North Carolina Society of Anesthesiologists

The Beacon for Patient Safety in North Carolina

NCSA Newsletter

Fall 2005

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In This Issue

From the President

Richard J. Pollard, MD

Dear Colleagues,

Another year is drawing to a close, and as is the case in nature some issues hibernate for the winter, while others are finally laid to rest. The NCSA continues to pursue House Bill 503, which clarifies the existing statutory requirements of physician supervision and allows for the licensure of Anesthesia Assistants. While the General Assembly has been out of session we continue to discuss the issue with interested parties. The NCSA recently met with the representatives of the North Carolina Medical Society and various specialty societies to ensure that they fully understood the ramifications and limitations of our legislative agenda. I thank you for your support during this year and ask for your continued support in the future.

The Board of Nursing lawsuit has come to a close with the North Carolina Supreme Court rejecting the Board of Nursing's appeal of the definitive ruling by the Court of Appeals supporting the existing requirement of physician supervision. The NCSA was successful in defending patient safety in North Carolina, as well as setting a national precedent regarding physician supervision and the role of the Medical Board. I would like to take this opportunity to thank the lawyers of Smith Anderson, *et al.* for their sterling work during this lengthy process.

"Medicine and the Law," the NCSA's annual fall meeting in Asheville, was a great success. The meeting was attended by 172 registrants, including anesthesiologists, residents and practice managers. The topics were well received and generated much discussion amongst the participants. It is my hope that this chance to expand upon our usual base of knowledge will be of assistance both inside and out of our practice settings. During the evening dinner an award was presented to Dr. Philip Boysen for his outstanding service to the society and anesthesiologists. Awards were also presented to Mr. Marion Suitt (Bert Coffer Distinguished Service Award), Representatives Jim Harrell and Bob England (Legislators of the Year), and Dr. John Butterworth (Immediate Past President). The NCSA would again like to thank all of those individuals for their help and support. With the strong assistance of our corporate donors, the meeting was able to pay for itself, as well as send money into the general budget. I hope you will take the time to thank all our supporters when you see them in your hospitals.

The NCSA continues to gain a strong following in the national society. Through the efforts of our director, Dr. Jerry Maccioli, we have placed NCSA members on various committees and boards at the national level. The NCSA has taken a leading roll in the ASA's approach to pay for performance (P4P) initiatives. The NCSA has developed a "white paper" on P4P for anesthesiologists that is available to all NCSA members through the Raleigh office. This paper will hopefully be able to assist your practices in strategic planning when your payors or hospitals raise this issue.

The NCSA is a volunteer organization composed of already overworked and overcommitted professionals, and much of the accomplishments of our society are directly attributable to those individuals. Many of these physicians have helped the NCSA by serving on committees, organizing PAC's, meeting with legislators, or serving as representatives to regulatory boards. I

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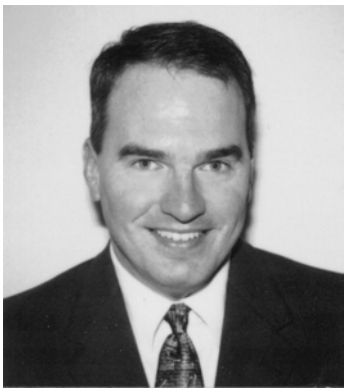
From the Editor:
The Little Square Librarian and the Big Round Earth



Scott K. Garrison, MD

After succeeding his father Philip II on the Macedonian throne in 333 BC, Alexander the Great rapidly set about subordinating his Greek neighbors, including Thebes and Athens. Next, he launched a massive invasion of the Persian Empire, allegedly in retaliation for Persia's war against the Greeks a century and a half earlier. Alexander also had a grand vision that Greek culture – superior, of course to all others – was the best hope for a force that could unify the peoples of the known civilized world.

Alexander decided to secure a foothold in Lebanon and Egypt before heading further east into Persian territory. The Egyptians hailed him as a conqueror, and had him crowned Pharaoh. While surveying Egypt's Mediterranean coastline, Alexander passed through a small fishing village a little ways west of the mouth of the Nile River. He thought the location ideal for his regional capital, and he ordered a city to be built on the site. Naturally, he named the place after the greatest guy he knew, and the city of Alexandria was born.

Few cities in world history ever rose so far so fast as did Alexandria, and she remained one of the world's most important cities for a thousand years. When Alexander died in 323 BC, his empire was divided among his generals, and General Ptolemy Soter assumed control of Egypt. He had himself crowned Pharaoh Ptolemy I, and he returned Alexander's body to Alexandria to be buried there. During the reign of Ptolemy II, the Egyptians completed the Pharos lighthouse at Alexandria, one of the Seven Wonders of the Ancient World. Standing over 100 meters tall, the lighthouse was for centuries to follow the tallest structure ever constructed by man, and it cried out to the entire Mediterranean world, "Dang right, you wanna dock here."

The Alexandrians also founded a museum and library, with the vision that it would be a repository for the world's accumulated knowledge. Ptolemy III had a legendary zeal for collecting books, and the story goes that he ordered all ships arriving in Alexandria to be searched for scrolls. Any that were found were confiscated and taken to the library for copying by the scribes there. The copies were then given back to the owner – the originals were kept by the library.

The library at Alexandria thus accumulated huge numbers of books, estimated at one time to be in the hundreds of thousands of volumes. Scholars from around the world were invited to Alexandria to work and study, including Euclid, the father of geometry; and Archimedes, discoverer of the mechanical lever and the Archimedes screw, as well as the number *pi*. The earliest translation of the Old Testament into Greek, the *Septuagint*, was also carried out at the library of Alexandria, and so named because the translation was performed by a team of 72 rabbis.

With all of the learning going on there, and the accumulation of ever increasing numbers of books, there had to be somebody in charge of keeping everything organized. *Somebody* had to make sure that the "geo-***logy***" scrolls didn't get filed away in the "geo-***graphy***" section by mistake. *Somebody* had to make sure that the kids weren't logging onto porn sites in the computer room. And *somebody* had to "Shhhh!" you anytime you made too much noise. And in the latter 3rd century BC, that somebody was a guy named Eratosthenes.

Appointed to the post by Ptolemy III, Eratosthenes of Cyrene was Alexandria's fourth chief librarian. And 2,000 years before Dewey and his decimal system, he devised an elaborate filing system for the library's scrolls that he somewhat grandiosely called *tetagmenos epi teis megaleis bibliothekeis* – "The Scheme of the Great Bookshelves."

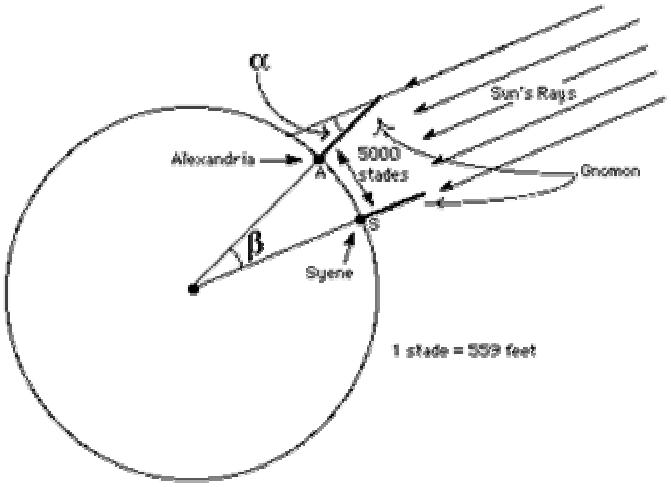
In reality, being a librarian in the 3rd century BC was probably about as cool as being a librarian nowadays, which is to say, it wasn't a job that exactly overflowed with hipness. Eratosthenes garnered little respect from his more specialized scholarly peers, who more or less saw him as a jack of all trades, and master of none. But it was perhaps Eratosthenes' working understanding of a variety of different disciplines that enabled him to undertake his most celebrated project, an attempted calculation of the circumference of the earth.

It's a dismal failure of the modern American educational system that perhaps a majority of Americans today think – and were taught – that Christopher Columbus set out on his famous voyage to demonstrate that the earth was round, and that most people in Columbus' time believed that the earth was flat. This is simply not true. Educated persons had known for centuries that the earth was spherical in shape. In the mid-4th century BC, Aristotle (who, incidentally, was Alexander's boyhood tutor) had postulated in *On the Heavens* that the earth was a sphere with a diameter of 400,000 *stadia* – on the order of 74,000 km. A century or so later, Eratosthenes came up with a novel way to measure the size of the earth that drew from his own broad base of knowledge.

From a group of travelers, Eratosthenes had heard an intriguing story about a well in the town of Syene. The story went that at noon on the longest day of the year, the sun shone straight down into the depths of the well without casting a shadow, and that one could see all the way to the water level at the bottom. No one in Alexandria had ever seen anything like this. Ancient astronomers had observed for centuries the migration of the sun to its northernmost apex, coinciding with the appearance of the constellation of Cancer in the night sky, and hence, the origin of the name Tropic of Cancer. Eratosthenes realized that, if true, the phenomenon of the well put Syene's latitude exactly on the Tropic of Cancer. Syene (near what is now the city of Aswan) was a well-

known destination, marking the first cataract of the Nile River, and was thought to be more or less directly south of Alexandria. It was also known that camel caravans took 50 days to make the trip, presumably traveling at a rate of 100 *stadia* per day. Eratosthenes realized that this was almost all of the information that he need to measure the size of the earth – without ever leaving his home in Alexandria.

His next step was the breakthrough. On the next summer solstice, Eratosthenes went to an obelisk used to measure time by the sun. Using a staff placed perfectly vertically in the ground, he measured the staff's shadow when it was at its shortest – and therefore, when it was noon, and the sun was at its highest. With the length of the staff and the length of its shadow now known, he was able to calculate the length of the third side of the triangle that was formed, and he could also measure the acute angle opposite the "shadow" side of the triangle. This angle, he surmised, would also be the angle of the arc of the earth's surface covered by the 50-days' trip from Alexandria to Syene. At the obelisk, Eratosthenes calculated his angle at 7^o 12' – which was conveniently exactly $1/50^{th}$ of a full 360^o circle. Thus, the distance from Alexandria to Syene was an arc $1/50^{th}$ of the circumference of the earth, and this circumference was therefore 5,000 x 50, or 250,000 *stadia*.



Eratosthenes' method for translating the length of a shadow at noon of the summer solstice into an estimate for the circumference of the earth. Angle *α*, which he calculated to be 7^o 12', equals angle *β*. The gnomon, or vertical staff, casts no shadow at Syene, because the sun's rays strike it from directly overhead.

The actual polar circumference of the earth – using any meridian – is now known to be just over 40,000 km, with the circumference around the equator being slightly larger. Different historical sources conflict as to the modern-day equivalent to a Greek *stadion* (the source for the diagram above claims that a *stadion* was equal to 559 feet), but it is generally agreed upon that Eratosthenes' measurement was within about 10% of the actual circumference of the earth, and that he likely erred a little on the high side. Interestingly, a few errors appear to have largely cancelled each other out. First of all, Syene was not actually on the Tropic of Cancer; it was about 55 km farther north – thus making the story of the well a 3rd century BC urban legend. Second, Alexandria and Syene are not on the same meridian; Syene is about 3^o to the east. And third, a more careful undertaking of Eratosthenes' obelisk observation with modern instruments would calculate a slightly smaller angle of 7^o 5'. But considering all of that, Eratosthenes still came remarkably close to the true measurement of the earth's size, especially considering that the primary input for his calculations was the largely assumed distance that a bunch of camels could walk in 50 days.

There was also plenty about the world that Eratosthenes had measured that he did not, and could not know. He did not know that people lived below the equator. He did not know that his own continent of Africa could be circumnavigated at its southern tip. And he did not know that the continents of North and South America, Australia, and Antarctica existed.

But Eratosthenes had figured out something very important – that the world had a size, that it was measurable, and that it wasn't boundless. And as soon as the world had a known size, it wasn't just hopelessly infinite in scope anymore. And most of all, Eratosthenes – and everybody else – now had a truer sense of perspective of the big picture.

The recent undertakings of the NCSA, especially those of this last year, have been about the big picture, if you will – about putting action behind our stated commitment to the safe delivery of anesthetic care, about improving the access to qualified anesthesia personnel, and about laying the groundwork for continued advocacy for patient safety – all for the people of North Carolina. These endeavors involved some "best guess" measurements. They required taking a broad perspective and using information from a variety of different sources. And yes, there was also some uncharted territory that was not, and could not have been foreseen.

But what continues to remain most important is the big picture, and our commitment to no longer accepting the premise that that picture is hopelessly beyond our ability to measure and to change. The efforts of the NCSA along these lines will continue into the new year, and beyond.

The *NCSA Newsletter* is published by the North Carolina Society of Anesthesiologists, Inc. The views and opinions expressed are those of the authors, and are not necessarily endorsed by the Society. Questions or comments concerning the *Newsletter* may be directed to the editor:

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Articles or editorials of clinical or general interest are solicited on an ongoing basis from the membership. All submissions may be e-mailed or faxed to Dr. Garrison.

From the Secretary/Treasurer:
Minutes from the NCSA's Annual Business Meeting

The Annual Business Meeting of the North Carolina Society of Anesthesiologists was held on Sunday, September 18, 2005 in conjunction with the Society's 2005 Annual Fall Session XXVI: "Medicine & The Law." President Richard J. Pollard, MD presided and called the meeting to order at 7:05 a.m., and a quorum was declared present.

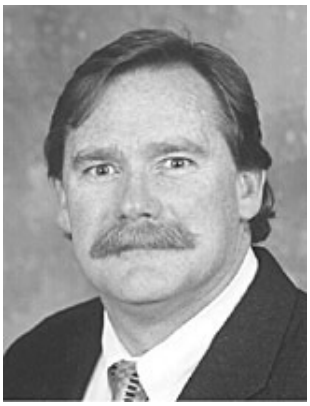
The minutes of the last Annual Business meeting, held September 19, 2004 in Myrtle Beach, SC were approved as previously distributed.

Dr. Pollard began his President's report by thanking Dr. John Butterworth for having provided excellent leadership as NCSA President for the first half of 2005. Dr. Pollard reported that the NCSA had several victories in 2005 – the NC Court of Appeals' dismissal of a lawsuit brought by the Board of Nursing; the introduction of legislation designed to protect patient safety and access; and the new Opinion from the Attorney General's office that reiterated that physician supervision is the law in North Carolina. He also noted that the NCSA had served as advocates for members on several issues. Dr. Pollard noted that the Patient Safety Defense Fund, as approved at the 2004 Annual Meeting, is now a reality and continues to receive funding. He noted that the NCSA has continued to raise its profile with the ASA. Corporate Support was also greatly enhanced this year. Dr. Pollard reported that the Resident Component Society has been more active than in recent years.

Gerald A. Maccioli, MD, ASA Director, provided highlights of his Director's Report to the ASA about 2005 activities. He also provided information about the 2005 ASA Annual Meeting move to Atlanta from New Orleans, and how logistical issues necessitated a scaled-down meeting.

Wesley B. Robinson, MD, Secretary-Treasurer, submitted the 2005 Treasurer's Report and the Proposed 2006 Operating Budget for the NCSA. He noted that 2005 could be the first year that all current year expenses are paid from current year dues, including having paid a backlog of 2004 expenses.

Dr. Robinson called on NCSA Legislative and Regulatory Counsel, Dana Simpson, JD, and NCSA Lobbyist, Marion Suitt, to provide an update of legal and legislative issues to the membership. Mr. Simpson reported that a three judge panel of the NC Court of Appeals had unanimously upheld a previous ruling in the Board of Nursing litigation. Mr. Simpson pointed out that the NC Court of Appeals wrote in its Opinion that "physician supervision of nurse anesthetists providing anesthesia care . . . is a fundamental patient safety standard required by North Carolina law." He alerted the membership that the Board of Nursing had appealed this decision to the North Carolina Supreme Court and that that body had not yet decided whether to entertain an appeal, and that there is still ancillary litigation pending on this case. He told members that in 1998 then-Attorney-General Mike Easley had issued an Opinion that physician supervision is the law in North Carolina. In 2005, the office of Attorney General Roy Cooper issued a similar Opinion noting that physician supervision is the law of the state.



Wesley B. Robinson, MD

Mr. Simpson noted that H503 had been unanimously passed by the Joint Committee on New Licensing Boards, and that the bill had been overwhelmingly approved by the House Health Committee, but not yet reported out of the Health Committee. H503 will be eligible for consideration during the 2006 session of the General Assembly.

Mr. Suitt thanked all members of the NCSA for helping educate legislators about the importance of this legislation. He noted that members had made contact with their local representatives and many had also attended hearings of the House Health Committee.

Julian D. "Bo" Bobbitt, Jr., JD, NCSA General Counsel, reported to the membership about various regulatory issues that had been addressed by the NCSA. In the course of these proceedings, the NCSA had worked with the Division of Facility Services, JCAHO and other groups to protect patient safety and the House of Medicine. Mr. Bobbitt noted that the NCSA was on the forefront of the move toward Pay for Performance models. He reported that the NCSA had helped fund a white paper and was working with the ASA Legislative Office to ensure that physicians understand how P4P models will operate and that care be taken when negotiating contracts.

Dr. Pollard reported for the Bylaws Committee. He sought permission to research a new NCSA member category to include an Educational category – suitable for those in healthcare education programs who have an interest in the NCSA. A **MOTION** was made and **PASSED** for the NCSA to analyze the addition of an Educational membership.

Scott K. Garrison, MD, provided the Communications Committee report. Dr. Garrison noted that the corporate support program was designed to fund the *Newsletter* and there are now four issues published per year. Dr. Garrison reported that the website had been enhanced to accept dues and registration payments on-line at a minimal cost. Dr. Garrison thanked all who contributed to the *Newsletter*.

Thomas Hill, MD provided the Education Committee report. Dr. Hill noted that next year's Fall Session: *"Make My Day: Complications in Anesthesia Practice"* would take place September 29-October 1, 2006 at the Embassy Suites at Kingston Plantation in Myrtle Beach, SC. He noted that speakers were already confirming participation, and that we expected to have a great meeting.

John Ebert, DO provided the Membership Committee report. Dr. Ebert noted that a few members had not paid dues and will be dropped from the NCSA and ASA. He reported membership by category – 610 active members, 185 residents members, 17 affiliated members, 1 educational member, 12 medical student members and 105 retired members.

David Crews, MD provided the Insurance/Manage Care Committee report. He noted that the Society is working on issues related to Medicare.

Dr. Maccioli provided the report for the Nominating Committee. He noted that the position of Secretary-Treasurer-Elect was open and that the Nominating Committee had unanimously voted to nominate Dr. Scott Garrison to this position on the Executive Committee. Dr. Garrison's nomination was unanimously **APPROVED**.

Wesley B. Robinson, MD and Alan F. Koontz, MD, Co-Chairs of the Legislative Committee, reported that the membership had been very active in developing relationships with legislators so that the legislators have contacts they can call on for questions about medical issues.

Dr. Robinson, Program Chair for the 2007 meeting, announced that the 2007 Annual meeting would be held at the Grove Park Inn, Asheville, NC. Although other venues had been analyzed, the size of our meeting limits the number of places that can hold our attendees.

Eugene Lee, MD provided the report for the Resident Component Society. Dr. Lee noted that residents had increased their participation in the NCSA. More residents have become politically active, and many residents attended the NCSA Legislative Reception in March. He noted that several residents attended the ASA Legislative Conference in Washington, DC, and that several residents would be participating in a Practice Management Seminar that would take place following the last lecture in the Fall Session.

New Business:

Frank H. Moretz, MD reported on the lack of coordination among the Medical Directors of North Carolina's CRNA Schools. A **MOTION** was **PASSED** requesting NCSA assistance in arranging a meeting of these Medical Directors.

Jay S. DeVore, MD reported that the ASA had asked his participation in a Task Force to address relief efforts for victims of Hurricane Katrina. He urged members to support the Anesthesia Foundation, and to check the ASA website for information about how to volunteer in Louisiana and Mississippi.

There being no further business, the meeting was adjourned at 8:55 am.

Dr. Pollard, *cont.*

(Continued from page 1)

would like to thank all of you who have taken part; you are what makes the NCSA the nationally recognized society that it is. I would like to especially thank the able assistance of your Executive Board. Without the assistance of Jerry Maccioli, Tom Hill, Wes Robinson, Scott Garrison and Rebecca McGhee we would not be in such a strong position to ensure the continued safety of patients in North Carolina.

The Executive Board continues to refine the governance of our society. As the year draws to a close I will be reorganizing the NCSA's committees so that we will be able to more nimbly respond to future challenges. I would ask individuals to get in touch with me if they have a future interest in serving on one of the following committees: Bylaws, Education, Communication, Insurance/Managed Care, Legislative, Rural Access, and Professional Liability Liaison.

The Patient Safety Defense Fund (PSDF) was instituted last year as a mechanism for soliciting private and corporate donations to assist with the legislative and regulatory efforts of the society. It is with great pleasure that I can report that this fund contributed greatly to the activities of our society. I would like to thank all who have donated, especially Critical Health Systems of Raleigh. Any individual wishing to donate, or ask for more information on this fund should contact either myself or Ms. Rebecca McGhee.

Once again I would encourage all members to contact me with any questions or concerns you might have. I would like to send my best wishes for a healthy and prosperous new year to you and your families.

Mark your calendars:

NCSA 2006 Annual Meeting:

"Make My Day - Complications in Everyday Anesthesia Practices"

September 29th - October 1st
Myrtle Beach, SC

Abstracts of NCSA Research Fellow Presentations from the 2005 Annual Meeting

Comparison of Postoperative Pain and Nausea Scores between Anesthesia Residents from Different Training Levels and Nurse Anesthetists

DB Auyong, WD White, TJ Gan, and JR Schultz
Department of Anesthesiology, Duke University Health System

Introduction: A major component of an anesthesia residency program is to acquire skills to develop an anesthetic plan that incorporates effective pain and nausea management in the postoperative period. One would expect as the training in anesthesia progresses, the management of postoperative pain and postoperative nausea and vomiting (PONV) would improve. There is a paucity of data comparing postoperative pain and PONV among residents at various stages of their training. We set out to evaluate if postoperative pain and nausea were influenced by increased anesthesia training (*i.e.* CA1, CA2, CA3).

Materials and Methods: After IRB approval, the electronic anesthetic records of adult patients undergoing surgery at our institution from September to December of 2002 were retrospectively evaluated. Cardiac, thoracic, and pediatric patients were excluded. Postoperative pain and nausea were assessed using a Verbal Response Score (VRS), where "0" represents no symptoms and "10" represents worst symptoms in the Post Anesthesia Care Unit (PACU). The mean scores were calculated. Cases were divided into level of anesthesia training (CA1, CA2, CA3) and nurse anesthetists (CRNA). CRNA scores were included as a control for providers not currently in training. Descriptive statistics are reported and scores were compared by ANOVA using Tukey's adjustment for post-hoc multiple comparisons among provider type. A p-value <0.05 is declared significant.

Results: A total of 2743 patients were identified. Mean pain and nausea scores were calculated for each category of anesthesia provider (CA1, CA2, CA3, and CRNA). Mean pain scores were negatively correlated with years of training (overall ANOVA $p<0.0001$). Pain scores for CRNA cases are similar to CA-1 residents ($p=0.9799$). Mean nausea scores did not show any significant differences with respect to anesthesia training level.

Discussion: Evaluation of PACU pain scores supports our hypothesis that increased anesthesia training is associated with decreased postoperative pain scores. Interestingly, PACU nausea scores were independent of level of anesthesia training. This may be a reflection upon our institution's protocol for postoperative nausea prophylaxis. Though this study shows statistically significant differences in pain scores, clinical significance was not evaluated. The differences in postoperative pain scores may not be explained by training alone. Differences in pain scores among provider levels may be attributed to complexity of cases, quantity and type of analgesics used, and regional techniques. Further randomized controlled trials are needed to confirm our findings.

Summary: Retrospective review of postoperative pain and nausea scores revealed a negative correlation between resident training and mean pain scores. Nausea scores were independent of training level. Pain scores for nurse anesthetists were similar to first year residents.

Alpha 2-Adrenoceptor stimulation blocks neuritis induced pain by transforming the immune response

EA Romero-Sandoval
Department of Anesthesiology, Wake Forest University School of Medicine

Immune response is largely responsible of neuropathic pain. Catecholamines, by actions on different adrenoceptor subtypes, modulate the immune response and neuropathic pain. Injection of clonidine, an α2-adrenoceptor agonist, at the site of peripheral nerve injury reduces pain behavior and local tissue pro-inflammatory cytokine content in rats. The aim of the current study is to test the efficacy and mechanisms of action of α2-adrenoceptor stimulation to reduce pain.

We utilized a model of acute inflammatory neuritis produced by zymosan, injected on the sciatic nerve. Zymosan causes hypersensitivity to mechanical stimuli ipsilateral to injection and contralaterally, so called mirror image pain. Perineural injection of clonidine inhibited ipsilateral hypersensitivity in a dose dependent fashion.

Zymosan increased leukocyte number at the site of injection 3 days later as well as their content of IL-1α, IL-1β and IL-6. Peri-neural clonidine prevented both the increase in leukocyte number and cytokine expression induced by zymosan.

In *ex vivo* LPS treated cells, clonidine reduced the capacity of leukocytes to express proinflammatory cytokines. Additionally, clonidine reduced the number of macrophages and lymphocytes as well as their expression of TNFα. All of clonidine's effects were prevented by co-administration of an α2A-adrenoceptor preferring antagonist. These results suggest that α2-adrenoceptor stimulation transforms cytokine gene expression, especially in macrophages and lymphocytes from a pro- to an anti-inflammatory profile in the setting of neuritis, likely relieving neuritis induced pain by this mechanism.

Predicting Outcomes in Critically Ill Octogenarians

K Johnson and PG Boysen
Department of Anesthesiology, The University of North Carolina at Chapel Hill

Introduction: In an aging US population, concerns regarding access and utilization of health care resources are growing. Paralleling the rapid rise in the elderly population are increasing hospital and ICU costs. Both patients and health care providers may harbor preconceived opinions about the utility of health care resources and interventions depending on the likelihood of possible outcomes and return to baseline functional status. This study was designed to assess the reliability of predicting outcomes in the superelderly ICU patient population.

Methods: After IRB consent, all octogenarians admitted to all ICU's at a major academic center between July 1, 2003 and June 30, 2004 were enrolled prospectively. Demographic and medical information was obtained via chart review, laboratory analysis, and interview. Variables considered include gender, age, baseline support level, location prior to admission, heart rate at ICU admission, type of ICU, number of ICU interventions, and organ system failures. The data were used in a logistic regression formula to make predictions regarding potential outcomes.

Results: Preliminary evaluation of 269 patients consecutively admitted to the ICU setting over the first 6 months was made. Of the 269 patients, 154 were female (57.25%), average age was 84.9, and average heart rate at ICU admission was 83.3. One hundred sixty seven of these patients performed independent ADL's (62.1%). Two hundred seven patients (77%) were admitted to medical ICU's, while 62 patients (23%) were admitted to surgical ICU's. Two hundred ten patients (78.1%) required no invasive interventions, such as PAC, mechanical ventilation, or vasopressor use. Only 30.11% of patients had organ system failure. One hundred thirty five patients (50.2%) were discharged home, 103 patients (38.3%) were discharged to a skilled nursing facility (SNF), and 31 patients (11.5%) died. The logistic regression analysis accurately predicted the actual outcome in 146 patients (54.3%). However, further analysis revealed variability in accuracy of the model based on outcome. Of the 135 patients discharged home, the model accurately predicted outcome in 126 patients (93.3%). In contrast, the model accurately predicted outcome in only 13 of the 103 patients (12.6%) discharged to a SNF and 8 of the 31 patients (25.8%) who died.

Discussion: Preliminary analysis of this data indicates that this logistic regression model can predict the likelihood of an octogenarian's discharge home following ICU admission at a major academic center. The power of this study will be increased when evaluation of all 698 study patients is completed. If this model can be verified, we may be better equipped to advise patients, families, and providers regarding potential outcomes and decision making with respect to invasive procedures and interventions, thereby improving resource utilization.

Research Fellows from the 2005 Annual Meeting (left to right): Edgar Alfonso Romero-Sandoval, MD, PhD, Wake Forest University School of Medicine; Matthew D. McEvoy, MD, Medical University of South Carolina; David B. Auyong, MD, Duke University Medical Center; and Krista Johnson, MSPH, MD, University of North Carolina School of Medicine

Legal & Legislative Activities Update

Supreme Court Denies Board of Nursing Appeal

On October 6, 2005, the North Carolina Supreme Court issued a one-line Order denying an appeal by the North Carolina Board of Nursing ("BON") in the case of North Carolina Medical Society, *et al. v.* North Carolina Board of Nursing. This ruling provided the final resolution of the BON's 2003 lawsuit challenging a position statement by the Medical Board requiring certified registered nurse anesthetists ("CRNAs") to be supervised by a physician.

The Supreme Court's short, but complete, refusal of the BON's appeal leaves the March 15, 2005 decision of the North Carolina Court of Appeals as the "law of the land." As you will remember from previous *Newsletter* articles, the Court of Appeals held that "the physician supervision of nurse anesthetists providing anesthesia care, when that care includes prescribing medical treatment regimens and making medical diagnoses, is a fundamental patient safety standard required by North Carolina law."

With the resolution of this litigation, the North Carolina Medical Board's guidelines on office-based surgery remain the standard of care in North Carolina. Contrary to the assertion of a few CRNAs, the Medical Board's guidelines require only "physician supervision," and do not and will not require supervision by an anesthesiologist in the office-based surgery setting.

Hopefully, the resolution of this longstanding dispute will allow members of the anesthesia care team to put their differences aside and refocus their energies on working together to provide quality patient care.

House Appoints Health Care Study Committee

North Carolina House Speaker Jim Black *(D-Mecklenburg)* recently announced the formation of a new Health Care Study Committee that will meet over the next six months, prior to the start of the 2006 Short Session in May. The House Select Committee on Health Care will be chaired by Representatives Edd Nye *(D-Bladen),* Bob England *(D-Rutherford),* and Thomas Wright *(D-New Hanover).*

The House Select Committee on Health Care will have six subcommittees and a total of 50 members. The subcommittees will study issues such as the rising cost of health care, access and affordability in communities across the State, the rising number of uninsured and underinsured North Carolinians, patient safety and quality improvement initiatives, the North Carolina State Health Plan, the State's Medicaid program, and issues related to the health care workforce. Below is a list of the new committee members:

Health Care Study Committee

Co-Chairs: Edd Nye *(D-Bladen),* Thomas Wright *(D-New Hanover)* and Bob England *(D-Rutherford)*

Subcommittee on Medicaid: Edd Nye (Chair), Arlie Culp, Margaret Dickson, Julia Howard, Bill Owens, Ray Rapp, Ronnie Sutton, Trudi Walend

Subcommittee on the Cost of Insurance for Employees and Employers: Hugh Holliman (Chair), Larry Bell, Alice Bordsen, Bill Faison, Bruce Goforth, Robert Grady, Bill McGee, Wilma Sherrill

Subcommittee on Patient Safety, Quality and Accountability: Bill Culpepper (Chair), Lucy Allen, Harold Brubaker, Carolyn Justice, Carolyn Justus, Deborah Ross, Russell Tucker, Edith Warren

Subcommittee on Health Care Workforce: Joe Tolson (Chair), Becky Carney, Debbie Clary, Bill Current, Jean Farmer-Butterfield, Mark Hollo, Marian McLawhorn, Winkie Williams

Subcommittee on Access to Health Care: Bob England (Chair), Jeff Barnhart, Lorene Coates, Susan Fisher, Verla Insko, Louis Pate, Mitch Setzer, Arthur Williams, Larry Womble

Subcommittee on the State Health Plan: Thomas Wright (Chair), Linda Coleman, Walter Church, Jim Crawford, Rick Eddins, Dale Folwell, Jiim Gulley, Phil Haire and Mickey Michaux.

Marion A. Suitt

Dana E. Simpson, Esq.

NCSA staff will closely monitor the Study Committee's proceedings. We anticipate that some NCSA members may be called upon to offer testimony on appropriate subjects.

Political Activities

North Carolina anesthesiology practices continue to form practice-based political action committees ("PACs") to help enhance physician involvement in providing financial support to local, state, and federal candidates who support policies that protect patient safety and improve access to medical care. For those NCSA members who do not participate in a regional or practice-based PAC, we encourage you to contribute to ANSPAC, the political action committee for the North Carolina Society of Anesthesiologists. You may download an ANSPAC contribution card from the NCSA website at **www.ncsoa.com/anspac.htm.**

If you have any questions about making a contribution to ANSPAC or becoming more involved in NCSA political activities, please do not hesitate to contact either Rebecca McGhee (rmcghee@ncsoa.com); Marion Suitt (masuitt@worldnet.att.net); or Dana Simpson (dsimpson@smithlaw.com).

Report from ASA's Hurricane Katrina Relief Task Force

Editor's note: *Dr. DeVore is an anesthesiologist in Kill Devil Hills. Those of you who attended the NCSA Annual Business Meeting in Asheville heard his initial report on the activities of this important ASA Task Force.*

– SG

Jay S. DeVore, MD

In early September, in response to the outpouring of support to victims of Hurricane Katrina from members of the ASA, President Eugene Sinclair formed a Task Force, Chaired by Dr. Charles Otto, to direct relief efforts of the Society. The task force consisted of representatives from the Anesthesia Foundation, the Disaster Preparedness Committee, and volunteers such as myself. The charge to the Task Force was to explore options for ASA's involvement in the relief effort, both monetary and personal in nature, to determine what the ASA should and should not become involved in, and to oversee the collection and disbursement of funds collected through the Anesthesia Foundation.

Since members of the Task force were located all over the country, meetings were held by conference call, coordinated by the tireless work of Denise Jones, Assistant Executive Director of the ASA, and aided by many other ASA staff. We were all in agreement that we neither wished to nor were able to duplicate the efforts of national organizations such as the Salvation Army and the Red Cross. We felt that the greatest need facing us was the 48 anesthesia residents in the two New Orleans based programs – Ochsner and Tulane. Our major goal was to aid in relocating those residents who needed another training program, as well as to provide direct aid to those who had suffered losses in the disaster. Some of their stories can be found on the ASA website.

Donated funds were to be channeled through the Anesthesia Foundation, since they already had tax exempt status. Any resident who could document loss was given an outright grant of up to $3,500 with an additional $3,500 being available as a low interest loan with repayment to begin following the completion of his or her residency.

Funds were solicited through the ASA website, with donors being given the option of unrestricted giving through the Anesthesia Foundation, or donation to an organization of choice such as Catholic Charities, the Salvation Army or the Red Cross. In addition, a booth was set up at the ASA Meeting in Atlanta, manned by Task Force members to receive direct donations.

To date, over $255,000 has been received, and donations continue to arrive. All of the New Orleans residents are currently located in a training program. The Ochsner Clinic fortunately did not sustain catastrophic damage and was able to reopen. Ochsner's biggest problem initially has been a lack of patients. The Tulane Hospitals were much more severely damaged, and all of their residents have been relocated, most to Baylor in Houston. Over $150,000 has been disbursed to anesthesia residents, and funds designated for specific organizations have been forwarded to them.

At this time, the Task Force is continuing to meet to determine further needs. Some consideration has been given to assisting anesthesia departments in smaller hospitals in the Gulf area with such things as purchasing educational materials that were lost in the disaster. Thought is also being given to how to best handle similar situations in the future.

I have found this to be a very rewarding experience and would strongly urge any members to seek out ways they can serve our specialty and our society.

ASA Director's Report

By asking for the impossible we obtain the possible.
– Italian Proverb

The American Society of Anesthesiologists (ASA) annual meeting was held in Atlanta, Georgia between the 22nd and 26th of October 2005. The educational and scientific component was conducted in total, and by all measures a huge success with over 14,500 registrants; a truly remarkable accomplishment in light of the ASA's only having seven weeks to transition the meeting location from Hurricane Katrina ravaged New Orleans, Louisiana. The ASA staff did an amazing job! While ASA Committees did not hold any 'official meetings' this year, the House of Delegates (HOD) conducted the full agenda of business relevant to the professional practice of the medical specialty of Anesthesiology.

Gerald M. Edelman, MD, PhD, recipient of the 1972 Nobel Prize in Physiology and Medicine, presented a phenomenal distinguished lecture entitled "From Brain Dynamics to Consciousness: How Matter Becomes Imagination." I hope ASA will make at least the text of this lecture available for all members; it was very thought provoking. The lecture was especially appropriate as the much anticipated, and highly controversial, *Practice Advisory on Intraoperative Awareness and Brain Function Monitoring* was released. This *Practice Advisory* – note that it is not a practice "guideline" – passed the HOD with limited debate, despite a long and vociferous reference committee discussion. The bottom line is that 'neurophysiologic monitoring' is a science in infancy, and at present there is no universal standard of care. No doubt the coming years will see many advances in the science of neurophysiologic monitoring and the ASA will revisit this issue again and again. Also presented at the meeting, and approved by the HOD, were the following: (a) *Practice Guidelines for the Peri-Operative Management of Patients with Obstructive Sleep Apnea*, (b) *Practice Advisory for Peri-Operative Visual Loss Associated with Spine Surgery*, and (c) *Practice Advisory on Blood Transfusion Therapies*. All of these documents are worth reading.

The required scheduling changes, *e.g.,* holding the House of Delegates on Saturday and Tuesday, with Reference Committee meetings held on Sunday, caused a few conflicts but did not inhibit participation. Report 614-2 (*Sedation Credentialing Guidelines for Non-Anesthesiologists*) presented at Reference Committee Number 2 became a marathon, four-hour boisterous, vehement debate as participants sought to define moderate versus deep sedation. In addition, this bellicose debate focused on the sensitive issue of credentialing guidelines for non-anesthesiologists. The political reality of the ASA needing an official position on this matter eventually won out at the end of the day with the report gaining HOD approval. However, these guidelines terminate in one year, and a new adaptation and construction of these guidelines will be presented in 2006.

Gerald A. Maccioli, MD

The recent mediated diplomacy between the ASA and American Association of Nurse Anesthetists (AANA) – *i.e.* the Thought Bridge Process, and its continuation – was debated via Resolution Number 7 [ASA/AANA Meetings, introduced by Maccioli, ASA Director NC]. In August, the ASA Board of Directors (BOD) had previously defeated this resolution that would have summarily ended these meetings, which have employed a third-party professional mediator to facilitate discussions between the two professional societies. However, after a debate in the full ASA HOD, the HOD overturned the Board's decision, and cut off future funding for these conferences. The final approved version of the Resolution allows the ASA Executive Committee to continue to meet with AANA leadership at its discretion, though without the expense of the third-party mediator. Of concern to the delegates was that at the time of the ASA BOD meeting in August 2005, the AANA had begun an aggressive campaign opposing any change in the Medicare Anesthesiology Teaching rule, even though earlier, the AANA leadership had told ASA leadership (during a Thought Bridge meeting) that they would support this much needed change for the survival of academic anesthesiology. The sudden, surprise reversal by the AANA of a commitment made at a Thought Bridge meeting raised serious doubts about the worth of future such meetings. It also exposed an even more serious concern, that the AANA apparently views resident physicians in anesthesiology as equivalent to student nurses. We have three residency programs in our state and each of them have suffered significant, deleterious financial consequences due to this rule, which, incidentally, ASA will continue to fight to remedy.

The concept of Pay-for-Performance (P4P) continues to gain momentum with CMS Administrator Mark B. McClellan, PhD, MD, pushing this concept across all medical specialties. Parallel to CMS's efforts, private carriers are allowing the federal government to do all of the ground work, and many will then parallel this concept into their own reimbursement systems. The government, in turn, is looking to emerging national consensus quality and best practice standards. Alexander A. Hannenberg, MD, ASA Vice-President for Professional Affairs, continues to prepare the ASA and its membership for P4P [Report 600-2, Approved by HOD] as this abstraction becomes embodied into the

reality of payment methodologies. The NCSA's White Paper on P4P, authored by NCSA General Counsel Julian 'Bo' Bobbitt, (and funded by Critical Health Systems, Inc. of Raleigh, Southeast Anesthesiology Consultants of Charlotte, and Wilmington Anesthesiology, PLLC of Wilmington) has been well received by ASA leadership, and will keep our component society very much 'in the loop' on P4P issues. The best practice implementation and measurement system of Southeast Anesthesiology has also gotten significant attention from the ASA as part of a possible P4P "tool kit." While a small cluster of ASA members think P4P is folly, the majority – like our component society – are preparing to meet the challenge, demonstrate quality care, and insure appropriate professional compensation. In December the ASA will begin to meet with representatives from the surgical community at the Surgical Quality Alliance (sponsored by the American College of Surgeons) to begin discussion of 'attribution' of peri-operative P4P metrics. The ASA will be represented at these meetings by Dr. Hannenberg and myself.

The ASA Excellence in Research Award was presented to Duke University anesthesiologist and NCSA member, David S. Warner MD, PhD. Congratulations, David!

There were two contested elections for the ASA Administrative Council: Assistant Secretary and First Vice-President. The candidates for Assistant Secretary were Timothy Quill, MD, of New Hampshire; Murray Kalish, MD, of Maryland; and Arthur Boudreaux, MD, of Alabama. All three candidates are members of the current ASA Board of Directors, and each had a large contingent of supporters. After two ballots, Dr. Boudreaux of Alabama carried the majority.

The First Vice-President of the ASA is, in essence, a vote for ASA President, as once elected, the winner moves progressively to President-Elect, and then President over the next succeeding years. This year's candidates were Jeffrey Apfelbaum, MD, of Illinois and ASA Assistant Secretary Peter Hendricks, MD, of Alabama. Both candidates have a history of distinguished service to the ASA with Dr. Apfelbaum having served as Chairman of the Committee on Intra-operative Awareness. It was an unusual election in that the outcome was uncertain beforehand, but reassuring in that the ASA would win in either case. Dr. Apfelbaum was elected, and will bring his outstanding credentials, energy and media savvy to the ASA.

Another significant appointment that involved one of our own from NCSA was that of NCSA President Richard J. Pollard, MD to the Board of Directors of the ASA Political Action Committee. Congratulations, Richard.

The NCSA was represented by the following delegates in addition to Alternate Director Frank Moretz, MD and myself: Eric W. Mason, MD, of Raleigh; Richard J. Pollard, MD, of Gastonia; Wesley B. Robinson, MD, of Charlotte; Robert E. Seymour, MD, of Raleigh; and Mark F. Newman, MD, and G. David Hardman, MD, of Durham.

In addition to Dr. Pollard's appointment, our outstanding NCSA Delegates and Alternates to the ASA HOD, we have the following NCSA Members serving on a number of ASA Committees:

- Jeffrey M. Berman, MD (Chapel Hill): Committee on Critical Care Medicine
- Philip G. Boysen, MD (Chapel Hill): Committee on Economics
- Jay S. DeVore, MD (Kill Devil Hills): Committee on Ambulatory Surgical Care
- James C. Eisenach, MD (Winston-Salem): Subcommittee on Drug Deposition; Chairman, Subcommittee on Obstetric Anesthesia & Perinatology; Committee on Research
- T. J. Gan, MD (Durham): Chairman, Subcommittee on Ambulatory and Geriatric Anesthesia; Committee on Practice Parameters; Committee on Refresher Courses; & Committee on Standards of Care
- Vincent L. Hoellerich, MD (Raleigh): Committee on Performance and Outcomes Measurement; & ASCCA Delegate to the ASA HOD
- Catherine K. Lineberger, MD (Chapel Hill): Committee on Problem-Based Learning Discussion
- Gerald A. Maccioli, MD (Raleigh): Chairman, Committee on Critical Care Medicine; Committee on Professional Education Oversight; Ad Hoc Committee on Component Society and Practice Group PACs; & Ad Hoc Committee on Professionalism
- Eric W. Mason, MD (Raleigh): Head, Section on Professional Practice
- Terri G. Monk, MD (Durham): Committee on Geriatric Anesthesia; & Committee on Performance and Outcomes Measurement
- Peggy J. Penny, MD (Chapel Hill): Committee on Young Physicians
- Patricia H. Petrozza, MD (Winston-Salem): Editorial Board for Anesthesiology Continuing Education Program (ACE)
- Earl S. Ransom, Jr., MD (Raleigh): Committee on the Anesthesia Care Team
- Kerri M. Robertson, MD (Durham): Ad Hoc Committee on Transplant Anesthesia
- Fred J. Spielman, MD (Chapel Hill): Committee on Communications
- David O. Warner, MD (Durham): Scientific Advisory Committee

If you are an NCSA member and serving on an ASA Committee not mentioned above, I apologize for leaving you off this list. Please let our Executive Director, Rebecca McGhee know about the oversight, and we will update our report. Likewise, if any NCSA members have an interest in being appointed to a specific ASA Committee please contact me directly.

As always, I thank you for the honor and privilege of serving as your ASA Director. Please do not hesitate to contact me at any time. My best wishes to each of you and your families for the holiday season.

Simulation Saturday on March 11th to Introduce a New ASA-Sponsored Educational Opportunity

Editor's Note: *Dr. Olympio is Professor of Anesthesiology at Wake Forest University, Founder and Immediate Past Director of their simulation laboratory, and Chairman of the ASA Workgroup on Simulation Education. He intends to host your visit to Wake Forest on March 11th.*

– SG

The American Society of Anesthesiologists, through its Workgroup on Simulation Education, is developing an ASA-sponsored national anesthesiology simulation CME program. Spurred by the successful, though small-scale 15-year history of simulation education development in our residency training programs, the need for practice-based learning in MOCA™ for the American Board of Anesthesiology, and the adoption of national simulation programs in Germany and Israel, the ASA convened this 19-member Workgroup in December 2004. Since that time, the Workgroup has studied the interest, feasibility, and methods of developing such a program, and will introduce the project to clinical anesthesiologists on **Simulation Saturday**, March 11th, 2006, at centers across the United States.

The need for simulation CME was outlined in the recent article, "Innovation and the Future in Continuing Medical Education (CME)" published in the September 2005 issue of the ASA Newsletter (1). That article describes the already-mandated use of simulation in surgical carotid stent training, it makes reference to airline and military uses of simulation training, and it describes a foundation for national promotion by the Institute of Medicine. After certification, clinicians rarely undergo continual systematic training and rehearsal with feedback assessment, to refine their clinical skills. This effort by the ASA is just the beginning of a response to that need. Practicing anesthesiologists have discovered the excitement and value of team training in simulation for the past 4 years, as the ASA conducted four full-scale simulation workshops. Those workshops were led by North Carolina's own Dr. Sarah Gillespie, current Director of the Patient Simulation Laboratory at Wake Forest University Baptist Medical Center, and myself, as Founder and former Director of the laboratory. You may have completed the "ASA Member Poll on Simulation CME" that was electronically distributed October 10th. Through that survey, with nearly 1,400 responses, the Workgroup preliminarily learned that only 22% had participated in simulation CME, (of which 94% indicated a positive experience), while 81% of all respondents were interested in future simulation CME. Respondents indicated their learning preferences, with 60% favoring common events, 89% favoring rare events, and 81% wanted to learn teamwork and crisis resource management skills. Regarding types of technical training, only 53% desired fiberoptic bronchoscopy but 79% wanted invasive airway management training; 55% requested TEE, 72% wanted regional anesthesia training, and 68% suggested ultrasound-guided CVC. Of note, only 49% voted for multidisciplinary training, only 51% were in favor of being videotaped, but surprisingly, 71% wanted formal assessment of their performance. The highest percentage (83%) wanted local training, and only 2% said they were uncomfortable with, or not interested in simulation.

Michael A. Olympio, MD

The Workgroup was excited to learn about the favorable opinions of its colleagues, and wanted to create an "ASA Simulation Registry" to provide its members with a database of simulation learning opportunities. That registry is now a reality, and may be found at the **www.asahq.org** homepage. Practicing clinicians, residents, and academics alike, are all encouraged to explore that resource, which currently lists and describes 15 centers and vendors, providing links to their own websites. One can search the database by location, names of leadership, courses offered, etc. The ASA expects the database to grow considerably as developing centers and manufacturers of simulation tools discover the merits of advertising their products.

Traditionally, simulation education in anesthesia has been limited to the medical student and residency programs, and many existing, even leadership centers, have not yet opened their doors to the community in providing CME. One might notice that the registry is deliberately open to all anesthesia simulation centers, regardless of their current ability or experience in offering CME, since they may eventually respond to the needs and feedback of the community. It is important to note that **Simulation Saturday** on March 11th is provided as a promotional courtesy of the participating centers, without charge to attendees, and may or may not offer CME. Soon, the ASA will activate the URL **www.asahq.org/simsaturday.htm** for its members to locate the Simulation Saturday site nearest them and to receive details and contact information on how to register for the introductory program. These programs will typically include a tour and introduction to the facility, and a very enjoyable, dynamic, and interactive learning session. Simulation centers maintain strict confidentiality and do not report anyone's performance to any organization or body without prior acknowledgement and permission.

International and multidisciplinary members of the simulation community will meet again on January 14-17, at their 6th Annual *"International Meeting on Medical Simulation*" at the beautiful Sheraton San Diego Hotel and Marina, sponsored by the Society for Medical Simulation,

located online at **www.SocMedSim.org**. You, as a practicing anesthesiologist, are highly encouraged to attend this meeting if you have any interest in the fascinating and explosive growth in medical/surgical/nursing/anesthesia simulation education. The ASA Workgroup will present a report of its progress at that meeting, and will inform and solicit other simulation centers to participate in **Simulation Saturday**.

In summary, simulation education in anesthesiology seems to be highly desired by its membership and is enthusiastically supported by the ASA and its Workgroup. Further advertising and development among simulation centers is necessary to create a high quality learning opportunity for ASA members. These centers plan to begin that effort with a voluntary introductory program, **Simulation Saturday**, on March 11, 2006. You are encouraged to check the ASA website as further details emerge. Both Wake Forest and Duke Universities, and perhaps the University of North Carolina, are participating in the program. Stay tuned for further announcements and mark that calendar now.

1. Olympio MA and Cole DJ. "Innovation and the Future in Continuing Medical Education (CME)" *ASA Newsletter* 2005; 69:32-33.

Welcome New Members

Active

Thomas Amsler, DO, New Bern
Solomon Aronson, MD, Chapel Hill
Timothy Burke, MD, Denver
Brittany Clyne, MD Charlotte
Christopher Dixon, MD, Wilmington
Judson Evans, MD, Wilmington
Jeffrey Gengler, MD, Winston-Salem
Neil Gillespie, MD, Waxhaw
Hans Hansen, MD, Statesville
Andrew Hart, MD, Asheville
Ramesh Kethavath, MD, Lewisville
David McDonagh, MD, Morrisville
Abigail Melnick MD, Durham
Thomas Mulford, MD, Asheville
Vinod Mungalpara, MD, Lexington
John Roper, MD, Concord
Michael Russell, MD, Kill Devil Hills
Iain Sanderson, MD, Durham
Elizabeth Trask, MD, Asheville
Miller Van Vliet, MD, Wilmington
Wade Weigel, MD, Durham

Retired

Margaret Carter, MD, Winston-Salem
William Greenberg, MD, Monroe
Mahmood Hosseinian, MD, Charlotte
David Maynard, MD, Greensboro
Kenneth Olsen, MD, Wake Forest

Resident

Idi Allen, MD, Durham, NC
Chris Beadles, MD, Durham
Alecia Blake, MD, Durham
Kevin Borders, MD, Winston-Salem
Robert Cinclair, MD, Durham
Tameta Clark, MD, Durham
Newell Daly, DO, Winston-Salem
Michael Danekas, MD, Chapel Hill
Joshua Dooley, MD, Chapel Hill
Michael Dudley, MD, Winston-Salem
Timothy Gruebel, MD, Winston-Salem
Brian Hacker, MD, Winston-Salem
Paul Harkins, MD, Winston-Salem
Lindsay Hill, MD, Chapel Hill
Matthew Hoopes, MD, Winston-Salem
Freeman Jackson, MD, Chapel Hill
Dominika James, MD, Chapel Hill
Steven Kuester, MD, Chapel Hill
Stephen Kushins, MD, Durham
Anjolie Laubach, MD, Durham
Jason Lemons, MD, Durham
Stephen Markweich, MD, Chapel Hill
Aaron McClure, DO, Clemmons
John McDowell, MD, Kernersville
Brian Paitsel, MD, Winston-Salem
William Reese, Jr., MD, Winston-Salem
Erin Rose, MD, Durham
Robin Rosenbleeth, MD, Winston-Salem
David Saliba, MD, Clemmons
David Sanders, MD, Winston-Salem
Meredith Sanders, MD, Chapel Hill
Hedwig Schroeck, MD, Chapel Hill
Nevin Shrimanker, MD, Winston-Salem
Elee Stewart, MD, Chapel Hill
Ross Thormahlen, MD, Durham
Shafonya Turner, MD, Chapel Hill
Stephanie Vanterpool, MD, Chapel Hill
Sylvia Wilson, MD, Chapel Hill

About the NCSA

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Current NCSA Officers

President: Richard J. Pollard, MD, Gastonia

President-Elect: Thomas R. Hill, MD, Hickory

Secretary/Treasurer: Wesley B. Robinson, MD, Charlotte

Secretary/Treasurer-Elect: Scott K. Garrison, MD, Raleigh

Immediate Past President & ASA Director: Gerald A. Maccioli, MD, Raleigh

ASA Alternate Director: Frank H. Moretz, MD, Asheville

NCSA

NORTH CAROLINA SOCIETY
OF ANESTHESIOLOGISTS

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2006 DATES TO REMEMBER

May 1st - 3rd
ASA LEGISLATIVE CONFERENCE
The J. W. Marriott
Washington, DC

September 29th - October 1st
NCSA ANNUAL MEETING
The Embassy Suites at Kingston Plantation
Myrtle Beach, SC

October 14th - 18th
ASA ANNUAL MEETING
Chicago, IL