The other day I was listening to one of my favorite podcaster
(not in the medical field) about how she was forcing herself
to wear regular clothes for five days in a row, as during
the pandemic she had been wearing sweatpants for over
400 days and she had reached a point where she wanted to
feel normal again.

Then I thought that in our profession, we have felt extremely abnormal but in the
opposite direction; our work not only didn’t stop but, for most of us, increased in ways
that were completely unforeseen a couple of years ago. We were overworked and
unsettled but we always had to wear our work clothes. Nonetheless, when dealing
with meetings, conferences and webinars, we became, like the rest of the world,
one square out of many thinking whether to press “start video” depending on the
situation—and sometimes our clothes.

And so, we reached the Annual Meeting, SOCCA’s flagship event, and with it the
challenges to offer a robust—yet affordable—vehicle to learn, network, and feel like
a connected group again, especially after last’s year cancellation. And what a
challenge it was! Starting with envisioning exciting topics and enlisting compelling speakers to
guaranteeing a virtual interface without glitches while creating
a sense of camaraderie and
community is no easy task.

How did we do? Let’s get into the nitty gritty: **we had 421 registrants, which is a record attendance**.
To put in into perspective, Montreal (‘19), Chicago (‘18) and Washington DC (‘17) had 273, 337 and 265 respectively,
and even though the total revenue was obviously smaller due to the reduced
cost, we were able to meet the budget, which has been difficult in the past. We
presented 195 abstracts, significantly higher than previous years as well.

There is more good news in the numbers: both our general members and trainee
members increased their participation, including non-members that hopefully
will decide to become full members after

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**Miguel Cobas, MD, FCCM**
President, SOCCA
University of Miami
Miami, FL

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the meeting. And participation from our female colleagues continues to increase, currently at 38%, the highest number of the last 7 years.

What can we do better? Like with every virtual platform, it was hard to keep most attendees focused all the time, as demonstrated in various levels of participation during different sections. It happens live too, and we are very familiar with segments that have more empty chairs. It's a full day and maintaining undivided attention in front of the screen is hard. Some of the periods that had the biggest drop off in clicks were the abstract sessions, highlighting that there's no substitute for being present and able to walk around looking at latest research and captivating cases.

In addition to creating an outstanding meeting, the society felt it needed to create more avenues to engage our members, and to that effect the Early Career group created a networking event for the up-and-coming generations of intensivists, where residents, fellows and young attendings interacted with seasoned (old) colleagues and leaders of the Society. It was extremely well received and reviewed, with a total of 54 participants. We expect to make this a permanent fixture in our face-to-face meetings.

Overall, the annual meeting proved to be a resounding success and demonstrated once more that SOCCA is the home for anesthesia intensivists. Perhaps the best way to summarize it is to simply paste one of the reviews from the feedback survey:

“Even though it was virtual, SOCCA was still a great meeting. SOCCA is always great—this is our home and the only time we, as critical care anesthesiologists, are not in the minority. I just love SOCCA!”

We must continue to capture the momentum and spotlight the pandemic has given us. One of our most immediate and most pressing actions is to make sure that our educational members become full members; our growth and financial health depends on it. To do that, we need to ensure our house is large enough and appropriately organized. To that end we are putting together an expanded committee and task force tree that will allow us to better fit and serve our ever-growing community.

I want to finish by giving you thanks. Thanks to the organizing committee for putting together an extraordinary meeting, thanks to the IARS for being such a strong partner, thanks to the chairs and members of each committee that work so hard to deliver excellent products and activities, but most of all thanks to you, the anesthesiologist-intensivist that makes a difference in the life of our patients, mostly in scrubs, sometimes in a suit, and yes, sometimes in sweatpants. Have a wonderful summer!

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**SOCCA WEBINAR SERIES PRESENTS:**

**MODERATOR**

**PANELISTS**

**CRAIG JABALEY, MD**
Emory University Hospital

**BLAIR BIGHAM, MD**
Stanford University
*Why Anesthesiologists Need to Engage the Press*

**ZAIN CHAGLA, MD**
McMaster University
*Lessons from Going Viral: How to Get your Message Picked Up*

**SAROO SHARDA, MD**
McMaster University
*An Algorithm for Going Viral*

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**GOING VIRAL: How to Combat Health Misinformation by Engaging the Popular Press**

July 22, 2021 | 6:00 pm EST

**REGISTRATION IS FREE**
COMMITTEE ON EDUCATION UPDATE

Looking Back and Thinking Ahead!

I was a second-year anesthesia resident when my teachers and mentors encouraged me to go to the annual Society of Critical Care Anesthesiologists (SOCCA) meeting. At my very first meeting, I found the atmosphere very family-like, very open, very healthy and a lot of positivity all around. Ten years later, I chaired my very first SOCCA meeting at the recently concluded SOCCA Annual Meeting in 2021. I never thought that a decade of association with the SOCCA would get me here, and neither did I ever think that I would one day chair a virtual meeting. My story is the story of what SOCCA means to an aspiring generation of ambitious critical care anesthesiologists, and what SOCCA can do for all of us. The society has nurtured and mentored me, and I can proudly say that today we are stronger than ever before because of this culture of support. I remain forever grateful and thankful. If you are reading this today, and you are new to SOCCA, I welcome you and hope that you will grow with SOCCA, much like a lot of us have.

Like a lot of other scientific meetings over the last year or more, SOCCA suffered at the hands of the COVID19 pandemic. We live in an era of objective data and the numbers received from the virtual SOCCA 2021 meeting, do not need complex statistics to tell a story. We had 421 registrants for the meeting, which is a whopping 60% more than our last in person meeting in 2019, and more than any other meeting going back to the year 2014. Not only did people register, but they also attended and stayed with their sessions during the virtual day. An average of 50 minutes of time was spent by attendees as virtual audiences for the hour-long educational sessions. A testament to the ease of attending a virtual meeting and maybe a message that we may always consider some sort of hybrid virtual format for our meetings. We also had 195 virtually presented scientific abstracts, which was yet again a greater than 65% increase from our last in person meeting in 2019. New for this year, was the early career networking event, that was attended by 54 folks on a virtual platform. We thank Dr. Alisha Bhatia for spearheading this effort, which despite all challenges, triggered good conversation and healthy discussion. In fact, most attendees felt highly engaged and wanted more time with the senior mentors on their respective virtual break out rooms.

I thank SOCCA president Dr. Miguel Cobas and the board of directors for leading us through a difficult year where we had to do a lot of unconventional and unprecedented things. I also want to thank my education committee and especially our former chair Dr. Peter Vonhomeyer for helping put together a truly star studded program for all of you at the 2021 annual SOCCA meeting. And last but certainly not the least, Kristin Howard and Vivian Abalama from SOCCA and IARS for working with us every step of the way and helping us get to where we are today.

After an exceptional year, we all are looking forward to going back to normal as we prepare for the upcoming SOCCA annual meeting in 2022. As we look ahead, I pass this baton onto co-chairs for the SOCCA 2022 Annual Meeting, Dr(s). Allison Dalton and Kunal Karamchandani. They share our vision for the future with all of you and hope that we will all be together and in-person next year! In the meanwhile, the education committee has expanded its scope of engagement to year-round activities to help the membership. Significant advancements and widespread use of technology to facilitate webinars and live virtual sessions has allowed for innovation in the educational offerings during the pandemic, and these continue this year as well. We now have the opportunity to meet (albeit virtually) for educational panels, interactive discussions and networking throughout the year.

Despite the constraints imposed by the pandemic, we have been able to keep our members engaged throughout the year via monthly webinars. We look forward to continuing these SOCCA education webinar series and have included diverse, high impact session themes including strategies to combat public health misinformation, updates on cardiac critical care, advancements in sedation management and preserving cognitive function in critically ill patients.

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Quarterly virtual journal clubs have given us an opportunity for profound discussion of recent relevant publications, and we wish to continue such sessions going forward. We are also excited to begin offering CME credit for journal articles as well as annual meeting presentation videos, which would soon be posted on the SOCCA website and possibly find a peer reviewed published home as well!

The second annual board review course happens in September this year. The popular new activity will help fellows prepare for the critical care board exam and participants will have the opportunity to review high yield concepts, taught by faculty with recent test taking experience.

Plans for SOCCA 2022 are currently in evolution. Please watch for the call of session proposals and submit all ideas of interest keeping in mind, diversity, inclusion, professional interest, and expertise. We are hoping that we would be able to have a hybrid meeting wherein the attendees would have the option of attending the meeting in person or virtually. We excitedly anticipate the opportunity to see and interact with you, our colleagues, whether it be virtually or over food and drinks at a live networking event. Our goal is to make the sessions interactive and entice constructive discussion, and we look to you for inspiration and expertise.

Similarly, our vision for future SOCCA annual meetings includes increasing involvement from all of our membership, bringing in a myriad of ideas and points of view that can help elevate the overall experience for the attendees. We welcome ideas from our anesthesia intensivist colleagues who practice throughout the world in various types of settings and at different stages of career development to create an inclusive, diverse and transparent process of creating content for the forthcoming annual meetings. We believe that learning from one another, whether in the form of panel discussions or in sharing of personal experiences, is a pivotal feature of the SOCCA annual meeting, and we eagerly await the chance for this personal and professional enrichment. Please join us as we build the future of critical care education and make SOCCA an essential and exciting feature of your lives!

SESSION SUBMISSION DEADLINE: JULY 16

SHARE YOUR KNOWLEDGE: Submit a session for inclusion in upcoming SOCCA education. SOCCA is dedicated to the support and development of anesthesiologists who care for critically ill patients of all types.

SOCCA fosters the knowledge and practice of critical care medicine by anesthesiologists through education, research, advocacy, and community.
A big welcome to all our new members to the SOCCA Membership Committee! We look forward to collaborating with you all. The main mission for the SOCCA Membership Committee is to coordinate all membership activities for SOCCA. Our membership numbers and interest in SOCCA continue to grow. To answer the asks of our members (‘I want to be more involved, but how do I do it?’), the SOCCA Membership Committee has launched a strategic structure realignment intended to better serve the members of SOCCA and the Anesthesiology Critical Care community. The realignment should foster increased engagement, diversity, and opportunities for members to contribute to the current and future of SOCCA.

We have established the following NEW subcommittees:

- Early Career Subcommittee & Working Group (active)
- Physicians in Practice Subcommittee & Working Group
- Wellness Subcommittee Working Group
- Diversity, Equity, and Inclusion Subcommittee & Working Group
- Fellows in Training Subcommittee & Working Group
- Residents and Medical Students Subcommittee & Working Group

Over the next few months, we will be reaching out to members of the Membership Committee soliciting interest in leadership and participation on these subcommittees. Additionally, we will be reaching out to all members of SOCCA for their interest in participating on the individual working groups. We are very excited about these changes and the work that the committee has done so far.

Under the leadership of Dr. Alisha Bhatia, the Early Career Intensivists Working Group, our first new working group in the Membership committee, went live in the early part of the year. The Early Career Intensivists Working Group held its first annual networking event the night before the annual meeting this year, and it was a huge success! After a brief large group introduction, members broke out into smaller break out rooms, each of which was hosted by a SOCCA board member or committee chair. We had over 50 participants, and everyone had the opportunity to attend two different break-out rooms. In addition to socializing and getting to know each other better, several important ideas for programming by SOCCA were introduced, and well received! These included mentorship and more regional programming throughout the year. We want to thank everyone who attended, and we look forward to hosting a similar event next year, in person! Please be on the lookout for more emails about our upcoming events soon!

Over the last year we have been successful in recruiting and retaining a widely diverse group of members into SOCCA. We will continue these efforts moving forward. The SOCCA Membership Committee goals over the next year will be to identify leaders and members of our subcommittees and working groups, outline the mission of these subcommittees and working groups and operationalize their efforts. Our focus will be on increasing engagement, mentorship and networking while maintaining wellness, diversity, inclusion and equity of all members of SOCCA and the Anesthesiology Critical Care community. Our members are the foundation and future of our society!
COMMITTEE ON RESEARCH UPDATE

The SOCCA Research Committee is enthusiastic and energized heading into the 2021-2023 term! As we reflect on the past two years, there has been substantial growth in committee activities. Under the leadership of committee Chair Dr. Robert Stevens and Vice-Chair Dr. Matthew Warner, the committee developed several short surveys designed to assess the current state of anesthesiology-led critical care, including: clinical practice patterns, research initiatives and mechanisms of support, current and future models of anesthesia-based ICU training and education, anesthesiology intensive care engagement in the COVID-19 pandemic, and point of care ultrasound utilization in clinical practice. The first of these surveys has been disseminated to SOCCA members with plans for staged implementation of the remaining surveys. Additionally, we created three subcommittees to enhance the scientific output of SOCCA, including Subcommittees on Data, Research Collaboration, and Task Forces. Finally, we have partnered with other organizations to establish consensus guidelines for various aspects of perioperative management.

As we look ahead to the 2021-2023 term, our committee has grown to 29 members, including the addition of ten new members from diverse backgrounds and practices. The research committee also has five active members on the SOCCA Board of Directors who help ensure alignment of committee activities with those of SOCCA. Dr. Warner has succeeded Dr. Stevens as the Chair of the committee, with Dr. Stevens now serving in the role of Immediate Past Chair. Additionally, Dr. Shahzad Shaefi has been appointed as committee Vice Chair. Drs. Warner and Shaefi are grateful for the service provided by Dr. Stevens and look forward to ongoing collaboration with him to meet the scientific objectives of the committee in the coming years.

Key committee objectives for 2021-2023 include: evaluating the current state of anesthesiology-led critical care practice and research through the implementation of our series of short surveys; disseminating new and important anesthesiology and critical care research findings to SOCCA members, which will include collaboration with the SOCCA Education Committee; facilitating collaborative opportunities for multicenter research; providing an open forum to discuss research ideas and challenges; and creating an infrastructure to support the career advancement of committee members. Most importantly, the research committee aims to provide a safe space for all SOCCA members to meet new people, network, and explore opportunities for collaboration in research and clinical practice.

We look forward to continued growth of the committee, which will include opportunities for other SOCCA members.
Healthcare Worker Risk of Contracting COVID-19 after Vaccination

We previously reviewed data related to the risk of healthcare workers contracting COVID-19 in December of 2020 (Interchange:31 3). One study of front-line healthcare workers demonstrated a 4% positive COVID-19 testing rate compared to just 0.33% for the general population1. In a survey study of 105 anesthesiologists and intensivists at a New York City hospital, 58% reported a workplace exposure (mostly related to airway management), 26% of those reported COVID-19-like symptoms after that exposure, but only 12% of providers tested were found to be positive for antibodies [2]. That was the same incidence of positive antibody testing for those reporting no exposure, and the authors concluded the COVID-19 infections were most likely community-acquired. A study looking at healthcare workers performing a high-risk procedure—intubation—showed that the risk of transmission, hospitalization, and/or self-quarantine was approximately 10%3.

Since our last update on this topic, there are now three options for SARS-CoV-2 vaccination in the U.S. During the initial roll out of vaccination programs, two mRNA-based vaccines were available, both showing high efficacy. The Pfizer-BioNTech trial had only 8 cases of COVID-19 out of 21,720 vaccinated participants (incidence of 0.04%) seven or more days after the second dose of vaccine4. The Moderna trial had only 11 symptomatic confirmed COVID-19 cases out of 15,210 in the vaccine group, for an incidence of 0.07%5. Despite these very encouraging results, in addition to the overall safety of the vaccine, COVID-19 vaccine hesitancy remains high, even among healthcare workers6,7.

Despite that hesitancy, a large percentage of the healthcare workforce is now vaccinated against SARS-CoV-2, and studies are becoming available to help us assess the risk of developing asymptomatic and symptomatic infection after vaccination. All three studies described below used mRNA vaccines.

The University of Texas Southwestern Medical Center studied the effect of vaccination in their 23,234 healthcare workers. In the study time period, approximately 9,000 people were not vaccinated, 13,700 received one dose of an mRNA vaccine, and nearly 7,000 people received two doses8. The incidence of infection (i.e., a positive SARS-CoV-2 PCR test) varied based on vaccination status: 2.6% in healthcare workers who had not yet received any vaccination, 1.8% after one dose, and 0.05% after two doses.

A study at the University of California, San Diego (UCSD) and the University of California, Los Angeles (UCLA) looked at a population of 36,659 healthcare workers who received the first dose of one of the mRNA vaccines [9]. Of those, 28,184 had also received the second dose. Like the previously mentioned study, the incidence of COVID-19 infection varied by vaccination status. In the first two weeks following vaccination, about 2% of tested individuals resulted positive. In contrast, eight or more days after the second dose, only 0.17% of tests were positive. Of note, the absolute risk of a positive test in this group was 1.19% at UCSD and 0.97% at UCLA, higher than the risks reported in the trials for the mRNA vaccines. This may be explained by the low threshold these institutions had for testing symptomatic employees, and

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UCSD performed asymptomatic testing on a weekly basis. No testing of asymptomatic participants occurred in the Pfizer-BioNTech trial of the BNT162b2 mRNA vaccine.

Finally, a study at the Hadassah Hebrew University Medical Center in Jerusalem, Israel, looked at positive SARS-CoV-2 PCR rates in their healthcare workforce before and after vaccinations with the Pfizer-BioNTech mRNA vaccine. In the months before vaccination efforts ramped up, 10.3% of 6,680 health care workers tested positive. Most were determined to be due to community exposures. Similar to the other studies, the rate of healthcare worker positive tests dropped dramatically after vaccine roll out. Two weeks after receiving the second dose, only 2 healthcare workers tested positive out of 4,793 people who had received both doses (incidence 0.04%).

HHUMC, Hadassah Hebrew University Medical Center in Jerusalem; UTSW, The University of Texas Southwestern Medical Center; UCSD/UCLA, University of California San Diego/University of California Los Angeles. Data derived from 5-10

The data in healthcare workers clearly shows that vaccination dramatically reduces the incidence of a positive SARS-CoV-2 PCR test. These data correlate well with mRNA vaccine phase 3 trial data. As previously noted, the data are limited on the transmission risk during high-risk procedures like intubation, which in a pre-vaccine era were thought to be as high as 10% [3]. Therefore, anesthesiologists and intensivists are likely to remain at relatively high risk of infection. As such, addressing any vaccine hesitancy in this high-risk group of providers should be a top priority.

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How Do We “Practice” Medicine?

According to Oxford Languages, to “practice” means to pursue a professional activity or exercise a skill regularly and routinely to improve proficiency. I am an anesthesiologist who “practices” critical care medicine and the residency program director for more than seventy-six residents in a large training program. I am also a mother, a wife, sister, and daughter; and I have to practice being human every day. We are all human, and we deserve more competence and proficiency as we interact together. Often, my biggest challenge that demands practice for proficiency is the transition from work to life.

As a young attending fresh from residency and fellowship training, I had the diplomas and certifications to practice critical care medicine, but I felt far from competent to handle the growing complexities of ethical conflicts in intensive care units. Reflecting on some of the most memorable dilemmas that faced my patients and their families, I knew I could and should do better, offer more, practice further. Thus, six years into my professional career, I enrolled in a master’s program for Medical Humanities and Bioethics, and there is not a day that goes by that I do not wish I had joined the program sooner. It was an investment of time and tuition, but the return on my investment has made me not only a better physician and intensivist; I believe I am a better educator, mother, friend, and person.

I expected and welcomed a formal education in how to foster the practice of shared decision-making with its infinite spectrum between paternalism and autonomy. Before completing the master's program, I had not struggled to understand the importance of beneficently advocating for my patients, nor the value of autonomy, but I was certainly perplexed by how to find the patient-specific location for the locus of authority on that spectrum.

Let me consider a composite example from several prior patients. I remember someone who suffered an acute spinal cord injury with resultant progressive tetraplegia. He needed multiple procedures to decompress his spine, but he was reluctant and refusing to consent to surgery. The patient had personal experience and was quite informed about the quality of life he could expect under the best circumstances of his injury. He did not wish to pursue surgical decompression. He did not want to participate in respiratory therapy, nor did he wish to be intubated or mechanically ventilated. The problem for our team at the time was his desire to participate in anything, including a capacity assessment. With medical management, brewing pneumonia, and acute injury, he is mental status waxed and waned, and he was not always lucid. He did not have a durable power of attorney for healthcare. In the setting of the reversible, non-terminal nature of his injury, I could not legally justify withholding life-sustaining treatment without establishing that he was making an informed refusal [1]. Given his non-compliance with bronchial hygiene, he decompensated into acute respiratory failure. It is nearly ten years later, and I still replay his eyes closing as he begged me not to proceed, then I intubated him. I cannot help but wonder if I really saved his life that day.

Over the next several years of practice, I acknowledged that I needed more tools than the four foundational principles emphasizing autonomy, beneficence, non-maleficence, and justice. I needed power tools in medical humanities and bioethics. With advanced study, I now have an appreciation for how care ethics, virtue ethics, and the social contract theory help navigate that spectrum of shared decision making with a patient and family specific perspective. I learned how to listen to my patient's narrative and respect their moral values even when they conflict with mine. I also learned how to frame a conversation with empathy and emotional intelligence. I recognize the wounds from our country’s history in research, innovation, and epidemics that shape the perspective of our patients today. Our former practices of medicine and medical research are scared with abuses of humanity that fostered mistrust. Furthermore, it is imperative that I remember my patients and their families, especially those I treated within the legal boundaries of appropriate practice but lacking a

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moral framework. In other words, we were practicing medicine without practicing humanism.

This brings me to the final point of discussion, the skill I acquired in theory and hoped I would not have to practice directly, for I am quite unsure of my competence. That is the task of applying justice in the allocation of scarce resources during a pandemic. Learning about social justice in healthcare always seemed so abstract and remote from daily practice. It has generally been the role of legislation and healthcare leadership, not the bedside physician. Of course, I remember some scary times in my clinical past battling H1N1 influenza as a fellow and preparing for an influx of patients with Ebola when I was junior faculty. Nothing, nothing could prepare me for the events of the last year. I know Grim by his first name, and we are not friendly. The playing field is no longer an infinite spectrum with a shifting locus of moral authority. It is a short, narrow, dark, and straight vector from suffocating to dying.

We practice and practice until our knuckles bleed from the cycle of sweat and disinfectant, but we often cannot change the direction of that vector. There are over 550,000 reasons to keep practicing, because we are far from proficient.

This past year, we discovered that we could make more ventilators, convert open buildings into hospital rooms, and stretch the blood supply and medication stores. But the scarcest resource is us. We need each other, we need to care for each other, and we need to practice being more human, because we are only human after all.

REFERENCE:

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
To at least some degree, we all entered medicine for altruistic reasons: helping others, finding meaning in providing comfort and care, and saving lives. We in critical care are especially driven to offer management of life-threatening disease states as well as solace and comfort to critically ill patients. This aspect has been highlighted in striking detail during the pandemic where, despite the grueling physical demands of working in ICUs during this time, the discomfort of PPE, and the trauma of watching so many people die and so many families suffer, we still find joy and reward in the lives we save and the families whose lives we touch by our compassion.

Finding meaning in our work is more than ever important to get through the pandemic of COVID and the new awakening to bias. In contrast, how often do we hear from others—or say to ourselves—when stretched beyond the limits of resilience that “I hate this job,” or “I hate this place?” Every day, nurses and doctors leave the profession feeling burnt out and disillusioned. Healthcare workers have felt a disproportionate share of weighty burdens: fear of contracting a deadly disease and transmitting it to our vulnerable loved ones, potentially dying from it, and compassion fatigue as daily challenges continue on.

After residency, I went from a fellowship in NYC during 9/11, witnessed several bombings in Pakistan, felt the national fear and horror of the aftermath of SARS in Singapore, and then returned to the US—just before the pandemic! During all of this I worked full time as an academic anesthesiologist and intensivist. Horror, devastation, fear, and despair are some of the words and emotions I have encountered closely. But apart from the love and support of my family, it is ‘Ikigai’ (a Japanese word for the reason for being) that keeps me coming back to work without (at least overt) bitterness! Of course, I did not know what this meant until I researched the topic and found that the values that define the concept are true to the core of countless other professionals who, despite being pulled in all directions and weighed down from the disparate burdens of working during the pandemic in high stress situations, still find meaning and purpose in what they do.

There are several purposes in life, which can complement each other or lead to the fulfillment of the others, such as family, community, helping others, faith, etc. The important thing is that the superficial drudgery, at times injustices, and stressors of our daily work life should not lead to removing the very purpose and meaning of why we joined the profession in the first place. The pandemic has shown us with resounding emphasis that life is an uncertain force, and we cannot plan our trajectories around probable courses. Our own Ikigai is the asset that needs to be built upon. We must first recognize what we love to do and are good at—yes, the two can often be different!—and molding this into our chosen profession.

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This must fit into what we can get paid for, and from there we can begin to build a sense of meaning in our daily existence. Truly achieving a sense of meaning and purpose comes from connecting these efforts to the needs of the world, which is where the nobility of our aspirations factors into the equation. Unpacking what we mean by purpose can help us better understand its presence, as well as the importance of not always trying to find our purpose but rather putting in a purpose in everything we do.

Burnout and disillusionment are on the rise, even in professions with a high impact on the world. Tiredness, Zoom fatigue, meetings, emails, fear of an unending pandemic, uncertainty, and childcare burdens have taken their toll on all of us. Burnout is a simplistic word that is often used incorrectly and not in its proper scientific manner. We may not display all three aspects as Maslach intended, but different varieties and combinations lead to disillusionment. Many have considered and actively chosen to leave the profession after years of training and thousands of hours and dollars invested. But how can we make it so that our job itself was worthwhile? What if it was meaningful, satisfying, and through it we could be part of something bigger? Would it take financial incentives? More vacation days, better work-life balance, better wellness resources? A motivational talk from leadership? In my opinion, it has to come from within, and even though organizations play a pivotal role in motivating or destroying morale by unjust practice or out-of-touch management, there is a certain modicum of personal or individual control that can be leveraged in any situation. If we do not have this control on our own paths, there is a sense of grief and loss of our purpose, which is associated with burnout's deep and visceral depression.

For me, that control came from another concept I read about whilst researching this article: "job crafting." I noticed that along the years, the circumstances of my employment in three different countries were very different; however, the relationships, attitudes, and behaviors, as well as rewards and costs (a euphemism here for punishments), were similar. Job crafting helped stabilize these varied yet similar forces through natural and manmade disasters that life threw our way. Job crafting has been described as “an employee-initiated approach which enables employees to shape their own work environment such that it fits their individual needs by adjusting the prevailing job demands and resources.”

In many ways, job crafting is what many of us do to pull ourselves out of whatever ‘slump’ we may be going through, whether it is physical fatigue, emotional burdens, failures, or toxic cultures. We improve our engagement by elevating what we are doing in three ways.

(1) The first is task crafting, where we improve our own work environment by either making choices that are available to us at work but benefit us in the short term, such as taking a vacation day, or going part time for a short period. I had to do that when my second-born son had colic, which was intractable for 9 months and effectively prohibited me from working normal hours while my older son was just a toddler. This helped me stay engaged while managing childcare responsibilities. While this may not be always an option, similar types of task crafting can be used to overcome temporary shifts in demands inside and outside of work.

(2) The second, which I find the most useful, requires a great deal of emotional awareness and intelligence: relationship crafting. This is where employees and professionals can change the way they interact and communicate across the board. I find this to be the most rewarding. Always trying to find a personal touch and instilling a positive emotion in a job relationship is a key tool for building trust and respect while also contributing towards a more satisfying life at work. Whether we like it or not, we often have to spend 10-12 hours a day at work, if not more. If our relationships are cold and aloof, team dynamics will be suboptimal, which can foster disengagement and dissatisfaction.

(3) Lastly, and most in our control, is mindset crafting. This is where we can elevate our work to find more meaning by changing our own perspective of how we see our work. For example, an environmental service professional can add a greater impact in what they do by remembering that they are crucial in maintaining the safety and efficiency of the ICU beds that they clean. Similarly, if we view what we do as having a higher purpose for humanity, we may find much more of a return on investment of the sacrifices we make daily.

Although Critical Care has proudly shone during the pandemic as a field that rose to meet the associated demands and rigors, we as professionals can still redefine, reimagine, and get more meaning out of what we spend so much time doing by using ikigai and job crafting to our benefit.

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YOUNG INVESTIGATOR AWARD PRESENTATIONS

WINNER: Kasey Grewe, MD

Peripartum ECMO for COVID-19

Our center has supported 43 patients with COVID-19 ARDS on ECMO. Of these, 8 cases (19%) were in peripartum women, and their rate of survival was 86%. Notable points regarding the pregnant cohort (4 patients) include the fact that all neonates born on ECMO were preterm and required intubation but ultimately survived. Of interest in the postpartum cohort (4 patients) is the fact that 3 of them suffered clinical decompensation on post-partum days 1-2, suggesting a common physiologic mechanism, such as the autotransfusion following delivery. The only mortality in our cohort occurred in a postpartum woman secondary to anoxic brain injury from a pre-ECMO hypoxic cardiac arrest. The main learning from our experience is that ECMO provides a relatively safe and effective way to enhance maternal oxygenation and ventilation for the developing fetus while maintaining lung protective ventilation. Pregnancy is not an absolute contraindication to proning, but it may not be tolerated in all patients. ECMO allowed us to achieve a higher SpO2 goal of >92% for fetal oxygen delivery, and normocapnia to balance fetal CO2 clearance and placental perfusion. We experienced challenges with device flow due to caval compression and contractions that were responsive to fluid resuscitation and left lateral positioning. We learned that preterm delivery has not been proven to improve maternal oxygenation in ARDS and thus planned for delivery in the OR only for fetal indications, or bedside cesarean for maternal arrest. Steroids provided dual benefit in COVID-19 pneumonia and fetal lung maturity. These experiences at our center highlighted the ability of ECMO to enhance peripartum supportive care in COVID-19, and the importance of multidisciplinary teamwork and careful patient selection.
“In cardiac arrest, death is more reversible than we believe. We allow many people to die prematurely” — Lance B. Becker, MD

“Mostly Dead is Slightly Alive” has been for more than 40 years the maxim for Dr. Lance B. Becker when somebody claims that a cardiac arrest (CA) patient is dead. We believe that our failure in improving outcomes in CA has grounds in the “myth of the single magic bullet.” For decades, the mainstream of resuscitation science was represented by unsuccessful clinical trials targeting single pathways while expecting miracles. Unfortunately, we have not had very positive outcomes and still we are questioning if epinephrine should be routinely used during cardiopulmonary resuscitation. Remarkably, a growing body of evidence shows that global ischemia affects a very broad spectrum of signaling pathways, therefore, combination therapy or a “cocktail” targeting the multiple affected pathways has been the most reasonable course of action in our Critical Care research.

Metformin is part of our drug cocktail that hopefully one day will make a difference at the bedside. Despite being one of the most studied drugs in the history of modern research, its mechanisms and potential applications remain to be explored. Novel research has shown that metformin can favorably modulate the production of reactive oxygen species, which is a fundamental aspect in ischemia and reperfusion injury pathology. Moreover, we found that metformin has specific effects in the mitochondrial electron transport chain system. Since neuroprotection is currently the most important challenge in the post-cardiac arrest syndrome, we envision a promising future where a cocktail therapy can be applied with therapeutic hypothermia (TH) to improve neurological function in CA patients. Our mission as a team covers different research arms oriented to help CA patients, including the mechanistic study of TH, the role of lysophosphatidylcholine supplementation in CA, hydrogen gas, ECMO, and mitochondrial transplantation in resuscitation, among others. Our daily work is inspired by the remarkable, outstanding, and everlasting memory of the physician-scientist anesthesiologist Dr. Peter Safar. We all remember Peter Safar as the father of the cardiopulmonary resuscitation and the creator of the ICU, but we do believe, his last and most profound will was to let the scientific community learn that without physician-scientists and academic medicine, innovation, progress, and new therapies will fade.

I am deeply grateful for the invaluable support, help, and mentorship from Dr. Lance B. Becker, Dr. Ernesto P. Molmenti, Dr. Judith Aronsohn, and Dr. Linda Shore-Lesserson. My gratitude and full acknowledgement to Dr. Rishabh C. Choudhary and Dr. Muhammad Shoaib, who lead the cocktail research in our laboratory.
2nd Runner Up: Ashish K. Khanna, MD, FCCP, FCCM, FASA

Cardiac Output Estimation by Analysis of Arterial Blood Pressure Waveform versus Continuous Pulmonary Artery Thermodilution in Post Cardiac Surgery Intensive Care Unit Patients

Cardiac output monitoring is essential for understanding flow and pressure relationships in critically ill patients after cardiac surgery. While the Swan-Ganz catheter is the traditional gold standard, new technology has used relatively non-invasive methodology to estimate cardiac output. Long time interval (LTI) analysis of the arterial blood pressure waveform is one such method. We sought to compare LTI estimated cardiac output (CO-LTI) with Swan-Ganz estimated continuous cardiac output (CO-CTD) in 100 prospectively enrolled cardiac surgery patients recovering in our CVICU. CO-CTD was recorded at a typical resolution of one measurement every 15 minutes. CO-LTI was averaged within a window of 30 minutes preceding each CO-CTD measurement, to obtain paired values. For the purpose of this initial analysis, we had 24 patients in our final cohort. We saw a moderate correlation across a total of 1012 paired measurements in these patients, $r = 0.62$ ($p < 0.001$). Bland-Altman analysis showed a bias (a measure of accuracy) of 0.43 L/min, percent error of 39.4 % and limits of agreement (a measure of precision) of -1.69 to 2.55 L/min across a CO-CTD range of 2.3 to 8.2 L/min with an overall precision of 1.08 L/min. Cardiac output measurements using a novel analysis of arterial blood pressure waveform (CO-LTI) are moderately correlated with the traditional more-invasive pulmonary artery thermodilution guided cardiac output measurements (CO-CTD). Our results agree with a previous validation of the arterial blood pressure waveform method in 31 post-cardiac surgery patients in the ICU, where a percentage error of 40.7% was reported. Pending larger datasets, intensivists and anesthesiologists have the option of using a relatively non-invasive, easy to use method of cardiac output estimation in post cardiac surgery patients.

I would like to thank the growing team (10 plus clinical research technicians and post-doc fellows, three research nurses, data scientists, and faculty) in our perioperative outcomes research group for this work. A special word of gratitude to my clinical colleagues in the CVICU and my co-investigators, Bryan Marchant MD, Lauren Sands BA, Lillian Nosow BS, Amit Saha PhD, and Lynnette Harris RN, BSN for their tireless work, and R. Shayn Martin MD, MBA for helping us with high fidelity streaming hemodynamic data extraction from the ICU. Our final dataset, (pending analysis & publication) should have nearly 10,000 paired measurements of cardiac output available.
Thursday, May 13, 2021

SOCCA Early Career Group Networking Event
6:30 pm - 7:30 pm

Pre-registration is required.

Friday, May 14, 2021

Welcome
10:00 am - 10:10 am

Education Session I: Leadership beyond the Bedside in the ICU - the Leadership Shadow You Cast
10:10 am - 11:20 am

Break

Education Session II: Preventing Postoperative Pulmonary Complications - Are There Low-Hanging Fruits?
11:30 am - 12:30 pm

Education Session II: Preventing Postoperative Pulmonary Complications - Are There Low-Hanging Fruits?
12:40 pm - 1:55 pm

Lifetime Achievement Award and Young Investigator Award Presentations
1:55 pm - 2:55 pm

Education Session III: ECMO: Beyond Cannulas, Flow or Patient Selection
3:00 pm - 4:00 pm

ASA Update
4:00 pm - 4:15 pm

Break

Education Session IV: A Look Back at the Surge: What We Found Ourselves Doing That We Never Anticipated
5:25 pm - 6:40 pm

Missed SOCCA’s 2021 Annual Meeting?
You can still register for onDemand access to session recordings!
CME for session recordings will be available after June 21, 2021

Note: Posting presentations is voluntary. Per the request of individual speakers, several presentations are not available onDemand.
As a SOCCA member, you are eligible to receive a discount on an IARS membership. IARS membership benefits include:
Subscription to Anesthesia & Analgesia | A&A Practice e-journal | Free Journal CME | Access to a member community | Discounted registration to the IARS Annual Meeting
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SOCCA Critical Care Medicine 2021 Board Review Course

The SOCCA 2021 Board Review Course will be held in September over the course of 4 weeks:

Join us on September 1, 8, 15, and 22 | 5:00 pm – 7:00 pm ET

This course will be held as a live event with interactive question and answer sessions. After the event, the recordings of the Board Review Course will be available to SOCCA members for OnDemand Viewing.

Fees for this course are TBD. If you are not currently a SOCCA member please click here to join.

The objective of the SOCCA Critical Care Medicine Board Review Course is to further prepare fellows planning to take their critical care board examination through the American Board of Anesthesiology in the fall of 2021. The course covers frequently missed topics from prior exams and other high yield, frequently tested content.

Exclusively taught by faculty that have recently taken the test themselves and can provide further insight on test preparation, trainees at any stage in their training are welcome, as well as junior faculty who want a refresher.

AGENDA Utilizing more than thirty presenters, the SOCCA Critical Care Medicine Board Review is organized into four sessions. The full program will be available in July, 2021

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JOB BOARD

Read members-only job posts—including roles with The University of Kansas Health System, Oregon Anesthesiology Group, and University of Florida Department of Anesthesiology—at SOCCA’s Job Board.

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.
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- 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

EMAIL
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Membership information: SOCCA@iars.org

VISIT THE SOCCA WEBSITE at: www.SOCCA.org

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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/

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