices. Each institution was asked to identify a primary contact, a secondary contact, and (where applicable) an administrative contact to aid with maintenance of the directory over time. In an order to promote maximal representation, the Council's constituents need not be active SOCCA members. SOCCA will continue to provide logistical support, and Council members interested in leadership positions will need to be active members per SOCCA's bylaws.

The broad aims of the Council are to improve SOCCA's line of sight into operational challenges, clinical challenges, organizational structures, and physician recruitment at the institutional level. More broadly, we aim to foster awareness about impacts of the national practice landscape, regulatory changes, reimbursement, and competition on anesthesiology critical care medicine. For the Council's constituency, aims include facilitating collaboration, networking, and mutual assistance while also identifying collective priorities and a leadership structure. To that end, Dr. Anne Drewry was recently named as the Council's Vice Chair, and Dr. Sheida Tabaie will serve as Secretary. Thematic analysis of a start-up survey yielded multiple shared interests and priorities, which will help to inform the Council's first collective work product.

Figure 2



Looking ahead, the Council also needs ongoing structural development. While representation from 106 active programs is an inspiring start, there are likely more nationally that are not yet represented, particularly in the community. If you are in such a practice or know of a sizable community practice locally with anesthesiology critical care leadership, please do reach out with contact information to help us ensure that the Council develops into a truly inclusive body.

REFERENCES

1. Shaefi S, Pannu A, Mueller AL, Flynn B, Evans A, Jabaley CS, et al. Nationwide clinical practice patterns of anesthesiology critical care physicians-a survey to members of the Society Of Critical Care Anesthesiologists. Anesth Analg. 2022:Epub ahead of print. PMID: 35950751.

2. Siddiqui S, Bartels K, Schaefer MS, Novack L, Sreedharan R, Ben-Jacob TK, et al Critical care medicine practice: a pilot survey of us anesthesia critical care medicine-trained physicians. Anesth Analg. 2021;132(3):761-769. PMID: 32665465.

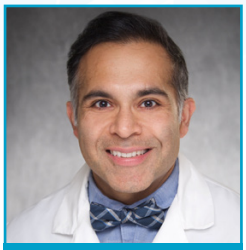
ANNOUNCEMENT

New Workgroup to be Established:

Mechanical Circulatory Support (MCS) / Extra Corporeal Membrane Oxygenation (ECMO) / Cardio Thoracic ICU (CTICU) Workgroup

Despite evolution in many areas of critical care medicine, refractory cardiopulmonary failure continues to have high morbidity and mortality. In patients with severe cardiopulmonary failure refractory to medical therapy, mechanical circulatory support (MCS) is more commonly being utilized for both short and long-term support. MCS for circulatory shock includes intraaortic balloon pump (IABP), minimally invasive percutaneous ventricular assist devices (pVADs, e.g., Impella), external and durable LVADs, and venoarterial extracorporeal membrane oxygenation (ECMO); venovenous ECMO is utilized for isolated pulmonary failure. MCS can salvage patients with severe disease to allow time for recovery, facilitate corrective procedures, or bridge to transplantation. The evolution of these therapies underscores the constantly evolving nature of critical care medicine and the importance of innovation in improving patient outcomes.

In the light of these developments and as MCS becomes increasingly prevalent, SOCCA is in the process of establishing a new workgroup called Mechanical Circulatory Support (MCS) / Extra Corporeal Membrane Oxygenation (ECMO) / Cardio Thoracic ICU (CTICU).



Lovkesh Arora, MD
Chair, CTICU/ECMO Workgroup
University of Iowa Hospitals and Clinics
Iowa City, IA

Lauren Sutherland, MD
Vice Chair, CTICU/ECMO Workgroup
Columbia University Irving Medical Center
New York, NY

OBJECTIVES OF THIS GROUP INCLUDE:

- Development of educational materials for trainees, anesthesiologists, and intensivists on device physiology, perioperative management, and complications after device implantation
- Organizing educational forums including simulation training
- Collaborating with ASA, STS, ELSO and SCCM to provide updates to the management guidelines for MCS

We cordially invite members who have special interest in MCS to join this workgroup and to help SOCCA with this endeavor.

Our first meeting will be January 19, 2023, at 5PM CST. Please register in advance for this meet-up: SOCCA CTICU/ECMO Meetup Link.

SOCCA Calendar

Mark your calendar!
Visit SOCCA's new calendar page!

MEMBER SPOTLIGHT

A Conversation with... Dr. Meghan Lane-Fall

This article brings to your attention Dr. Meghan Lane-Fall, an extraordinarily achieved female physician-scientist who continues to excel in many aspects of Anesthesiology and Critical Care. I invited Dr. Lane-Fall to be the center of this story because I am impressed and inspired by her remarkable achievements and her capacity to remain approachable.

Dr. Lane-Fall graduated magna cum laude at the University of California, Berkeley, and received an AB degree in 2001. She received an MD degree at Yale University School of Medicine in 2006. After completing the Anesthesiology residency and the Critical Care fellowship at the University of Pennsylvania in 2011, Dr. Lane-Fall dedicated more time to research education, obtaining an MS in Health Policy Research at Perelman School of Medicine, the University of Pennsylvania, in 2013. I was fortunate to have an interview with Dr. Lane-Fall and I will share with you her answers.

Dr. Meghan Lane-Fall, MD, MHSP, FCCP
University of Pennsylvania, Perelman School of Medicine
Philadelphia, PA

Dr. Lane-Fall's vast research interests revolve around patient safety and include strategies to support safe and high-quality care of hospitalized patients, implementing effective evidence-based practice in acute care, learning from human factors, and anesthesia handoff challenges.

She is a prolific scientific writer and published more than 100 manuscripts, out of which 73 are first, senior, or sole-author publications.

Dr. Lane-Fall received numerous grants. Two important ones are "Handoffs and Transitions in Critical Care – Understanding Scalability" RO1HL National Institute of Health; and "Identifying Facilitators and Barriers of Diversity and Representativeness in RCTs," project #1 in the more significant center grant "Behavioral Economics to Transform Trial Enrollment Representativeness (BETTER) Center," American Heart Association.

She has numerous editorial and grant reviewer positions, including Associate Editor for *Anesthesia & Analgesia* and *Anesthesiology* journals.

Monica Lupei: When during your Anesthesiology training did you decide to specialize in Critical Care Medicine?

Meghan Lane-Fall*: I was one of those Medical Students who loved everything about medicine. I fell in love with Anesthesiology for all the reasons many of us do. Still, I thought I would miss the diagnostic pieces of medicine and the ability to lead a team and follow patients throughout their course. I came into residency with the idea that I would be interested in Critical Care, which seems like a right fit for me; I get to talk with lots of people, I interact with patients and families, I get to work with patients at times of their lives that are deeply critical. Critical Care is really impactful work.*

ML: Is it necessary to have a research focus as a physician scientist or is a broader research interest also possible?

ML-F*: I typically tell people it's instructive to think about the dichotomy of being a principal investigator versus a collaborator. If you want to be a principal investigator, you get to decide what the vision, the mission, and the direction is; you get to ask the questions, but you have all the responsibilities of a small business leader, which means you need to secure the funding, you need to staff the team, you need to lead the team and make sure everyone is doing the work, and you're responsible for sharing the output with the world, writing the manuscripts or making sure they get*

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Monica I. Lupei, MD
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Minneapolis, MN

written, disseminating all the information. It's a tremendously rewarding enterprise, but it takes a lot of time and brings a lot of responsibility. If you are a collaborator, you don't have the same responsibility, and you can work on various fields such as cardiac research, urology, peds, and many different things. If you're broadly interested in research, being a collaborator can be a rewarding pathway to participating in research. The tradeoff is that you don't necessarily get to drive where it's going.

ML: What is the main advice you would give to an early career physician-scientist?

***ML-F**: The main advice for people is to do some honest self-reflection about who they are, what they want, and where they want their impact on the world, health, or critical care to be. If you know that, you might have more insight into what types of questions you would want to ask. Once you know what the questions are, you know what the team should look like and what skills you need to execute the projects. Once you have those questions and those skills, you can think of who would fund this and how you can make a compelling proposal to get this funded. It all stems from that core question of what you want to do.*

Dr. Lane-Fall serves on various national and international professional and scientific committees and chairs several such committees. She also has extensive leadership experience proving she made a difference and invested in growing our Anesthesiology Critical Care specialty. Some of her current leadership positions include Director of Research and Scholarship at Penn Center for Healthcare Improvement and Patient Safety, Director of Acute Care Implementation Research at Penn Implementation Science Center at the Leonard Davis Institute of Health Economics, University of Pennsylvania, and Vice President, Anesthesia Patient Safety Foundation. Among her numerous awards and honors, Dr. Lane-Fall received the Patient Safety Advocate Award from the Hospital of the University of Pennsylvania in 2011. She was the University of Pennsylvania Health System Overall Winner for the Quality and Patient Safety Award, Handoffs and Transitions in Critical Care, in 2016.

ML: Can a physician-scientist advocate for patients?

***ML-F**: Yes. One example is the representation of various groups in research; as scientists, we can look for steps to improve the representation of a diverse group of patients in our research, so the science that we create reflects all the people we care for. The second example would be thinking about implementation science as a deeply engaging stakeholder enterprise; some implementation science teams bring patients and patients' advocates into the team as co-investigators, so their perspectives are incorporated into the work that we do.*

Dr. Lane-Fall earned considerable academic achievements and appointments. She is the Co-director of the Penn Center for Perioperative Outcomes Research and Transformation, Co-Medical Director of the Trauma Surgery Intensive Care Unit at Penn Presbyterian Medical Center, Founder, and Co-Medical Director of the COVID-19 Perioperative ICU, Hospital of the University of Pennsylvania, Associate Professor of Anesthesiology and Critical Care at the Perelman School of Medicine, University of Pennsylvania, and Associate Professor of Epidemiology at the Perelman School of Medicine, Vice Chair of Inclusion, Diversity, and Equity and member of Anesthesia Leadership Team, Department of Anesthesiology and Critical Care, University of Pennsylvania, to name just a few.

ML: What are the essential aspects necessary to promote inclusion, diversity, and equity at a department, institution, or professional society level?

***ML-F**: When we think about inclusion, diversity, and equity, we sometimes lump them altogether. In general, we want to provide equitable care, we want our patients to have superior outcomes irrespective of their background and identity, and we, as clinicians, want to be respected and want to work in a place where we are valued and part of the team. I believe deeply that inclusion within healthcare teams makes us better clinicians and better scientists. It makes the care safer because we can see things from different perspectives and see some of the vulnerabilities in the system.*

In terms of how you get there, institutions, in general, need to engage in strategic planning that is focused on inclusion, diversity, and equity.

In 2014, the Association of American Medical Colleges (AAMC) published a guide to strategic planning for diversity and inclusion. It's a great resource and freely downloadable. As part of that strategic planning, you do an environmental scan and figure out where your institution stands. Suppose you're starting in a place where you have to convince people about the importance of diversity and inclusion. In that case, the initiatives you are going to undertake will look very different than if you are in an organization where there is work with microaggression, and anti-racism, providing language concordance services for people who have limited English

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proficiency. After figuring out where to start, you can have a conversation with people in your organization about what the goals are and what to prioritize in the next 3 to 5 years. It does take a systematic approach that takes resources and time. What I would encourage readers to think about is that this work should not be purely performative. It is important to give this topic a lot of time and thought.

ML: What do we need to do to increase the awareness about inclusion, diversity, and equity in our Anesthesiology Critical Care specialty?

***ML-F**: We are not where we ought to be concerning inclusion, diversity, and equity in our Anesthesiology Critical Care, and there are a few indicators of that. When we look at the diversity of the specialty overall, it does not reflect the diversity of the population we serve, the diversity of the medical trainees. Our fellow classes are increasingly diverse, but it's moving very slowly. We have some work to do with the trainees', the intensivists', and especially the leadership composition. We can extrapolate a bit from other disciplines that there is probably a link between our teams' diversity and the care we offer.*

I am enthusiastic about structural interventions to get us closer to where we want to get. If you think about how we select fellows to interview, for instance, how much weight we put on their in-training exams and board scores. These exam scores predict future exam performance that doesn't necessarily translate into the care provided. When we select clinicians at the fellowship stage, I hope we can take a more holistic view of the candidates so we can look at the full range of folks interested in critical care and ultimately diversify our specialty. Similarly, when we think about faculty candidates, how much emphasis do we put on where they trained and their "academic pedigree" as compared to demonstrated excellence in clinical care? When we look for leaders, are we transparent about position openings? I can think about institutions where a division chief or program director position opens, and someone gets put in a position without a call for applications, without considering all the people who might be eligible. We probably shouldn't be doing that anymore. I think there are some structural interventions that we can take that would support those values of inclusion, diversity, and equity in Anesthesiology Critical Care.

Application Submission Deadline: December 31, 2022

SOCIETY OF CRITICAL CARE ANESTHESIOLOGISTS INNOVATORS AWARD

Created through a generous anonymous donation, we intend to award one deserving recipient $10,000 for a true innovation, that is, something that introduces a new device or technique, changes clinical practice, or could improve clinical outcomes. A full description of the award is available here: About SOCCA Innovators Award.

Research Spotlight

David J. Douin, MD
University of Colorado School of Medicine
Aurora, CO

I am an Assistant Professor of Anesthesiology at the University of Colorado School of Medicine in Aurora, Colorado, where I attend in the operating rooms and the Surgical Trauma ICU (STICU). Throughout my early career as a physician-scientist, I have been dedicated to studying critically ill patients, trauma, and multi-organ dysfunction.

A mutual interest in hyperoxia with my primary mentor, Dr. Adit Ginde, was the catalyst for a relationship that has resulted in multiple studies on the pathologic effects of hyperoxia in critically ill patients. Dr. Ginde is the overall PI for (and I am an active contributor to) the ongoing SAVE-O2 trials (NCT04534959 and NCT04534972), which focus on the relationship between oxygenation targets and clinical outcomes in critically injured trauma and burn patients respectively.

One silver lining of the COVID-19 pandemic was the abundance of new research opportunities for anesthesiologists and intensivists. I was lucky to partner with the Influenza Vaccine Effectiveness in the Critically Ill (IVY) network, a national consortium of researchers who quickly pivoted to the study of COVID-19. Through this relationship, we have published extensively on ICU bed utilization during the initial surge, COVID vaccine efficacy at various stages of the pandemic, and the ability of monoclonal antibodies and antiviral treatments to mitigate severe disease among hospitalized patients.

My recent work has focused on trauma-induced coagulopathy and the intersection between endothelial glycocalyx integrity and trauma resuscitation. Specifically, our team is investigating whether personalized resuscitation can mitigate the multi-organ dysfunction which is common in severely injured patients.

My involvement in SOCCA dates to 2018. Thank you to the leaders of SOCCA and the research committee for asking me to participate in this edition of *SOCCA Interchange.*

ABOUT THE AUTHOR: I completed medical school at Tufts University School of Medicine in 2014, anesthesiology residency in 2018, and critical care fellowship in 2019, both at the University of Colorado School of Medicine. My work is funded by grants from the National Institutes of Health (NIH) and the Department of Defense (DOD). My passions include family, running, hiking, skiing, and trying new restaurants. I sing poorly, but that doesn't stop me—especially during long car rides to the mountains.

Contact Dr. Douin via email at david.douin@cuanschutz.edu, or follow him on Twitter @joshdouin.

SOCCA EARLY CAREER INTENSIVISTS

The SOCCA Early Career Intensivists working group provides new members and members who are early in their careers with the resources needed to ease the transition from trainee to practicing intensivist.

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WOMEN IN CRITICAL CARE
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Women in Critical Care Update

Shahla Siddiqui, MD, MSc, FCCM
Co-Chair, SOCCA Women in Critical Care Working Group
Beth Israel Deaconess Medical Center
Harvard Medical School
Boston, MA

We hope you are well and have seen the new uploads on our Women in Critical Care website (SOCCA) and our column in the *SOCCA Interchange*. We are adding more content and intend to bring new Webinars, Fireside Chats, and—hopefully—some more creative content designed for the busy woman in CCM.

1. We wanted to invite more engagement from the membership. Please join our **working group** and feel free to give us opinions on how to improve the section.

2. We have launched a **white paper**—in this issue of *SOCCA Interchange* and on our website—that (with your input) has been developed by WICC. It will serve as a reference for organizations and societies on recommendations to advocate for women intensivists.

3. We are hoping to program podcasts between women intensivists on conversations that are important around work and life in academic medicine.

4. We are also hoping to help WICC members submit panels, proposals, and abstracts for upcoming scientific meetings. If anyone is interested in being part of a panel, please send in your name and area(s) of expertise / interest prior to the due dates.

5. Spread the word to improve membership amongst women in CCM!

6. We would like to provide informal advice—including CV advice—for professional / academia related matters. We do not claim to be experts in any way, but sometimes simply having someone hear you out can help.

7. Please send in any short write ups for the WICC section of SOCCA Interchange / Drip on any topic. We are always looking for great content!

Our last **Fireside Chat** was on December 8 and featured Dr. Natalia Ivascu Girardi on—a hot topic—"Promotions and Women in CCM." A recording of it (along with previous Fireside Chats) is now available on SOCCA Women in Critical Care.

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WOMEN IN CRITICAL CARE: WHITE PAPER

Suggestions to Organizations/Societies for Female Representation in Critical Care

***Disclaimer**: This is a work product of Women in Critical Care and does not represent the views of the Society of Critical Care Anesthesiologists*

Background: Despite the increasing percentage of female intensivists and their multifaceted involvement in healthcare over the last decades, to date, their representation in physician workforce, academic positions and leadership roles in critical care remains disproportionately low.

Similar to their male counterparts, female intensivists dedicate themselves to long-term learning, rigorous training, and high-intensity work and are able to gather equal qualifications and experiences. However, it has become globally recognized that this effort does not necessarily translate to equal career opportunities across all levels of the professional ladder, or to comparable academic or professional metrics, including academic rank, leadership positions, publications, funding, and other scholarly ventures. As compared to their male counterparts, women intensivists are paid less, and many have experienced harassment at work. (AAMC 2022)

There are many striking examples of this gender imbalance in critical care. This bias also affects likelihood of research funding, as a Swedish study found that women needed to have 2.5 times the publications to have the same peer-review score for submitted research grants. Literature also shows a dearth of first and senior authorship from women published in contemporary high and medium impact critical care journals. This gender imbalance disrupts individual professional growth, but also has a negative impact on working dynamics, efficiency and productivity, motivation and confidence, mental health, and quality of life.

Deciphering the underlying causes of this phenomenon is challenging, but there are likely contributing factors. Women mostly confront greater and more time-consuming challenges with regards to childbearing and family responsibilities that are compounded by sociocultural expectations and stereotypes. Furthermore, studies done in other related fields point to working environments being inhospitable due to unequal payment, unsatisfactory working conditions, work-related stress from biased perceptions, and unfavorable policies for women. Lastly, networking seems to also remain challenging for women.

As a society, we definitely are in a better place than we used to be. Awareness about gender equality has been raised but gender equity has still to be reached. The critical care field is not different. Women in Critical Care strongly believe in meritocracy. However, in order to achieve meritocracy and fair treatment, regardless of gender, we have to establish equal “enablers” for both male and female intensivists.

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Recruitment, rewards, promotions, leadership roles and participation in committees and scientific events must be advocated for those who deserve them, those who have demonstrated the scientific merits and abilities, regardless of gender. We, as women, do not want to be chosen just because we are women. We want to be chosen for our work, our outcomes, our vision, our ethos. In order to reach this state, we need a cultural change at an individual, institutional and societal level. The leading societies and organizations in our field can play a critical role towards that transformation.

To reach that goal, WICC recommends the following suggestions which professional societies of intensive care and organizations can espouse to empower more women to enter and thrive in CCM:

Considerations for Professional Societies

- Review of women's current and historical representation in leadership to inform future policies
- Consider the establishment of CME programs to highlight unconscious bias and harassment, especially among recruitment/ program directors, academic promoters, event organizers
- Comprehensive review of policies and practices to identify and extinguish contributors to imbalance in operations and leadership in committees, chair sessions, panels, editorial boards, lectures, and workshops

Considerations for Organizations

- Ensure that recruitment, rewards, and promotions are designed in ways that minimize any potential gender bias
- Include women and URMs (underrepresented minorities) in selection committees
- Develop expertise, and sponsorship, mentorship and coaching around women in academics
- Encourage women to apply for potential leadership positions and work with them to make it possible to lead whilst fulfilling other roles at home and in practice, including the possibility of flexible scheduling
- In-depth review of existing policies and advocacy for practices that promote the concept of shared parenthood and family care roles (e.g., mandatory paternity leave)
- Develop and endorse policy statements for issues affecting women in CCM (e.g. lactation, infertility, pay negotiations, psychological, sexual and physical safety at work)

Major professional societies and organizations have the obligation to initiate and sustain this cultural change by implementing strategies that support and enhance gender equality in critical care. WICC invites members of SOCCA to opine and add to these suggestions. Understanding and recognizing gender diversity challenges and carrying on the momentum started within the past few years within SOCCA and outside it, will enable a positive environment for more women to enter and remain within ACCM.

SOCIETY OF CRITICAL CARE ANESTHESIOLOGISTS
SOCCA
WOMEN IN CRITICAL CARE
QUALITY + COMPASSION + BENEVOLENCE

2022 Post-Women in Medicine Month

SURVEY RESULTS

During the summer of 2022, SOCCA asked its members questions about being a female intensivist. These were their answers.

Being a Woman in Critical Care Means...

- Being a leader and a mentor.
- First and foremost, I'm a doctor who specializes in caring for critically ill patients. I'm also a woman and an under-represented minority hoping to open doors and inspire other women and minorities to follow their dreams and fully live their potential.
- An interest in not only the medicine but also the family and social structures surrounding a particular patient, impacting his or her illness journey.
- Being better at this job. Working in and leading the care in an ICU has so many nuances, and I think being a woman gives me an advantage to succeed. By my nature I take care of people...the patients, their families, the ICU team, the nurses. I can multitask. I can make quick decisions. I can be gentle, but I can be firm. Being a woman is why I'm amazing at this job.
- Being superwoman!
- Being a part of a minority physician population — small but powerful!
- Being a woman in critical care means being the best I can be and aspiring to show up with my whole self every time I clinically practice. It is important for trainees, patients, family members, and other colleagues to see a strong, confident, thoughtful, and insightful critical care practitioner and leader who also happens to be a woman.
- Caring & communicating with patients and families.

Greatest Satisfaction in Critical Care...

- Patient and family centered clinical care drives me: every single day.
- Being able to help a patient and their family through some of the toughest times in their lives.
- Taking care of my patients and their families during extremely stressful illnesses. Supporting my team so they can continue to make a difference in patients' lives.
- Helping families be at peace with the death experience their loved ones so often go through in the ICU.
- Working as a team to make patients better. When you are able to work together to figure out the hemodynamics, make a diagnosis and then improve/save a patient. That is the best.
- Being able to save a life and share a family's grief.
- Taking care of my patients.
- Connecting deeply with families as they are navigating difficult decision-making and the challenges of having a critically ill loved one and teaching trainees to do the same.
- Exciting, quick thinking and actions, fast pace.

Greatest Challenge as a Woman in Critical Care...

- Remembering that my insight and knowledge is as valuable as that of colleagues.
- Balancing the hours of a critical care career with the needs of my small children, particularly relating to breastfeeding and pumping time.
- It can be emotionally draining. I have a high level of empathy and a desire to take care of everyone in the unit, not just the patient. The days/weeks are exhausting physically, mentally and emotionally. And occasionally you have another physician who still treats you differently because you are a woman...
- Proving myself constantly.
- Getting male surgeons to listen to me.
- It is still not uncommon for family members of critically ill patients to unconsciously (and sometimes consciously) presume that, because of my gender, I am not the attending intensivist and to show more deference to a male in the room, even though he may be junior to me.
- Not being listened to because of my gender. Challenged by nurses on daily basis. It's never been easy to me as a female physician with an accent.

Improvements For Women Since Entering Medicine...

- More appreciation for the different roles women play at work and home.
- More conversation about gender equity.
- I was the only woman on my ICU team for 8 years. We now have 6 women on a team of 20!
- There is a much greater acceptance of part time work and more flexible schedules, to the benefit of both men and women, particularly parents.
- There are more women everywhere. The blatant sexism that occurred when I started clinicals in 2002 has greatly improved.
- Being treated as an entity and gaining trust and respect.
- More opportunities for advancement.
- Although there is still a paucity of women in critical care leadership in both academic professional societies and hospital and departmental structures, there are incrementally more women in leadership now than there were two decades ago. Moreover, the 2016 uproar over no women amongst the authors for the 2016 Sepsis Definitions Task Force also brought much needed attention to the all-too-frequent negation of inclusion of women in key critical care panels, speaking bureaus, and leadership...although there is still much room for improvement moving forward.
- Not sure. We still have pay gap, micro-aggression toward minorities female physicians.

What Has Clearly Changed for Women Since You Entered Medicine?

- Women giving each other more grace and support. Diminishing the culture of 'in my day'.
- At the departmental and institutional level, women are more represented in positions of leadership at my institution.
- ACGME policy on maternity leave will help trainees a great deal.
- Women can do anything in medicine and that much is clear now. With slowly improving support with maternity leave and unique job and staffing models, there isn't much holding women back from choosing any field.
- More allowances for female needs.
- Perhaps patients are now more accustomed to seeing a female physician.
- I am grateful that there is more advocacy for and amongst women to rise into leadership and to be more prominent in different specialties, particularly those that traditionally have lacked women. It is now more supported that women celebrate each other and focus on potentiating each other into leadership and prominence in many specialties.

FEATURED ARTICLE

COVID-19: The Rise of the Machines

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Artificial intelligence (AI) is a revolutionary inclusion to current medical practice, particularly in the field of Critical Care medicine. The actualization of AI is empowered with the intellectual acumen to analyze and generate vastly complex data, as well as integrate from experience, based on recognition of formed patterns. This is achieved through machine learning and perception, compounded by natural language processing, and automated simple repetitive tasks or exposure. These are attributes or skills born from the innovative integration of human intelligence and computer systems. Thus, allowing for a multitude of decision-making and task-executing functions. Critical Care widely encompasses an intricate and detail-oriented multidisciplinary approach in diagnosing diseases and analyzing their progression with simultaneous treatment interventions. While the established conventional approach to medical management has proven to be undoubtedly reliable, it is also unremarkably challenging and time-consuming to medical professionals in the face of disease progression and overwhelming workload. The field of Critical Care establishes multiple landscapes and opportunities in which AI is a transformative asset to researchers and Critical Care physicians alike.

As standards of medical care have been continually refined, the clinical outcomes of critically ill patients have improved exponentially. However, the traditional Critical Care approach still maintains limitations in terms of comprehending the complexities of acuity, dealing with significant individual heterogeneity, forecasting deterioration, and delivering early treatment techniques prior to decompensation (Yoon et al., 2022). Artificial intelligence, along with its conceptual role in Critical Care, has the capacity to, not only guide clinical decisions, but to accurately diagnose detected diseases and evaluate their predicted outcomes. While the concept of merging such systems in improving patient care is in emergence, several studies on its application have been published, further examining its validity, with the viewpoint to allow for rapid intervention for such patients. This early assisted detection is crucial to the management of critically ill patients in the ICU, as deterioration of their clinical status can either be insidious, rapid, or even a combination of both. Through pattern recognition from complex data, AI can, not only detect diseases but recognize the many phenotypes they can manifest as well. Not to mention, the use of electronic health records conjugated with AI to predict mortality of certain diseases. An example highlighted in the 2022 study by Yoon et al., shows that excess alveolar fluid cannot be presumed to be the cause of pulmonary infiltrates, as the underlying etiology could be cardiac, infectious, or even trauma related. However, timely management tends to be delayed, in the face of limited clinical context and ongoing investigations. The role of AI in this clinical scenario can assist in prompt focused diagnosis, through advanced text and image processing capabilities. This collaborative approach toward patient care, allows for medical doctors to manage patients more efficiently in the Critical Care unit.

Another aspect of the use of technology in Critical Care is Telehealth and Telemedicine. Telehealth refers to the delivery of healthcare service via remote use of telecommunications technology. Telemedicine, a subset of telehealth, is the remote diagnosis and treatment of patients by means of telecommunications technology. It aims to permit real-time, two-way interaction between physician

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and patient from a distance. With its inception dating as far back as the Ancient Egyptian era, this prominent concept was first employed in scrolls disseminated to apprise others of various health-related events such as diseases (Kichloo et al., 2022). Along with its distinguished past, telemedicine has made profound strides in modern-day medicine as well, with its most recent evolution occurring amidst the COVID-19 pandemic. Implemented extensively in what is known as 'forward triage,' telehealth and telemedicine have accommodated the screening of patients while in a state of quarantine, both containing the spread of a prospective virus, and preserving the health of the physicians and other health-care providers. Such instances can also be conducted via remote monitoring, which is devoid of real-time interaction. Supplementary to remote monitoring and interactive patient care, telemedicine also provides the opportunity to 'store-and-forward.' This is the process of collecting clinical information and sending it to another location for evaluation. Demographic data, medical history, documents such as lab reports, images, video, and/or sound files are all common types of information utilizing this process. Furthermore, the principle of telemedicine is intimately intertwined with that of an AI relationship that has also come into fruition amidst the COVID-19 pandemic. In addition to remote screening, the collusion of telehealth and AI has paved the path for improved protein structure prediction, therapy monitoring, awareness, social control, and digital health (El-Sherif et al., 2022). Lastly, AI in telemedicine offers expanded healthcare access, less exposure to diseased patients, and the preservation of supplies.

Intensive care unit telemedicine (Tele-ICU) refers to a technology-based apparatus that employs artificial intelligence to deliver effective Critical Care from remote locations, in response to addressing the increasing patient load and shortage of intensivists. Combined with highly qualified and experienced Critical Care staff, tele-ICU provides remarkable improvements to patient survival and quality care. Risk prediction algorithms, smart alarm systems and machine learning tools augment conventional coverage and can potentially improve the quality of care as Critical Care physicians are able to access patient data, off-site and efficiently implement clinical decisions through the tele-ICU (Khurrum et al., 2021). Despite said advantages, acceptance by healthcare professionals, as well as markedly expensive costs to maintain and operate systems have both proven to be limiting factors to the seamless integration of Tele-ICU into global healthcare.

The COVID-19 pandemic created a perilous environment for the healthcare sector, affecting patients from the general population as well as medical professionals and available resources. Hence, it motivated the undeniable need for the delivery of digital medical services in the form of diagnostic, therapeutic, and prognostic models. This provided a unique opportunity for further integration and advancement of AI use in Critical Care management. The burden for Critical Care services has significantly increased compared to patients requiring ICU admissions and mechanical ventilation before the pandemic (Jansson et al., 2020). This inevitably propelled the extensive revision of the quality and extent of health care readily offered, allowing for the inculcation of AI into practice. AI assisted diagnostic interventions for a variety of clinical presentations has been integrated to facilitate COVID-19 detection through radiological and biochemical techniques,

combined with advanced contact tracing. Lesions on chest x-rays and CT scans are better identified via methods assisted by AI. Artificial intelligence algorithms have also been devised to predict COVID-19-related mortality, along with need for ICU admission, and to determine the most suitable drug or treatment option for patients based on their unique clinical profiles. According to Jansson et al. (2020), AI accommodating ventilator adjustments allowed for the improvement of time-sensitive decisions and negated the risk of COVID-19 exposure in Critical Care professionals, as well as reduced the costs of personal protective equipment and labor. Not to mention, the application of deep learning systems can accommodate the rapid detection of COVID-19 via RT-PCR, thus reducing the time to diagnose COVID-19, aiding in the management of insufficient isolation-bed resources, and adequately accommodating critically ill patients (Lee et al., 2022).

It is evident that AI in medicine, a still rudimentary yet promising concept, has the potential to elicit revolutionary strides in the medical world. To not only summarize the aforementioned, but also emphasize the profound impact that AI has started to have on medicine, a brief synopsis of its benefits. Firstly, and arguably most importantly, the standardization of AI in Critical

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Care could prove to be highly instrumental in identifying diseases, predicting the evolution of diseases, categorizing diseases into their corresponding phenotypes, and guiding clinical decisions (Yoon et al., 2022). Secondly, both telehealth and tele-ICU could also be revamped, with more thorough and efficient data analysis and collaboration, providing more accurate diagnoses, protecting physicians from burn-out, and enhanced convenience in monitoring patients remotely. Lastly, AI has shown to be propitious in addressing the most recently established pillar of modern medicine: battling the COVID-19 pandemic. Artificial systems aid in the quick and effortless diagnosing of COVID-19 patients as well as focusing on drugs that could combat this illness through AI screening and predicting future variants of the virus.

Even though AI promises outstanding refinements in modern medical practices and procedures, it has impediments that, if not catered to, may hinder the seamless integration of this "other-worldly" concept into current practices. One such fear is that AI systems are overly complex, therefore reducing interpretability. This would require training of medical personnel which may be cumbersome. Additionally, AI technology is still rather new and rife with unanswered questions, which can only be clarified by further trials and experimentation. Supplementary to the above, ethical concerns have also risen, AI automation could slowly replace human-oriented jobs, resulting in the obsolescing of educated medical professionals. Given that these encumbrances are slowly but surely surmounted, we feel artificial intelligence will be ubiquitous in modern medicine. Above all, fulfilling the emotional needs of the patients, the expectation of human touch and "treating the patient, not the disease" will continue to be important in the field of medicine.

Artificial intelligence is far from perfect, but its reliance on the fundamental building blocks of human intelligence, namely learning, reasoning, problem solving, perception and communicative skills, may be programmed in a way that is refreshingly free from the behavioral detritus of human judgment. While the conventional approach to medical management is well-grounded and dependable, it remains with its known limitations. To not only surmount the current plateau of medical advancements but to go far beyond it, the integration of artificial intelligence in modern medicine, particularly Critical Care, is pivotal.

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FEATURED ARTICLE

Airway Management in Patients with Ankylosing Spondylitis

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Ankylosing Spondylitis (AS) is an inflammatory rheumatic disease that primarily affects the spine, although other joints and organs can become involved. AS and its parent disease, Axial Spondyloarthritis, are not rare, and affect at least 2 million and 5.9 million adults in the United States alone, respectively[1,2,3].

Anatomic and Physiologic Airway Changes Resulting from Ankylosing Spondylitis

Patients with AS may have ossification of the spinal ligaments and calcification of the outer fibers of the annulus fibrosis of the intervertebral disc, which leads to a "bamboo" appearance of the spine on radiographic images (Figure 1). Fusion of the apophyseal joints and extensive syndesmophyte formation usually leads to fixed forward kyphosis and loss of mobility of the thoracic and cervical spine.[4,21] Cervical involvement occurs in more than 50% of patients with AS[5], and by 20 years of disease progression, more than 70% of patients have cervical involvement. (Figure 1)

Figure 1

Lateral Cervical Spine Radiograph of a Patient with Advanced AS. Note the Fusion of the Apophyseal Joints Posteriorly and of the Outer Fibers of the Annulus Fibrosus Anteriorly

Intubation is challenging for patients with AS because they may have (1) limited atlanto-occipital extension, (2) limited mouth opening, and (3) an inability to lie supine secondary to both fusion and anterior flexion of the cervical spine.

Osteoporosis is common in patients with AS, present in up to 61%, and is associated with increased risk for spinal fracture, especially in those with long disease duration and advanced spinal disease[6,19]. Also, recent data have shown that patients with AS have an increased risk of developing a vertebral fracture even after adjusting for age, gender, and the presence of osteoporosis[7].

All of these physiological changes incurred by AS can combine and lead to a spinal structure with mechanics that mimic a long lever arm that is susceptible to low energy trauma[4], including the forces generated by direct laryngeal visualization during intubation. A fused, anteriorly positioned and flexed cervical spine combined with ossified supporting ligaments may not safely tolerate a chin lift, jaw thrust, or direct laryngoscopy required to pass an endotracheal tube. Case reports have highlighted an occurrence of severe neurological deficits, including permanent tetraplegia secondary to direct laryngoscopy in this patient population[8]. AS involvement of the temporomandibular joint results in a narrowing of the joint space due to the presence of osteophytes and erosion of joint[9], which can severely impede mouth opening and impede any type of transoral approach to the larynx. Historically, it is believed that Pharaoh Ramses II (1303-1213 BCE) had AS. His neck had to be hyperextended to fit into his sarcophagus (Figure 2), which resulted in cervical spinal fracture (Figure 3)[10].

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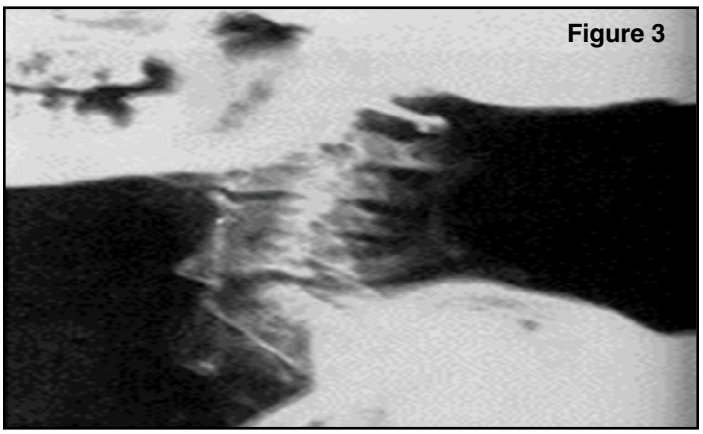
The Remains of Pharaoh Ramses II, Indicating the Pre-Mortem Position of the Neck and the Forced Hyperextension of the Cervical Spine to Fit into the Sarcophagus



Lateral Spinal Radiograph of Ramses II: The Results of Forced Hyperextension of a Fused Cervical Spine

Airway Management Considerations for Patients with Ankylosing Spondylitis

Airway management in the hospital setting for patients with AS requires an individualized approach, always consider the patient's overall clinical condition, their specific airway anatomy, available equipment, and caregiver skills.

Patients with chronic cervical kyphosis from AS have a significant risk of neurological injury from any neck-extending procedure. Neck extension can also cause vertebrobasilar insufficiency resulting from bony encroachment on the vertebral artery. Injuries to the cervical spine and spinal cord after an emergency intubation in patients with AS, such as dislocation of C6 vertebra and tetraparesis, have been reported1[2].

Direct laryngoscopy is associated with a low first pass success rate and a high complication rate in patients with AS; hence, this technique should be avoided whenever possible. However, video-laryngoscopes provide an easy learning curve with reasonable effectiveness and safety comparable to standard fiberoptic intubation in some situations[11]. If the patient has a significant level of temporomandibular joint damage with limited oral opening, or significant fixed cervical spine deformities are present, the video-laryngoscope may not be any safer or effective than direct laryngoscopy. In these situations, fiberoptic intubation will be the best approach. In emergent situations, intubating LMA (I-LMA) will be helpful[14,15,20]. The advantages of this technique are that laryngeal visualization is not necessary, the trachea can be intubated without head or neck movement, and ventilation of the patient's lungs can be maintained during the procedure.

Other Considerations Regarding Care of Patients with Ankylosing Spondylitis

Pulmonary Considerations: Patients with AS may have restrictive lung disease due to fusion of costovertebral joints, which can limit chest expansion. Additionally, patients with AS may have pulmonary fibrosis, which often manifests the worst in the upper lobes. Therefore, pulmonary function tests and arterial blood gas analysis for patients with AS are advisable, especially during preoperative preparations.

Cardiac Considerations: In patients with AS, inflammatory involvement of the heart just under aortic valve can lead to aortic valvular insufficiency, or even complete heart block; thus, a preoperative electrocardiogram is mandatory, and an echocardiogram should be obtained to assess the severity of possible AS–associated valvular disease.

Complications Associated with Spinal Cord Injury in Patients with Ankylosing Spondylitis

In an analysis of 12,484 hospital admissions and 267 deaths in patients with AS, data abstracted from the Healthcare Cost and Utilization Project Nationwide Inpatient Sample between 2007 and 2011 showed that c-spine fracture with spinal cord injury and sepsis led to the highest odds of death (16). Another recent analysis of the U.S. Nationwide Inpatient Sample data of years 2016-2018 of 5385 AS patients with spinal fractures found spinal cord injury was present in 26.5% of the patients with cervical spine fractures. The overall complication rate was 40.8%, highest in those with spinal cord injury. Respiratory complications, including pneumonia and respiratory insufficiency, were the predominant complications in the overall cohort.

Prone Positioning in Patients with Ankylosing Spondylitis

Without proper planning, these patients may experience disastrous outcomes, such as complete spinal cord damage and possible death. Prone positioning can lead to physiological damage to patients with AS if underlying restrictive lung disease or cervical spine fracture are present[16,17]. Therefore, proper planning and discussion needs to take place between

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care teams if prone positioning is absolutely necessary. Ideally, special positioning beds with proper padding and head support should be used to maintain the curvature of spine, and any forcible movements of the neck in the presence of neuromuscular blockade should be avoided[18].

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If you would like to post a job, please email a short description and/or PDF flyer including location, contact information, and closing date to SOCCA Society Director, Vivian Abalama, IOM, CAE at vabalama@iars.org.

THINK PIECE

Re-Thinking the Anesthesia Rotation

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To augment recruitment to our specialty, we need to start at the grassroots. The COVID-19 pandemic shed light on a lack of critical care training among practicing anesthesiologists, as well as lack of appreciation for the specialty in the global medical community. A large contributing factor is the myopic perspective of our specialty offered on the standard boilerplate anesthesiology rotation. Medical student exposure to anesthesiology is almost exclusively dedicated to intubation and the role of the intraoperative provider: a rote sequence of injections and dials, staying quiet so as not to wake the beast across the drapes. We love to show off our cheap thrills: the magic of propofol, the placement of arterial lines, and we stick to cheeky truisms: "physiology and pharmacology in action," "our patients are 100% compliant!", "we protect patients from the surgeon!" But in doing so, we are selling ourselves short. It's time to draw back the curtain and show them how much the role of a modern-day anesthesiologist and intensivist can transcend this role.

First, we need to show them our world beyond the operating room. Sitting with the resident for hours on end gives the wrong impression, unless we are trying to sell students on the role of a private practice solo provider. It may be more useful for the student to shadow the attending, who is juggling multiple emergent responsibilities, and triaging perioperative medical issues. If perioperative medicine is our future, we should use it as a selling point.

Second, we need to strengthen their exposure to surgical critical care. I may be biased in saying that anesthesia intensivists represent the apex of our field—we work as real doctors, our procedural and intellectual prowess on full display. This is also the arena in which we have the most leverage in garnering respect from the broader hospital. The future generation of physicians need to see that we are not just a technician behind the drapes being yelled at about paralysis. When the drapes come off, we engage in high level medical decision making with these very same surgical colleagues. In most European countries, Anesthesiology and Critical Care are integrated into the same specialty. Medical Students would likely welcome this perspective.

Third, we should expose them to our ever-increasing footprint in the hospital at-large. Medical students might be thrilled to be included on the airway stat team: we can show them how critical our expertise on respiratory failure is in the peri-arrest setting (and additionally, that we know more about hemodynamic management than most others called to assist in the same setting). We should include them on the ICU triage team, showing them how anesthesia intensivists are necessary for critical care resource allocation. We should expose them to regional anesthesia, of course, but additionally the regional anesthesia requests outside of the OR - ICU, pain clinic, etc. which also involve complex medical decisions.

The broad reach of anesthesiology on the functioning of the hospital is significant. As I moved through student, resident, fellow, attending—I began to notice this "anesthesia creep" into almost every arena. We are the hospital's insurance policy against failure, the sole arbiters of patient safety. The hospital has grown to rely on us for any situation which requires urgent, high-level, acute care, or one in which a patient is having a life-threatening experience (or an experience that would benefit from amnesia). We protect from iatrogenic harm—drug overdoses, procedural error, or apnea due to an overzealous PCA prescription. We allow for time-sensitive interventions to occur without a hitch—neuro-embolization for acute stroke, STEMI activation for patients who need higher level of monitoring. And we are a necessary utility by which the hospital's greatest revenue generators—surgeons—can thrive.

I think we would immensely benefit from a recruitment standpoint if we brought students into this broader world of anesthesia as a bridge between the hospital and its ability to function safely.

These changes will require some hefty changes from anesthesia program coordinators/directors, but they are necessary if we want to keep up recruitment to our fast-evolving field.

Application Submission Deadline: December 31, 2022

SOCIETY OF CRITICAL CARE ANESTHESIOLOGISTS INNOVATORS AWARD

Created through a generous anonymous donation, we plan to award one deserving recipient $10,000 for a ***true innovation***, that is, something that introduces a new device or technique, changes clinical practice, or could improve clinical outcomes.

The purpose of the grant is to promote:

- the advancement of medical technologies
- innovative clinical solution ideas
- safe and effective uses of existing technologies
- next-generation innovators & leadership
- translational research
- academic promotion

This award is an extension of the SOCCA's growing interests in research, education, and engagement. We encourage interested members to apply.

The award will be given to a medical student, fellow or clinical faculty member at an accredited North American training program, who is also a member of SOCCA.

Required elements for application include:

- Background of the problem being solved
- Expected final product of the research
- Expected expense budget
- Expected impact from implementation
- Relevance to the field of critical care anesthesiology

Applications will be judged by an awards committee, and finalists (up to three) will be asked to present their proposals at a SOCCA meeting. Travel grants will be provided.

A full description of the award is available here: About SOCCA Innovators Award.

The application deadline has been extended to December 31, 2022.

Please review the Award Guidelines.

We expect to announce the winner at the 2023 SOCCA Annual Meeting in Denver, Colorado.

SOCCA onDemand

2022 SOCCA WEBINAR SERIES CME & ONDEMAND:

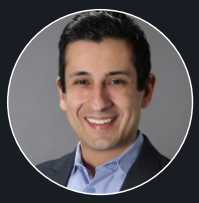
CME & recordings of the presentations will be available to SOCCA members only after they occur.

PERIPARTUM CARDIOMYOPATHY: Management in the Critical Care & Peri-operative Setting

MODERATOR

EMILY NAOUM, MD
Massachusetts General Hospital

PANELISTS



YANNI ANGELIDIS, MD, MSPH
NYU Langone Medical Center

KAIT BRENNAN, DO, MPH
Vanderbilt University Medical Center
Vanderbilt School of Medicine

JOANA PERDIGAO, MD
The University of Chicago Hospital
Pritzker School of Medicine

FEARFUL INFECTIONS in the Postoperative Cardiothoracic Patient

MODERATOR

TALIA BEN-JACOB, MD, MS
Cooper University Hospital

PANELISTS

ALOK GUPTA, MD
Northwestern University
Blood Stream Infections in Patients with Mechanical Circulatory Device

KANDIS ADKINS, MD
University of Louisville
Opportunistic Fungal Infections in the CT ICU

GOZDE DEMIRALP, MD
University of Wisconsin-Madison
Diarrheal Disorder in the Transplant Patient

CONTINUING MEDICAL EDUCATION ACTIVITY INFORMATION

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 and the Society of Critical Care Anesthesiologists.

The International Anesthesia Research Society is accredited by the ACCME to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENTS The International Anesthesia Research Society designates this live activity for a maximum of 1 AMA PRA Category 1 Credit™ per session. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

SUPPORT This program has not received any commercial support

Coming Soon: Full roster of SOCCA 2023 Webinars.

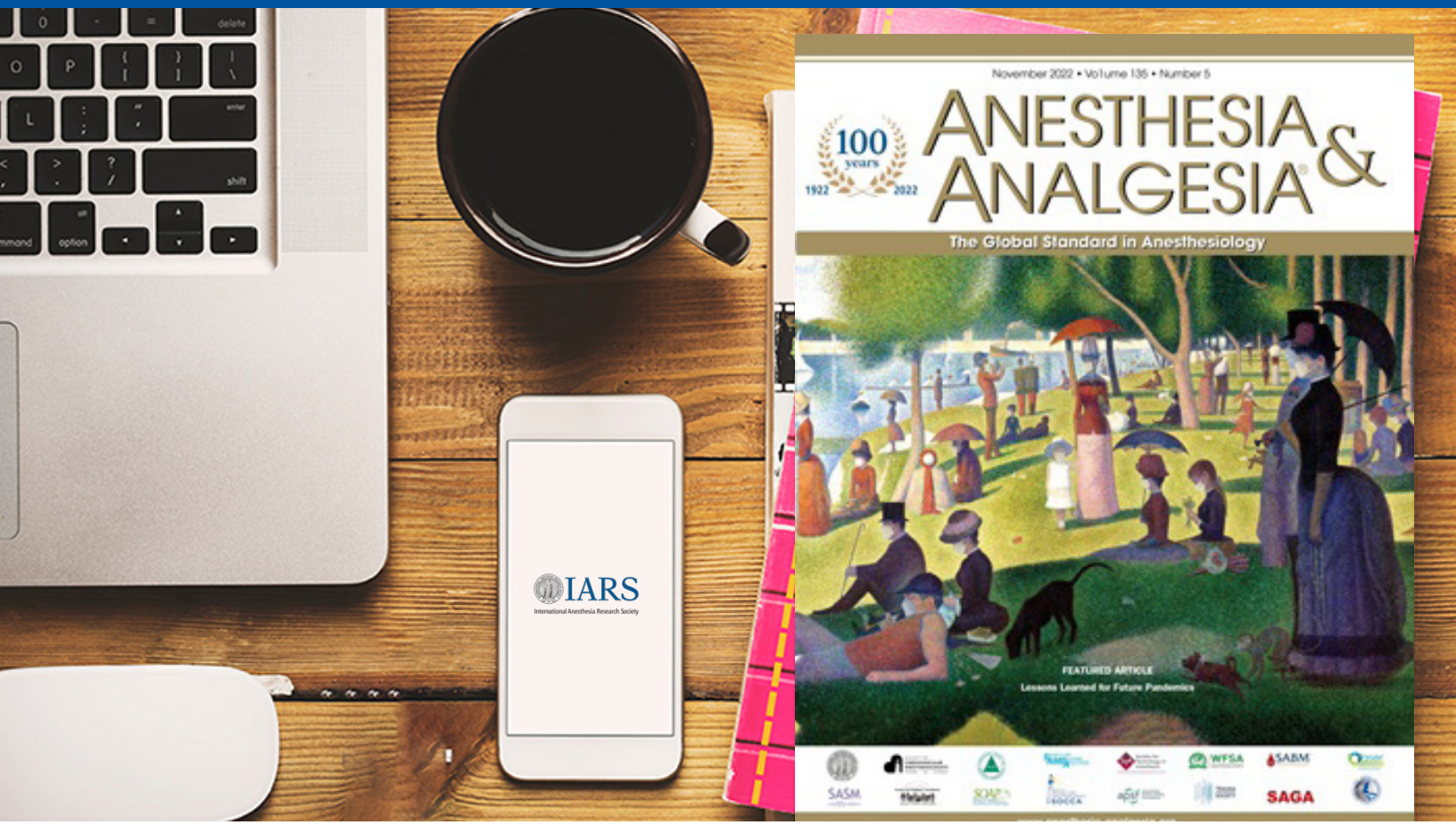
SOCCA drip

SOCCA Drip is a new online platform that offers member-generated content, spotlights member achievements, and delivers relevant news and updates from the broader critical care community—more frequently than ever before.

- Our newsletter, SOCCA *Interchange*, will continue to highlight features from our members and news from within the organization.
- To reflect these changes, SOCCA's Main Menu has changed to include "Drip" under "News" on the main menu.
- All back issues of SOCCA Interchange are available here.
- To explore contribution opportunities or share relevant professional or programmatic accomplishments, please email SOCCA Society Director Vivian Abalama, IOM, CAE at vabalama@iars.org

REGISTER TODAY

Discounted Membership Available with IARS



As a Society of Critical Care Anesthesiologists—a journal affiliate society—member, you are eligible to receive a discount on an IARS membership.

IARS membership benefits include a subscription to Anesthesia & Analgesia, SOCCA's official journal, A&A Practice e-journal, free journal CME, access to a member community and discounted registration to the IARS Annual Meeting. Click here to view a list of membership options. Enter the discount code during checkout to receive preferred affiliate society dues pricing at the membership level of your choice.

IARS Full Membership = $195/year
Includes full IARS member benefits including print and online journal access

IARS Limited Plus Membership = $135/year
Includes print and online journal access only

IARS Limited Membership = $75/year
Includes online journal access only

SOCIETY OF CRITICAL CARE ANESTHESIOLOGISTS
SOCCA

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SOCCA Information

SOCIETY OF CRITICAL CARE ANESTHESIOLOGISTS SOCCA

EMAIL

Meetings: SOCCAmeetings@iars.org
Membership information: SOCCA@iars.org

TWITTER

@SOCCA_CritCare

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.

Renew or join today at socca.org/socca-membership/

MEMBERSHIP BENEFITS

- Free access to SOCCA Doc Matter Community
- 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
- Virtual education / eLearning
- onDemand learning
- 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 Residents' Guide
- Free digital newsletter, which covers ethically controversial issues, survey of practice patterns, and historical aspects of anesthesiology
- Timely member news and information via SOCCA Drip
- SOCCA Speakers Bureau
- SOCCA Mentoring

EDITORIAL NOTES

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.

SOCCA *INTERCHANGE* NEEDS YOU!

Interchange seeks to deliver timely, relevant, and high-quality content to SOCCA members. Contributions from members are not only welcome but essential to ensure that *Interchange* meets these goals. If you are interested in authoring content concerning clinical challenges, emerging research findings, member accomplishments, or anything of general interest to the membership, please reach out to SOCCA Society Director, Vivian Abalama, IOM, CAE.