President’s Message

Recent Changes Bring Growth — And There Are More Changes to Come

Gerald A. Maccioli, M.D., F.C.C.M.
Raleigh, North Carolina

To every bird, his own nest is beautiful.
— Italian Proverb

For those of you who attended our Annual Meeting in San Francisco last October, you know firsthand that it was our best meeting ever. For those of you who missed it — plan on attending next year in Orlando as Avery Tung, M.D., and Andrew Friedrich, M.D., have assured me they will top this year’s team of Michael O’Connor, M.D., and Dr. Tung. We will all be the beneficiaries of this not-so-serious (serious?) competition!

For ASCCA, these are indeed good times. Under the able leadership of Michael Wall, M.D., and the Committee on Membership, we are on a steady growth trend — including the return of old members and, more importantly, recruiting new members. Coupled with this membership growth, our recent Annual Meeting (vide supra) set an all-time attendance record.

All of this forward momentum is both reflective of and supported by our recent changes in the bylaws infrastructure and the excellent fiscal health of our organization. Our Treasurer, Helgi B. Kummer, M.D., M.P.H., has closely monitored and allocated ASCCA funds for growth, giving us the positive cash flow to support our organization’s missions, including growth at the base of anesthesiology-based critical care medicine practice.

Immediate Past President Stephen O. Heard, M.D., is spearheading the updated version of our highly successful “Residents Guide to Critical Care.” We expect this to be completed in early spring 2008, and thanks go to all who authored chapters for this project.

The continuing demand for adult intensivists has created and continues to produce a plethora of professional opportunities for anesthesiologists (and other primary specialty physicians) to combine base specialty with subspecialty practice virtually anywhere in the United States. Yet, not all of our fellowship positions are filled — why? This was a topic of great discussion at the annual Fellowship Director’s Breakfast coordinated by Theresa L. Hartsell, M.D., Ph.D., and William E. Hurford, M.D. The discussion was insightful, and I applaud programs such as the University of Oregon’s for experimenting with a combined/integrated anesthesiology residency and critical care fellowship. The results of this pilot project are unknown, BUT it is an attempt to help solve our fellowship crisis, and that alone makes it worthwhile.

Likewise, critical care practice offers an interesting and challenging lifestyle, BUT it is also a demanding lifestyle. As surgical anesthesiology practice has allowed sicker and sicker patients to come to and through the operating room, more and more “operating room anesthesiologists” are practicing “short-term” critical care — we need to figure out how to attract and retain these physicians into our tribe.

Fortunately, our president-elect, Todd Dorman M.D., is a nationally recognized authority on critical care workforce issues. While this year’s and next year’s leadership tasks have been directed toward re-growth, reorganization and renewed infrastructure, our future challenge will be developing practice lifestyle models that have a broader appeal. I can think of no one better than Todd to spearhead this effort.

Malcolm Gladwell’s fascinating book, The Tipping Point, is a case study for adult critical care medicine. Our pediatric intensivist colleagues long ago sold their fellow physicians on intensivist-only care and their trainees on critical care fellowships. I hope we can tip the scales of this challenge in our favor.

Thank you again for the opportunity and privilege to serve as your president. Please do not hesitate to contact me.
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San Francisco was the destination for the 2007 ASCCA Annual Meeting. Events began early on October 12 with a leisurely breakfast followed by an exciting day of presentations on both old and new topics in critical care. The first speakers were this year’s coordinators of the meeting, Avery Tung, M.D., and Michael F. O’Connor, M.D., both of the University of Chicago, who co-chaired the meeting, welcoming everyone to the west coast despite a rainy weather forecast.

The first session of the day was titled “Protocols, Prognosis Scores, and Process Measurements: What Is the Role of the Intensivist?” Andrew D. Friedrich, M.D., University of Cincinnati, moderated the panel, which started with a presentation by Nicholas Sadovnikoff, M.D., Brigham and Women’s Hospital, focusing on the benefits and pitfalls of having ICU protocols. He made several points during this lecture, including that every part of a protocol may not be important in achieving the effect and that protocols perhaps do more by freeing nursing and other providers to work in parallel with physicians than acutely improving care. He also discussed the fact that pay for performance may become dependent on adherence to protocols that may not necessarily be appropriate for the patient.

Andrew L. Rosenberg, M.D., University of Michigan, then presented on the use of ICU scoring systems and their potential to provide better care. He presented data on several ICU scoring systems and their documented utility. His conclusion was that ICU scoring systems are not useful for the individual patient, but help provide important ICU performance measures within a unit, institution and nationally for the purpose of administration, benchmarking and research.

The next lecture focused on whether improving care was better addressed by improving processes or focusing on outcomes. Todd Dorman, M.D., Johns Hopkins University, made this presentation. He compared and contrasted the resources, validity and usability of the goals and data obtained from each method of evaluation. He concluded that one must focus on both in order to improve care and determine the effect. He stated that by utilizing both methods, the intensivist is actually best able to lead a dedicated ICU team and obtain the best care for patients.

Next, Douglas B. Coursin, M.D., University of Wisconsin, introduced Hilmar Burchardi, M.D., F.R.C.A., Georg-August University, Germany, the distinguished lecturer for 2007, who discussed the reason for a closed ICU with the existence of modern, protocol-facilitated ICU care. To facilitate this, he contrasted a closed unit in Germany with a semi-open unit in the United States. He discussed Continued on page 4
Annual Meeting Recap

how open ICUs depend on permanent nursing teams and other nonclinician providers to deliver critical care. Dr. Burchardi argued that while this model may work well for routine cases, routine cases are rare in the ICU and that “...often real cases have multilayered problems for which a mono-directed treatment by protocol is not adequate...” He then went on to discuss the concepts and structure behind the closed, intensivist-directed unit. He conveyed that while protocols are good, they are generally not enough to deliver optimal, timely care.

A short break was followed by a new event for the ASCCA Annual Meeting. Dr. Tung reappeared at the podium and moderated an audience-directed interactive clinical forum, with Drs. O’Connor, Shander, Avidan, and Friedrich acting as discussants on specific clinical scenarios. As each case was presented, the audience members were polled in real time on what their specific recommendation would be from a multiple-choice list. The results from polling were then displayed on two large screens, and afterward, the panel members chimed in with their thoughts. A highlight occurred with the first question of the session, resulting in a 50/50 audience split on whether to restart beta-blockade in a tachycardic, critically ill 59-year-old woman after pelvic exenteration.

Following this exciting session, ASCCA President Gerald A. Maccioli, M.D., F.C.C.M., introduced ASA President-Elect Jeffrey L. Apltelbaum, M.D., who discussed the current state of ASA, anesthesiology practice in general, the Medicare teaching rule, ASA continuing education and the role of the ASA Political Action Committee. A pleasant lunch and one-hour break followed Dr. Apfelbaum’s address. During this time, mentors met with residents and fellows from different institutions to discuss various topics in critical care.

At 1 p.m., Michael S. Avidan, M.B., B.Ch., Washington University, presented on resistant infections in the ICU. He discussed the history of major pathogens that have affected the human race and also currently evolving infectious threats. He then moved on to the methods bacteria utilize to develop resistance, including inactivation, modification of drug targets, antibiotic influx reduction, metabolic modification and efflux pumps. He focused on the current threat presented by methicillin-resistant staphylococcus aureus, or MRSA, and its routine treatment with vancomycin and/or teicoplanin. The lecture then tackled vancomycin-resistant enterococci due to the vanA gene found in enterococci fecium. Treatment with chloramphenicol, linezolid, daptomycin and dalfopristin-quinupristin were all mentioned as valid treatment modalities. However, prevention was a key point in his discussion, where grooming and gloving around VRE patients was found to reduce VRE transmission when compared with gloves alone.

Following Dr. Avidan’s lecture, Judith Hellman, M.D., Massachusetts General Hospital, presented a basic science update on sepsis. She lectured on the influence of toll-like receptors (TLRs) on the inflammatory response to infection, including the response to bacteria and the cardiovascular and pulmonary response to sepsis. She also discussed the role of NF-κB and its inhibition being a target for antisepsis therapy. Nuclear factor-erythroid 2-related factors (Nrf2) were also discussed as a regulator of redox balance and stress response. However, a crucial part of Dr. Hellman’s discussion focused on mitochondrial dysfunction and how cytochrome C may be a potential therapeutic target and how antioxidants and statins may also lead to potential therapies against sepsis-induced organ failure.

Vivek K. Maltra, M.D., Columbia University, then made a remarkable presentation using the “Lessig method” to discuss new events in the clinical management of sepsis. During his presentation, he brought up the recent changes in sepsis management, including the use of sepsis bundles, vasopressin, and goal-directed therapy and then finished with a discussion on the new surviving sepsis campaign guidelines. These guidelines should be published in early 2008.

Around 2:30 p.m., a break and facilitated poster viewing was under way. A total of 13 basic science and 13 clinical posters were presented this year. Topics varied from “A Mathematical Model of Pulmonary Regional Overdistension During Mechanical Ventilation” to “Tracheostomy Tube Malposition in Patients Admitted to a Mechanical Ventilation Weaning Unit.” Each poster was assigned to a group and was reviewed with a moderator providing useful feedback and lively discussion.

The group reconvened for Daniel R. Brown, M.D., Ph.D., Mayo Clinic, to present this year’s Burchardi Award to Michael J. Breslow, M.D., F.C.C.M., for his extensive work in improving the care of critically ill patients. During his acceptance speech, Dr. Breslow discussed the current state of critical care in the United States and the
oncoming Medicare funding crisis that will significantly change the type and quality of care provided to patients. He made a compelling argument for evidence-based, quality-directed care to help reduce the financial burden placed on the public by critical illness.

Following Dr. Breslow’s lecture, Richard J. Levy, M.D., New York Medical College, presented the Young Investigator Award to Minjae Kim, M.D., Columbia University, for his work on isoflurane and its protective effect on renal ischemia-reperfusion injury via sphingosine kinase (SK). In his work, Dr. Kim anesthetized mice with either pentobarbital or 1.2 percent isoflurane and then subjected them to 30 minutes of renal ischemia with or without SK inhibitors. The mice anesthetized with isoflurane and not receiving inhibitors had statistically significant lower creatinines after ischemic insult. He also subjected human proximal tubule cells to either 2.5 percent isoflurane or room air for three to 16 hours at 37 C. SK activity was measured and found to be significantly higher in the isoflurane group.

The general session finished with a pro/con debate between Geoffrey K. Lighthall, M.D., Ph.D. (pro), Palo Alto VAMC, and Michael F. O’Connor, M.D. (con) on the merits of simulation in ICU training. Dr. Lighthall discussed the Stanford experience with simulation and the reviews of residents who have gone through simulator training. Although he acknowledged there was little strong scientific evidence supporting simulators, observation and reviews by participants supported their use, and scientific proof of efficacy would be difficult to obtain. Dr. O’Connor discussed the history of simulators in the medical and nonmedical settings and the direct and indirect costs of simulator training. He stated that the cost of simulation was not only in the expense of the device but in the staff required to man and teach trainees to use the simulator. He felt this cost could run into the hundreds of thousands of dollars per year. He also discussed the current lack of published evidence supporting the use of simulators.

The general meeting adjourned around 5:30 p.m., and a brief business meeting preceded a wine and cheese reception on the top floor of the Grand Hyatt, San Francisco, which provided beautiful views of the city and bay. Next year, the ASCCA Annual Meeting will be held in Orlando, Florida, on October 17. We hope to see you there!
The ASA House of Delegates met on Sunday, October 14, and Wednesday, October 17, in San Francisco during the ASA Annual Meeting. As the only meeting for the House, the members tackled a large body of topics. Several topics were of specific interest to practicing intensivists.

**Reorganization:** The Executive Committee has worked hard in the past year to restructure ASA’s business practices. The changes introduced, dubbed the Organizational Improvement Initiative (OII), bring the practices of the society in line with modern corporate structure. The recommendations of private consultation led to an increase in permanent staffing, the creation of new administrative positions, including a new Executive Vice President position, and better administrative structure to support coordinated activities between the Park Ridge, Illinois and Washington D.C. offices. These changes should make the ASA business practice compatible with modern realities. Furthermore, executive leadership will be empowered to handle important issues (in particular legislative matters) in a timely fashion. This has direct benefit for our subspecialty, as we can reasonably anticipate health care issues to be an important part of federal policy through the upcoming election cycle. ASA continues to function at the pleasure of the House of Delegates.

**Pay for Performance (P4P):** P4P continues to be an important topic inside and outside ASA. At the federal level, there is ongoing interest in promoting measures that could be tied to reimbursement for anesthesiologists. At the same time, several lawmakers have voiced concern that the entire principle is counterproductive and possibly unethical. Similar controversy emerged in the House this year with the passage of Resolution No. 6, ASA Pay-for-Performance Action Plan, and No. 7, Confidential Benchmarking.

Resolution 6, the Pay-for-Performance Action Plan, was a statement questioning the rationale behind pay for performance. It raised concerns about the financial and ethical implications of P4P and questioned how best to create and vet quality measures. The amended proposal, passed by the House of Delegates, reflected testimony that was highly skeptical of P4P but stopped short of restricting ongoing ASA participation in discussions regarding performance measures and payment schemes at the federal level. This distinction was the most important part of the debate, and testimony on the floor of the House of Delegates emphasized that nonparticipation or limited participation by ASA in government P4P discussions might leave us more vulnerable to outside regulation as well as possibly hamper other cooperative efforts in Washington, D.C.
Resolution No. 7, Confidential Bench Marking, sought to produce an alternative way for ASA to evaluate performance. This involved confidential registries and databases that could be compared to established benchmarks for performance. The proposal had few details. This was proposed as an alternative to P4P, and specifically stated that the system should not be linked to reimbursement. This proposal was referred to committee, as the concept was novel and many details need to be explored.

As working intensivists, ASCCA members might be particularly affected by P4P measures. ASCCA has taken a leadership role, along with the ASA Committee on Critical Care Medicine, and crafted two quality measures: the “Prevention of Ventilator-Associated Pneumonia” and “Prevention of Catheter-Related Bloodstream Infection” initiatives passed at last year’s House of Delegates.

Donation After Cardiac Death (DCD): The ASA Committee on Transplant Anesthesia has been working on a sample policy for DCD that hospitals can use as a guide. Many institutions are now required to have such policies, so a sample document will have real value for ASCCA members who might be called upon to help craft policies at their local institutions. Intensivists are crucial stakeholders in DCD policies, as we are often the primary care physicians for potential organ donors. We can anticipate that care withdrawal decisions and many aspects of terminal care will be our responsibility. There are many ethical and practical considerations with DCD, and these have not been completely resolved. ASCCA has considerable experience in end-of-life issues and has been a source of constructive input during the drafting of this document. The sample policy has been approved as an ASA work product, meaning it may still be revised.

As ASCCA members, it is important to remember that you have a say in these and other matters that are addressed by the House, and your input to the ASCCA Board of Directors is important in guiding our involvement. ASCCA is fortunate to have representation on the House of Delegates, and ASA values our participation and input. As your delegate and alternate delegate, we are happy to hear any input that you might have.

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After the Friday Annual Meeting was over, Saturday morning found 35 critical care fellowship directors and interested colleagues gathered in the Grand Hyatt’s Dolores Ballroom to discuss emerging trends in critical care education. Theresa L. Hartsell, M.D., Ph.D. (Baltimore) and William E. Hurford, M.D. (Cincinnati) led the discussion at the Annual Program Directors’ Breakfast Symposium.

Integrated CCM Fellowship
Per A. Thorburg, M.D., Ph.D., and Christopher E. Swope, M.D., presented Oregon Health & Science University’s innovative combined program in anesthesiology/critical care medicine. Currently in its second year, this 48-month integrated residency-fellowship trains two residents per year, beginning with the PGY-2 year. The CA-1 and CA-2 years are similar to the standard residency, except that trainees complete one additional critical care month. In addition, their initial orientation month of the residency is spent in the ICU to foster a unique cohort identity. The CA-3 year includes six months of advanced anesthesia and six months of critical care at the fellow level, three spent in the critical care unit and three as critical care “electives.” The program concludes with a CA-4 year comprising six months of anesthesia (completing the primary residency requirements) and a final six months of critical care fellowship. Participants are eligible to sit for the primary anesthesia boards as well as the critical care boards after completing the entire four-year continuum.

Ultrasound/Echocardiography Curriculum
Extensive discussion then centered upon teaching fellows basic echocardiography and ultrasound skills. Michael H. Wall, M.D. (Washington University, St. Louis) gave an in-depth overview demonstrating that echocardiography has an expanding role in the evaluation of critically ill patients, providing additional information at the bedside that impacts management decisions. Multiple studies document successful education of trainees (medical students, residents or practicing physicians) in basic ultrasound and TTE examinations, allowing utilization of this technology in defined situations to enhance or extend the physical examination. Moreover, intensivists were able to acquire sufficient skills for focused TEE examinations — volume status, contractility, regional wall motion abnormalities, severe valvular lesions and tamponade — in a reasonable period of time.

It was proposed that all critical care fellows should acquire skills for limited, goal-directed ultrasound/echo examinations designed to answer specific questions and guide care in clearly defined conditions. Such examinations would be characterized by one or two easily recognizable findings, be learned easily and performed quickly at the bedside, and directly affect clinical decision-making. A basic curriculum for the critical care practitioner would not replace the existing standards of required training for clinical competency already established by national organizations. Likewise, performance of limited diagnostic critical care examinations should complement rather than replace formal comprehensive studies performed by appropriately trained individuals. The goal of such education would be to allow provision of bedside service in a timely fashion to those capable of making treatment decisions.

Several fellowships presently incorporate these skills into their educational programs using both didactic and practical curricula, and directors spoke to practical feasibility of this training. Assistance from cardiology and radiology services was essential and by report had not been difficult to obtain. Issues of compensation were handled differently from institution to institution.
There was solid enthusiasm for ASCCA and ASA taking a proactive role in advancing this area as a component of anesthesia critical care practice, with continued discussion and formation of a focus group following the symposium. Introduction of this area to the ASA Committee on Critical Care Medicine was planned for later in the day. Anyone with interest should contact Dr. Wall at wallmi@msnotes.wustl.edu.

Electronic Residency Application Service (ERAS)
Earlier this year, critical care medicine program directors received a survey about adopting the ERAS service for fellowship applications. ASCCA President Gerald A. Macciòllo, M.D., F.C.C.M., on behalf of the ASA Committee on Critical Care Medicine, clarified some issues around this query that had earlier been dismissed for lack of interest. Most importantly, he noted that utilizing ERAS is separate and distinct from offering positions through the National Residency Matching Program. Several directors of multidisciplinary programs spoke to the advantage of receiving anesthesiology applications in a format parallel to that of their other specialty slots. An informal poll suggested that all in attendance would be willing to again consider this option once more information was provided. Fred G. Milhlm, M.D., (Stanford, California) volunteered to serve as the anesthesia critical care representative for further ERAS consideration.

Residency Review Committee Update
Neal H. Cohen, M.D. (San Francisco) discussed the following proposed changes to the critical care program requirements:

- Coordination of fellowship training and educational resources between multiple critical care specialties must be ensured at the institutional level.
- Although most critical care medicine educational experiences should be with the adult patient population, fellows should develop an understanding of the clinical problems that arise in both adult and pediatric patients and develop skills necessary to address them.
- Fellows must have the opportunity for supervision and teaching of residents and medical students in the care of critically ill patients; development of administrative/management skills related to critical care services, resource utilization and triage of critically ill patients; and participation in clinical and other research activities related to critical care medicine.
- Additional clinical training expectations: diagnosis and management of sepsis and septic shock; ultrasound (line placement, cardiac evaluation); percutaneous tracheostomy; palliative and end of life care; management training/experience; and performance improvement activities.
- The program must ensure that the fellows have experience in the care of patients at all hours, consistent with duty hour requirements. The fellows are expected to perform some duties at night and on weekends in order to understand how to manage clinical problems during periods of potentially limited resources and support services.
- Faculty responsible for teaching subspecialty fellows in ACCM must provide evaluations of each trainee fellow’s progress and competence to the director no less than quarterly.

ABA Update
American Board of Anesthesiology (ABA) board member Douglas B. Courrin, M.D. (Madison, Wisconsin) was available to answer questions. Efforts toward a combined anesthesia and surgery critical care certification examination continue by the ABA and ACS. Programs using competency-based evaluation strategies were encouraged to share experiences for consideration at upcoming international meetings.

Interchange Newsletter
Increased fellowship participation in the society newsletter was the call of Michael L. Ault, M.D. (Chicago), editor-in-chief of the Interchange. This is a terrific way to increase fellow involvement in ASCCA while continuing to support and improve the newsletter, all the while providing opportunities for fellow academic projects and scholarly activity as required by the RRC. James M. Blum, M.D., a fellow at the University of Michigan, will provide a synopsis of this annual meeting for the upcoming newsletter. Through the year, the newsletter will highlight fellow submissions in the form of literature reviews of current hot topics and “don’t miss” articles. Program volunteers for the next issues were accepted, and those wishing to include their fellows in subsequent months should contact Dr. Ault directly at mault@northwestern.edu.

Additional Round Table Discussion
Lively round table discussion concluded the session. Concern was raised by many that while resident attendance at the meeting has increased as the result of the targeted recruiting efforts, attendance by fellows remains almost negligible. As a group, we resolved to work at our individual programs to encourage fellow involvement in ASCCA, in part through facilitating attendance at next year’s meeting and participation in the newsletter initiatives mentioned above. Several suggestions were made about expanding portions of the Web site for fellows, streamlining the process for updating fellowship information and developing a fellowship directors’ blog or listserv to enhance ongoing discussion.
The American Board of Anesthesiology (ABA) will administer examinations for recertification in the subspecialties of critical care medicine and pain medicine via computer at more than 350 test centers from September 20 to October 4, 2008 (except Sundays). ABA will inform candidates of the test sites when the list is available.

All applicants for subspecialty certification must satisfactorily complete one year of training in a critical care medicine program accredited by the Residency Review Committee for Anesthesiology or in a pain medicine program accredited by the Accreditation Council for Graduate Medical Education by September 30, 2008. They also must be certified in anesthesiology by ABA or scheduled for ABA oral examination in 2008. After January 15, 2008, applicants may use the ABA Web site www.theABA.org to submit their application for a subspecialty certification examination electronically.

The standard application deadline is March 15, 2008. ABA will consider late applications received by March 31, 2008. Applications received after the late deadline will not be considered. ABA will make a decision about an applicant’s qualifications for subspecialty examination by May 15, 2008.
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*NOTE: This committee consists of the Immediate Past President (Chair of the Committee), the President and the President-Elect and at least one Director.