

Society of Critical Care Medicine Presidential Address—50th Annual Congress, February 2021

Lew, thank you for that wonderful introduction. More importantly, thank you for your superb leadership over an unexpected and tumultuous last year! And I wish all of YOU a warm welcome to 2021, and to our 50th Critical Care Congress!

Greg S. Martin, MD, MSc

2020 was a landmark year in ways that we will remember forever, not the least of which was COVID-19. Some moments in history mark the beginning of something new—something extraordinary that will shape the decades to come. Critical care medicine has played an important role in such times—in fact, the framework for our specialty was cast from the pressures of the polio pandemic.

In 2020, the accomplishments of our Society, our members, and our specialty were among the most impactful and influential contributions in health-care. From me personally, and for SCCM, I thank each of you for what you have done. I am so grateful for the honor to serve each and every one of you, whether you are a long-time member of our Society, a new member in training, or if you have not yet joined.

I am a physician who specializes in—wait for it—critical care medicine, as well as pulmonology. I grew up in Wichita, Kansas, the heartland of our country, and I now work at Emory University in Atlanta, Georgia. I am the first physician in my family, and perhaps like many of you, I was drawn to critical care medicine because of a personal experience with critical illness.

In my case, my older brother was critically injured in a motor vehicle accident while we were in high school. That event exposed me to the ICU at a formative stage in my life—at a period where critical care medicine shaped my eternal curiosity.

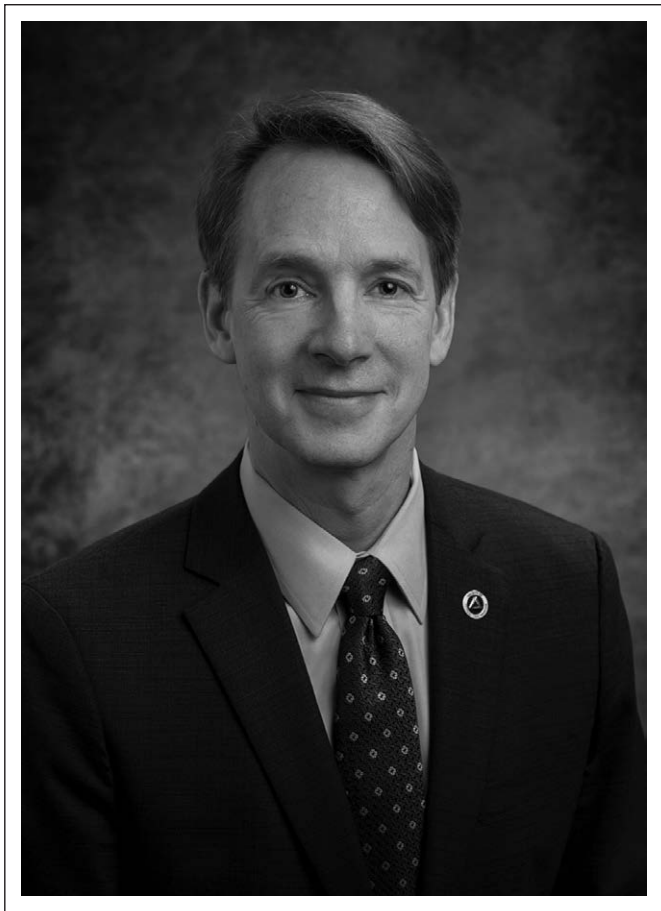
In college, I volunteered in a cardiovascular physiology lab, long enough to burnish my interest in cardiopulmonary physiology and long enough to snuff out any interest I had in large animal research. But my interest in physiology carried through to medicine, where I was fortunate to have a series of capable and compassionate mentors.

Many of you will know Dr. Gordon Bernard as one of the world's leading critical care researchers from Vanderbilt University, or perhaps you recognize him as last year's SCCM Lifetime Achievement Award winner. I am fortunate to have had Gordon as a mentor at a key phase in my training, where he shaped not just my career interests in critical care, but he shaped the way I approach problems. He shepherded my interest in physiology to address clinically important questions about fluid management in ARDS.

When I moved to Emory University, I found a phenomenal group of mentors who further shaped my career in ARDS and created the collaborative team that led me into the area where I now spend much of my time, focused on sepsis. At the time, as a young physician interested in ARDS, I naïvely asked the question, what most often causes ARDS? It wasn't a difficult question—the answer, of course, is sepsis—but the perspectives on how, why,

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when sepsis causes ARDS, and in whom sepsis causes ARDS, led to a lifelong commitment and passion for understanding sepsis as one of the most common conditions in the ICU.

Like all of you, the past year with COVID-19 has changed the way I spend every day. For me, it is a fortunate coincidence that I can now apply what I have learned about sepsis and ARDS to COVID-19. And because of the foundation laid by my mentors and my colleagues at Emory University, I have the privilege of helping to lead the NIH Rapid Acceleration of Diagnostics (RADx) program that is bringing innovative, new COVID-19 tests to the world, and I also have the genuine pleasure of serving at Dr. Anthony Fauci's invitation on the federal panel that produces the continually updated treatment guidelines for COVID-19 (<https://www.covid19treatmentguidelines.nih.gov>).

Come back in time with me for a moment—let's jump back in time to 1971, the year when our Society was founded. The microprocessor was created that year, Walt Disney World opened, and Mariner 9 orbited Mars while Apollo 14 put astronauts on the moon.

In that world of rapidly evolving technologies, the Society of Critical Care Medicine was founded. SCCM started 50 years ago with a vision for a professional society that was focused not on a single profession, but was dedicated to the entire professional team that cares for the critically ill.

The first intensive care units were created 100 years ago, and as ICUs became more common, three thought leaders—Max Harry Weil, Peter Safar, and William Shoemaker—gathered at a 1968 meeting in Atlantic City and conceived a revolutionary idea—that allies from different specialties and professions should collaborate in a patient-centered environment.

Their ideas were unconventional, even controversial. Importantly, these visionaries put the patient and their needs at the center of the focus for an entire team of professionals, and by 1971 this group of futuristic intensivists had grown to 54 members.

Our founders formally adopted a constitution and the Society of Critical Care Medicine was born, inspired by the mission to secure the highest quality care for all critically ill and injured patients. That humble motto has led SCCM to make an outsized impact in the field of critical care medicine.

After being founded in 1971, the first annual SCCM Congress was held in 1972, and shortly afterward the Society published the *Guidelines for Organization of Critical Care Units* in *JAMA* (*JAMA* 1972; 222(12):1532-1535. doi:10.1001/jama.1972.03210120030008). After our founders launched the premier critical care journal, *Critical Care Medicine*, we have since launched *Pediatric Critical Care Medicine* and, most recently, *Critical Care Explorations*.

Since inception, the journals and our Annual Congress have continued to grow, and our membership has flourished...from the specialty sections that represent each of the professions in the ICU, to our regional chapters and their local leaders, and our recently developed Knowledge Education Groups, or KEGs, to represent unifying cross-professional interests within critical care medicine.

In striving to meet the needs of our global critical care community, SCCM has created a diverse array of resources produced in many languages. To address the need for critically ill patients around the world to receive high quality critical care from trained professionals, SCCM created the Fundamentals of Critical Care Support, or FCCS, course.

Since its inception in 1994, the Fundamentals program has trained more than a quarter million health-care professionals in multiple languages from 33 countries. We continue to grow our collaborations with members and organizations around the world, and to improve our ability to reach and support clinicians far from our Chicago Headquarters, in 2020 we established a new office in Asia.

Our Society has led the way in developing and disseminating strategies to save lives, and to improve the quality of life, for critically ill patients and their families. Perhaps the most enduring example comes from the Surviving Sepsis Campaign, our international collaboration we launched in 2002 with our close partner, the European Society of Intensive Care Medicine. The campaign has progressively expanded its scope to encompass four editions of evidence-based guidelines, results from more than 30,000 patients around the world, and the deployment of a performance improvement program on a global scale (<https://www.sccm.org/SurvivingSepsisCampaign>).

More recently SCCM established the value of a bundled strategy to liberate critically ill patients from the ventilator. The ICU Liberation bundle may be the most effective, and most cost effective, intervention in intensive care, with its application producing a shorter time on the ventilator, increased patient survival, less delirium and coma, fewer ICU readmissions, and improved ICU discharge disposition (<https://www.sccm.org/LearnICU/Resources>).

This complements our Choosing Wisely campaign that focuses on the efficient delivery of the most important care in the ICU. Our past president, Dr. Jerry Zimmerman, espoused the “Less is More” paradigm for ICU care and implementation of the Choosing Wisely program with the Critical Care Societies Collaborative (<https://www.choosingwisely.org/societies/critical-care-societies-collaborative-critical-care>). And now for our 50th Congress, his team has fashioned the next five elements in the Choosing Wisely campaign, to be released in *Critical Care Medicine* for us to further improve care in 2021 (*Crit Care Med* 2021; 49:472-481).

These initiatives provide patient and family-centered care with better outcomes, and they are bolstered by the THRIVE collaborative. THRIVE was instrumental in characterizing the post-intensive care syndrome, and SCCM has made PICS a common expression in the critical care lexicon and helped to develop strategies

that may one day eliminate PICS as a consequence of critical illness.

Our successes at SCCM are in no small part due to our diversity. In our heritage and equal to our founding principle to represent the breadth of the critical care team in our Society is our formal commitment to diversity, equity and inclusion throughout our many programs and activities. In this regard the Society was once again an early leader, when in 2000, our first female president, Dr. Carolyn Bekes, followed two years later by our first president from the nursing specialty, Maureen Harvey. Not long afterwards, Judi Jacobi, our first president from the pharmacy specialty, took the reins.

These, and other remarkable women leaders at SCCM, laid the groundwork for our Women in Critical Care KEG—one of the first and most active groups of its kind in critical care medicine.

Your elected Council leadership are equally diverse, with a mix of individuals from the many specialties that make up our ICU teams, and equally diverse in important areas such as ethnicity, age, sexual orientation, and employment setting. We measure this diversity across *all* Society programs both from the committee and participant standpoint, believing deeply that the more diverse is our Society, the more effective we will be as a team and the more effectively we will care for the full breadth of critically ill patients and their families.

Just as this novel coronavirus has affected you, and me, and everyone else we know and care about, it has also affected SCCM. When we met last year in Orlando during the 49th Critical Care Congress, we knew that this new coronavirus was on the march. It had already struck in China as our colleagues in Wuhan cared for the first large-scale outbreak of what would become a global pandemic. In response, SCCM rapidly launched a wide variety of free resources to help all of us as we faced this unprecedented challenge. SCCM’s guidance on preparedness, staffing strategies, mechanical ventilation, and resource allocation were read by hundreds of thousands.

Our free virtual training program for non-ICU clinicians was taken by over 500,000 people in four languages. We worked closely with many government agencies to help guide their response and we partnered with dozens of healthcare associations as we worked to deliver key resources to clinicians everywhere they were needed. And while there *is* light at the end of the tunnel, the pandemic continues to roil the

globe, and SCCM is regularly adding resources to the COVID-19 Rapid Resource Center (<https://sccm.org/covid19rapidresources/resources>).

Over the past few months we have seen remarkable improvements in survival of even the most severely ill patients with COVID-19, and among the things that have made the difference is our resourcefulness and our teamwork in caring for these patients. We have navigated a tsunami of COVID-19 information, we have adapted our treatment protocols, and we have coordinated the places, the people, and the equipment needed to save lives. There is no question we are increasingly successful and saving more lives every day. Saving peoples' lives is what we do. But we have seen with each surge of COVID-19 comes an imminent threat to our workforce: stress, depersonalization, loss of empathy, anxiety, depression, and burnout.

In a record short time, we have made incredible strides with managing patients with COVID-19. The next hurdle we must address is the wellness of our team members. It is important now. Right now. Today. And it is even more important for tomorrow, for the next generation of intensive care nurses, advanced practice providers, pharmacists, respiratory therapists, dietitians, and intensivists.

Despite the dark and challenging days, we need to remember the bright spots too. If any of the spikes on the coronavirus represent a bright spot, it is from the creative innovation, the flexible adaptation, and facilitating new connections and partnerships that will endure long after the pandemic.

SCCM has deepened our close working relationships with the US CDC and established new relationships with the Indian Health Service, the Food and Drug Administration and USAID to name but a few. And perhaps more importantly, we've seen how our global critical care community has come together to respond during a time of crisis.

Our many dedicated member volunteers stepped to the forefront to develop and share resources through our COVID resource center, and I want to thank each and every one of them. Many of these key resources were the foundation of the successful COVID-19 What's Next conference we organized with many partner organizations last fall. The presentations, including by Dr. Anthony Fauci and Dr. Brett Giroir, remain available to you on the SCCM website. The conference and our COVID resource center were

graciously supported by individual donors and corporate partners who immediately stepped forward to provide essential funding...and I want each of them to know that we could not have done it without you!

And finally, to all the dedicated professionals who have worked tirelessly and even graciously volunteered to help others in this time of need...thank you. COVID-19 will not go away in days, weeks or even months, but it WILL relent. Our path forward from COVID-19 rests on the key discoveries that improve the care and outcomes for our patients.

Research is a key component of the SCCM mission, and our SCCM Weil Research Trust has funded incredibly innovative and ground-breaking research to find the next important advances in critical care. In the last five years alone, we have funded more than 1 million dollars in research projects, to investigators both new and established. These projects have been published in high impact journals and have helped to launch careers and accelerate discoveries that will change the way we practice.

In 2017, our Society committed 3 million dollars to establish the SCCM Discovery Research Network to facilitate clinical research in critically ill patients and to serve as a multi-professional clinical trials network (<https://www.sccm.org/discovery>). A shining example that many of you will know is the VIRUS COVID-19 registry (<https://www.sccm.org/virus>) that was developed and deployed by Discovery over a few days early in the pandemic, thanks to the hard work of our talented and energetic members and our exceptional staff. It has become one of the largest registries of COVID-19 anywhere in the world, with information on approximately 50,000 adult and pediatric patients from more than 20 countries (<https://sccm-covid19.org/>).

Discovery has now received funding from private foundations, government agencies and corporate partners of over 2 million dollars because of the collaborative and proactive nature of its programs. The VIRUS registry alone has spawned collaborations between SCCM, academic and community hospitals, and other medical societies like the American Heart Association and the American College of Radiology. If you're not aware, or already involved, check out the website (<https://www.sccm.org/Research/Discovery-Research-Network/Discovery-Activities/VIRUS-COVID-19-Registry>).

Thank you for all you do, every single day, pandemic or none, to secure the highest quality care for all critically ill and injured patients. And thank you for entrusting me to serve as your president. No one makes his or her way to this platform alone. I have benefitted from the help of many and I would like to recognize them.

Thank you particularly to the most amazing SCCM staff who have been led for more than 20 years by our CEO, Mr. David Martin. The people who make SCCM such a powerful society also make it a special place to work together, and our Society would not be the global powerhouse that it is without each and every member of our team putting their heart and soul into the array of successes you see today.

I am a better intensivist and a better person for having met all of the incredibly talented critical care colleagues who volunteer their time to serve on the SCCM Council, and so many of our leaders on SCCM committees and within our regional SCCM chapters as well as our international collaborators and colleagues.

For those of you who already know me, you know that my path to this stage was not linear, because like the diversity of our multiprofessional team I thrive on the breadth and variety of activities to challenge me every day.

For those who have aided me to possess the skills to guide SCCM, I thank you all. In particular, and in addition to those I have already mentioned, I want to thank Dr. Jonathan Sevransky, and Dr. Tim Buchman, as well as my colleagues at Emory University and Grady Memorial Hospital, and each of my mentees who have indelibly shaped the things I do and made it possible for me to be here today.

And most importantly, I owe a huge thanks and a debt of genuine gratitude to my family: my wife Stephanie who is the most understanding and critical care-educated orthopaedist on Earth, our children Forrest and Sydney who are in virtual college and of whom I am so proud, my parents Tom and Nancy Martin who nurtured my curiosity and made it possible to become who I am today, Stephanie's parents Steve and Rosie Bankson, and my brother Mike Martin. Each of them, in their own way, have made my career and my contributions with SCCM possible.

The extraordinary accomplishments of our society over the past half century rests on the shoulders of our entire team, and our successes in the next year rest in your hands much more than in mine. Working together is our greatest strength. My commitment to you, SCCM is here to provide the highest quality critical care for our patients through the multi-professional team of providers we all rely upon. If there is something... anything... that SCCM is not doing or that we should be doing better, I want you to let me know (email: president@sccm.org; Twitter: @SCCMPresident).

Thank you for the honor and privilege of serving as your 50th President. Welcome to our 50th Annual Critical Care Congress.

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