



Based on a design created by Paul M. Wood, M.D., in 1932, the ASA seal has represented the specialty's heritage and commitment to vigilance and high standards for safe patient care. Though officially adopted in black and white, the seal will soon be rendered in color.

EDITORIAL BOARD Editor Mark J. Lema, M.D., Ph.D. Associate Editors

Douglas R. Bacon, M.D. Lawrence S. Berman, M.D. David E. Byer, M.D. John A. Cooley, M.D. Norig Ellison, M.D. N. Martin Giesecke, M.D. Stephen H. Jackson, M.D. Noel W. Lawson, M.D. Jessie A. Leak, M.D. Paul J. Schaner, M.D. Jeffrey H. Silverstein, M.D. R. Lawrence Sullivan, Jr., M.D. Editorial Staff Danica M. Longe

Denise M. Jones David A. Love Roy A. Winkler Karen L. Yetsky

The ASA NEWSLETTER (USPS 033-200) is published monthly for ASA members by the American Society of Anesthesiologists, 520 N. Northwest Highway, Park Ridge, IL 60068-2573. E-mail: mail@ASAhq.org Editor: Newsletter_Editor@ASAhq.org Web site: http://www.ASAhq.org Periodical postage paid at Park Ridge, IL, and additional mailing offices.

POSTMASTER: Send address changes to the ASA NEWSLETTER, 520 N. Northwest Highway, Park Ridge, IL 60068-2573; (847) 825-5586.

Copyright ©2000 American Society of Anesthesiologists. All rights reserved. Contents may not be reproduced without prior written permission of the publisher.

FEATURES

CONTENTS

Our Seal of Approval: Maintaining Vigilance & High Standards

8

11

13

The Genesis of the American Society of Anesthesiologists Bradley E. Smith, M.D.

Our Society's Seal: Its History and Significance Frederick J. Spielman, M.D.

ASA — Leadership in Medicine: The National Halothane Study *R. Dennis Bastron, M.D.*

The Wood Library-Museum — Reflecting ASA Values Douglas R. Bacon, M.D.

. Bacon, M.D.

ARTICLES

House of Delegates to		N
Convene October 15	24	H
Eugene P. Sinclair, M.D.		a
Postoperative Visual		H A
Loss Data Gathered		t
and Analyzed	25	H

Lorri Anne Lee, M.D.

Anesthesiology,
Anesthesiologist,5Anesthetics and
Anesthetist15Patrick P. Sim, M.L.S.

Fires and Explosions19Kim E. Turner, M.D.

21

ASA Antitrust Suit 1975-1979 Jess B. Weiss, M.D.

	Malignant	
24	Hyperthermia	
	and the Malignant	
	Hyperthermia	
	Association of	
	the United States	28
25	Henry Rosenberg, M.D.	

DEPARTMENTS

Ventilations	1	Practice Management	33
Administrative Update	2	Subspecialty News	36
Washington Report	3	Residents' Review	38
Erratum	7	ASA News	39
What's New in	31	FAER Report	40

The views expressed herein are those of the authors and do not necessarily represent or reflect the views, policies or actions of the American Society of Anesthesiologists.

SUBSTANCE ABUSE HOTLINE

Contact the ASA Executive Office at (847) 825-5586 to obtain the addresses and telephone numbers for state medical society programs and services that assist impaired physicians.

VENTILATIONS

Anesthesiology Aphorisms: Chicken Soup for the Doctor's Soul

I happen to like aphorisms because they express a piece of practical wisdom in a few memorable words. Aphorisms are one-sentence philosophical guideposts for everyday living and career-planning. For those who have adult children, I would predict that a few over-used aphorisms (or "adages" or "maxims") were part of one's repertoire of parental witticisms.

Every summer, just prior to my children returning to academic studies, I repeat the same familiar admonitions in rhyme and verse. I have also used these same adages in an attempt to keep me in focus and moving forward in my career. So I thought that I would share a few "brilliant" maxims with you in the hope that others might read them and possibly add to the list. To my knowledge, I cannot attribute any of these sayings to my own insightfulness. Nonetheless, I feel confident in saying that if we all routinely reflected on these guideposts and placed them into practice, life could be more easily managed.

"Lema's Lessons for Living:"

- Proper Planning Prevents Poor Performance (The five Ps).
- "Deciding" is not "doing."
- Just Do It! (variation of item 2).
- Don't overpromise and underdeliver.
- Always say "yes" until you have a good reason to say "no."
- Seek first to understand, and then be understood (Covey).
- Seek win-win solutions (Covey).
- Begin with the end in mind (Covey).
- You leave this world with only your reputation; don't be so willing to sell it cheaply.
- Believe any excuse, but trust yourself.
- · Seek to become, not to acquire.
- · Believe nothing you hear and half of what you see.
- First things first.
- No decision is deciding not to do it.
- Lead, follow or get out of the way.

Here are a few for resident "training:"

- To care for patients without reading is like sailing without a map, but to read without caring for patients is not sailing at all (Osler).
- Care always, comfort often, cure sometimes.
- · Common illnesses commonly occur.
- When you hear hoofbeats think of horses, not zebras (or unicorns!).
- You can't anesthetize a rumor.
- · Anesthesiologists don't get ahead, they only break even.
- Geriatric patients can hurt you a lot more than you can hurt them (House of God).

Continued on page 37



Mark J. Lema, M.D., Ph.D. Editor

ADMINISTRATIVE UPDATE

Bean Counters

Orin F. Guidry, M.D., Treasurer

The term "bean counter" made its way into the dictionary in 1975. It is defined as a person involved in corporate financial decisions and especially one reluctant to spend money. It is moderately derogatory as they are usually considered to be "nerds" or "wonks" and supposedly impede progress by focusing too intently on the bottom line.

I am your bean counter.

I am not alone and have plenty of help. I am guided by the Section on Fiscal Affairs, which consists of the Assistant Treasurer and the members of the Committee on Finance of the Board of Directors. The current members are Richard P. Alberson, M.D., Jan Ehrenwerth, M.D., Roger W. Litwiller, M.D., Jimmie D. Moore, M.D., Roger A. Moore, M.D., and James

M. West, M.D. The technical aspects of the "bean counting" are done by the experts in the ASA Executive Office under the direction of Susan M. Rogowski, ASA Director of Finance. We have outside help from Arthur Andersen LLP to make sure that we are counting the beans correctly, and Chicago Capital Management and the Northern Trust Company help to make our beans grow.

Nevertheless, I am the bean counter responsible to you. Last year my column said, "On the surface, the budgeting process seems like a tedious, prosaic and arcane exercise. However, budgets are not bureaucratic or accounting make-work. A budget is the master plan of how an organization intends to expend its resources and how it orders its priorities."

ASA has spent a lot of time on a strategic plan, and the budget is the financial tool that empowers that strategic plan. The goals of the ASA Strategic Plan are: 1) continue to provide education to members and improve public education as it relates to anesthesiology, 2) create the mechanisms to support practice management programs, improve communications and marketing of the specialty and identify and promote professional opportunities, 3) advocate for the needs of patients, the public and ASA members with state and federal governmental entities, third-party payers, consumer groups and other professional organizations, 4) support or conduct research to foster optimal patient care and advancement of the specialty and 5) create an efficient



Orin F. Guidry, M.D.

and effective governance and administrative system that supports member services, information needs and future planning. The criteria used to critically examine the budget should be how well the budget accomplishes the strategic plan goals.

Last year, I also indicated where you could find specific information about ASA finances. This year, I would like to give you some general information about where our revenue comes from and the extent of our expenses. In other words, where the beans come from and where the beans go to (I know better than to end a sentence with a preposition, but I could not resist).

Major sources of net income are member dues, the Annual Meeting, the journal *Anesthesiology*, the Self-Education and Evaluation (SEE) program and interest

income. There are other line items in the income category on the financial statements, but these other programs produce little *net* income.

Dues are the single largest income source, providing over half of the total. In the last 20 years, our dues income has increased five-fold, from \$1.6 million to around \$8.5 million.

The Annual Meeting may be one of the few examples of a "free lunch." It usually nets over \$1 million, and registration is free for members. This represents a remarkable bargain for the membership. The SEE program is also a marked success because it not only is a great member benefit but also produces an annual net income of about \$300,000 - \$400,000.

Another source of revenue is the Society's share of the royalties for the publication of the journal *Anesthesiology*. This amount is variable and somewhat unpredictable from year to year depending on the journal's activities. Michael M. Todd, M.D., has met with the Section on Fiscal Affairs in the past and is keenly aware of the impact of the journal's performance on the Society's finances. He does a superb job of producing the preeminent journal in the specialty while keeping an eagle eye on the bottom line.

The Society's fixed income investments usually yield about \$900,000, and this has traditionally been used for

Continued on page 23

Action on Health Issues in Doubt as Congressional Recess Begins

Michael Scott, Director Governmental and Legal Affairs

On July 28, Congress recessed for its Labor Day break, leaving a host of health-related issues unresolved — most prominently adoption of a managed care reform legislative package, creation of a prescription drug benefit program for seniors, antitrust reform permitting collective physician action, passage of pain relief promotion legislation and partial restoration of provider reimbursement cuts imposed by the Balanced Budget Act of 1997. Of these, only the last appears to have any chance of passage before adjournment, now projected for early October.

Managed Care

The stalemate over effective managed care legislation, now moving into its 10th month following House passage of the Norwood-Dingell bill last October, continues principally to derive from the incapacity of the two congressional bodies to agree on two fundamental issues: scope of the protected population and liability of managed care organizations for improper coverage denials. The House-passed bill covers all beneficiaries under private plans; the Senate bill would limit coverage to beneficiaries under plans that are self-funded by employers. The House bill would also expand legal remedies for aggrieved beneficiaries; the Senate bill would not.

Failure of conferees on the two bills to reach agreement (Democratic conferees have not even participated in discussions) prior to the August recess further clouds the future for any managed care reform legislation in this session of Congress. President Clinton, moreover, has promised a veto of any measure that does not expand beneficiary protections — all of which suggests that the likely fate for this issue is its inclusion in the election season debate following congressional adjournment.

Prescription Drug Benefit

Even more doubtful are chances for passage of legislation providing a drug benefit package for senior citizens. Here, GOP and Democratic legislators are fundamentally divided, not by the concept of a benefit, but on how to provide it and at what cost. Republican proponents would approach the issue by providing subsidies to the prescription drug industry; Democrats would create a new benefit under the Medicare program.

On July 27, Senate Finance Committee Chairman William V. Roth, Jr. (R-DE), floated a compromise provision by which he attempted to bridge the gap between the two approaches, but the new proposal was greeted with little enthusiasm. Although the President has urged Congress to pass drug benefit legislation before adjournment, it appears unlikely that in the time remaining, the two parties will bridge the gap between their two differing philosophic approaches. However, the concept of a prescription drug benefit for seniors "has legs," as those inside the Beltway are fond of saying, and if the economy remains strong, the likelihood of legislation in the 107th Congress will be high, no matter which party controls the White House and the two bodies of Congress.

Antitrust Reform

As noted in my August column, the House passed the Quality Health Care Coalition Act (H.R. 1304) on June 30 by a wide margin. The bill would amend the federal antitrust laws to allow health care professionals, including physicians, to negotiate collectively with managed care plans and other insurers. Passage of the bill was strongly favored by organized medicine, including ASA.

As of this writing, a companion bill has not been introduced in the Senate, and given the expressed opposition to the bill by Senate Majority Leader Trent Lott (R-MS) and the Administration, prospects for the bill becoming law are, unfortunately, small.

Pain Relief

No Senate action has occurred on the Pain Relief Promotion Act (H.R. 2260) since the bill was reported favorably, with amendments, by the Senate Judiciary Committee in late May. The amended bill is supported by ASA, the American Medical Association and a host of other physician organizations concerned with effective pain relief for the terminally ill. As of this writing, Senator Don Nickles (R-OK), Assistant Senate Majority Leader and the principal proponent of the bill, has given no indication when he will seek to bring the bill to the Senate floor. Senator Ron Wyden (D-OR) has threatened to attempt a filibuster if the bill is taken up by the Senate, and its future in the 106th Congress is at this point uncertain.

Medicare "Givebacks"

Despite the rather bleak prospects for other health-related measures, momentum is clearly growing for legislation to ameliorate the unanticipated cuts in Medicare provider reimbursement brought about by passage of the Balanced Budget Act of 1997. The only issue seems to be the size of the package: President Clinton has already requested \$21 billion over five years for hospitals, nursing homes,

COMMITTEE ON WAYS AND MEANS U.S. HOUSE OF REPRESENTATIVES WASHINGTON, DC 20515-6348

July 18, 2000

The Honorable Jacob J. Lew Director, Office of Management and Budget Old Executive Office Building, Room 252 Washington D.C. 20503

Dear Director Lew:

We understand that OMB is now reviewing a proposed HCFA rule relating to the issue of physician supervision of nurse anesthetists during the administration of anesthesia.

As cosponsors of H.R. 2002, the Anesthesia Outcomes Study Act, we urge that before any rulemaking is finalized, a comparative outcomes study be done by the Agency for Healthcare Research and Quality to determine whether the draft rule change could erode patient safety. HHS has conducted no new anesthesia outcome studies since it rejected a similar proposal in 1982. Late June's publication of a University of Pennsylvania anesthesia outcome study by a team of research scientists led by Jeffrey Silber, M.D., Ph.D., only heightens the urgency of having an AHRQ-sponsored study done on this life-and death issue for Medicare and Medicaid patients. The Silber study, which is attached, found increased mortality rates among Medicare patients when the anesthesia was <u>not</u> provided or directed by a physician anesthesiologist.

This study raises concerns but is by no means definitive. Given the data presented by the study, there should be an HHS study before the final rulemaking on whether physician supervision of nurse anesthetist services does indeed make a difference. If it does, then maintaining the current rule would be appropriate; if it does not, then a rule change could be made. Patient outcome data should govern. We, therefore, urge that OMB send back the draft rule change to HHS, and require HHS to proceed with a comparative study immediately.

Thank you for your help on what could be a life-and-death issue.

Sincerely,

(Signatories included Congressmen Rangel, Stark, Baca, Thurman, Traficant, McCarthy, Hoyer, Matsui and Berman)

managed care organizations and home health agencies, but industry representatives have their sights set at least twice as high. These estimates were fueled by the most recent budget surplus expectations announced by the Congressional Budget Office — half again as much as the \$1.4 trillion over 10 years estimated last January.

Development of a "giveback" measure would provide a ready vehicle for two initiatives supported by ASA, resolution of the Medicare physiciansupervision issue and halting of the Medicare four-year practice expense transition from old values to new "resource-based" values, now in its second year. ASA is teamed with a host of surgical specialties in support of the latter initiative that would allow the transition to continue enhancing values for primary care codes while leaving declining anesthesia and surgical code values at their midway point.

Physician Supervision Issue

On the physician supervision issue, ASA received another congressional boost in July in the form of a letter to the Office of Management and Budget from nine Democrats headed by Congressmen Charles B. Rangel (D-NY), ranking minority member of the Ways and Means Committee, and Fortney "Pete" Stark (D-CA), ranking member of its Health Subcommittee (see box on this page). Also signing the letter were Joe Baca (D-CA), Howard Berman (D-CA), Steny Hoyer (D-MD), Karen McCarthy (D-MO), Robert T. Marsui (D-CA), Karen Thurman (D-FL) and Jim Traficant (D-OH).

ASA Washington Office • 1101 Vermont Ave., N.W., Suite 606 • Washington, DC 20005 • (202) 289-2222 • mail@ASAwash.org

The Genesis of the American Society of Anesthesiologists

Bradley E. Smith, M.D.

t the outset of the 21st century, ASA has become the world's largest anesthesia society with more than 36,000 members and has been responsible for many advances in the worldwide practice, science and teaching of anesthesiology. Nevertheless, ASA today finds itself beleaguered with demands and restrictions from business, legislature and the courts that seem to directly attack our profession. In this time of stress, we can perhaps extract some solace, and certainly tremendous pride, from a review of the tribulations of our professional forebearers who established and nourished ASA. One will not be surprised to see that the establishment and maintenance of professionalism in the practice of anesthesiology was a central theme of our predecessors, even before ASA was established!

Depending on definitions and sources, the first full-time anesthesia physicians in the United States may have been Isabella Herb, M.D., of Chicago and the Mayo Clinic; H.O. Hermance, M.D., of Philadelphia; Mary Botsford, M.D., of San Francisco or Thomas Bennett, M.D., of New York City. At any rate, there were precious few physicians specializing in anesthesia even 50 years after the discovery of ether, and their numbers continued to expand slowly for another 50!

In 1912, James T. Gwathmey, M.D., published that American mortality rates for anesthesia were one death in 5,623 anesthetics, three-fold greater than in the United Kingdom where physician anesthetists by then were on duty in almost all major hospitals. He was the first to widely publicize his opinion that the unfavorable comparison was due to the lack of training of physicians in the United States and the common use of nurses to administer anesthesia.

In 1909, he made a clear statement of the problem of professionalism in anesthesiology that could almost have been written today. He wrote, "...a curettage performed even by a trained nurse is by statute a crime punishable by imprisonment. Yet there is less reason that a nurse...should administer an anesthetic than to attempt a curettage." During these early years, the surgeon paid either a physician anesthetist or an "ether nurse" from his surgical fee. Many physicians who desired to practice anesthesia could not become established under this abusive system. Gwathmey also stated that "the anesthetist should [...as was already the practice in the United Kingdom] send his bills directly to the patient, thus establishing his

identity and independence. Under this system, the anesthetist can stand as high in the profession and make as good a living as other physicians."

The world's very first anesthesiology society was the London Society of Anaesthetists, formed in 1893. In 1905, Adolph F. Erdmann, M.D., and eight other New York physicians formed the first anesthesia society in the United States, the Long Island Society of Anesthetists. Its purpose was "to promote the art and science of anesthetics." In 1912, this society reconstituted itself into the New York Society of Anesthetists (NYSA), whose first president was Dr. Gwathmey. (Dr. Gwathmey also was simultaneously president of the American Association of Anesthetists, a direct antecedent of the International Anesthesia Research Society.)

In the next two decades, there were almost as many anesthesia societies as anesthesiologists, each with regional, national or international interests. Two strong factions emerged. The first group was those who would totally abstain from any form of recognition or collaboration with nurse anesthetists, led by Francis H. McMechan (who also established *Anesthesia & Analgesia* in 1922). The other group, centered in the NYSA, identified with Paul M. Wood, M.D., and others and favored maintenance of an educational and supervisory role of the physician for nurse anesthetists. They eventually received the support of Ralph M. Waters, M.D., and John S. Lundy, M.D. As a result, the NYSA became in 1936 (after some name adjustment later) the American Society of Anesthesiologists, Inc. that we know today.

Also in 1936, for the first time, the "hospital standards" issued by the American College of Surgeons stated: "It is unfortunate that a large number of hospitals fail to recog-

Bradley E. Smith, M.D., is Professor of Anesthesiology, Vanderbilt University, Nashville, Tennessee.



nize the necessity and value of a well-organized department of anesthesia. As the administration of anesthesia is generally conceded to be the practice of medicine, it is only reasonable to expect medical supervision." diethyl ether. There were no muscle relaxants in clinical use until 1942. But after years of pleading with others, Lewis H. Wright, M.D., persuaded Harold R. Griffith, M.D., of Montreal, Quebec, Canada, to introduce the first

A major problem that slowed the recognition of anesthesiology as a specialty was the astounding official attitude of the American Medical Association (AMA). For over 35 years, the AMA held the position that anesthesiology had "not progressed yet enough" to be recognized as a section of the AMA! Gwathmey in 1912, and again in 1921, was not successful in his attempts to achieve AMA recognition for the specialty, but with the diplomatic suggestions by Thomas D. Buchanan, M.D., the help of surgeon Erwin Schmidt, M.D., of Wisconsin (who had been solicited for help by his friend Waters) and with the urging of Lundy, he finally overcame 35 years of AMA resistance. Anesthesiology became a subsection of the Section of Surgery of the AMA in June 1940. Due to the welcome assistance of the American Board of



James T. Gwathmey, M.D.

Surgery (ABS), the American Board of Anesthesiology (ABA) was established as a "sub-board" of the ABS in 1938 and as an autonomous "board" on August 31, 1940.

The advent of World War II found anesthesia practice little changed for over 100 years. A few leaders such as Gaston Labat, M.D., had been experimenting with regional anesthesia and others were beginning to explore thiopental (Dr. Lundy) and cycloproprane (Dr. Waters and Dr. Rovenstine). However, in 1941 the overwhelming majority of anesthetics in America were still being administered with muscle relaxant, d-tubocurarine (curare), into clinical practice.

On the eve of World War II, ASA was composed of only about 500 members, and the ABA had only 105 diplomates. By 1943, our military services still contained fewer than 50 physicians with any training in anesthesiology. But the realities of war brought revolution to the practice of anesthesiology. Early reports indicated that a startling proportion of battle deaths at Pearl Harbor might have been avoided by better application of anesthesiology techniques that were then already available. This and other battle experience led the War Department to appoint a system of consultants for anesthesiology in the various war theaters. These men included Ralph M. Tovell, M.D., Henry K. Beecher, M.D., Emmanuel M. Papper, M.D., and other

outstanding early experts. They were given broad powers, and they literally dragooned many untrained young physicians into brief anesthesia training, followed by intense battlefield anesthesia experience.

The rewards of this rough-and-ready solution included not only a notable decrease in direct anesthesia deaths at the battlefront, but also the creation of a host of surgeons who now demanded physician anesthesia and hundreds of other newly inspired young doctors who clamored for further anesthesia training. During the four years of World War II, total membership in ASA skyrocketed to 1,977. By 1946, 739 were still in active military service, but there were still only 300 diplomates of the ABA.

In the immediate post-war period, new problems appeared on the national scene. Publications suggested that death due to anesthesia in American civilian hospitals was increasing rapidly and may have reached one in 1,600 anesthesia administrations. This rate was three times worse than that reported by Dr. Gwathmey in the United States 40 years previously! This new danger, alleged by Dr. Beecher and others, was due to a general ignorance of the dangers of the newer anesthetics and muscle relaxants. These findings cried out for the establishment of better anesthesia training, research into new agents and techniques and greater emphasis on professional medical participation in anesthesia care.

Thus the first annual meeting of ASA in St. Louis, Missouri in 1948 found a strong new organization with real problems to solve. The amazing successes of ASA in addressing these problems in the second half of the 20th century demonstrate the mature exercise of professionalism by this Society. Sustained and effective programs of ASA have encouraged and facilitated scientific research; improved relationships with and recognition by other physicians, government and the public; created and supported innovative contributions to medical education; encouraged and facilitated new clinical advances in the delivery of health care; and have established bellwether programs for effective quality control and patient safety. Many of these ASA programs have been used as models by other medical organizations and by government.

Finally, let us all share deep gratitude and respect for those who have so valiantly struggled step by step to establish ASA and, through it, to improve both our lot and that of humankind!

Erratum

In the June 2000 *NEWSLETTER* ("Informed Consent: Patterns of Liability from the ASA Closed Claims Project," by Robert A. Caplan, M.D.), two figures in Table 1 were inadvertently reversed. The table should have read:

Table 1: Liability of Profile Cases with Informed Consent as a Litigation Issue

	Informed Consent	
	Appropriate (n = 22)	Less than Appropriate (n = 16)
Death, brain damage or permanent injury	4 (18 %)	5 (31 %)
Payment to plaintiff	6 (27 %)	11 (69 %)
Range of Payments*	\$7,500 - \$400,000	\$6,500 - \$1,800,000
*Note: Claims with no payment or missing payment data were excluded.		

Our Society's Seal: Its History and Significance

Frederick J. Spielman, M.D.

The seal of ASA depicts the risks and goals of anesthesia. It illustrates what anesthesiologists do and how we accomplish our responsibilities. The seal is on the ASA

Directory of Members, our membership card and the covers of *Anesthesiology* and the ASA *NEWSLETTER* [Figure 1].

The emblem of ASA had a humble beginning, making its first public appearance at the West End Tavern in New York City on April 13, 1932, at the Annual Meeting of the New York Society of Anesthestists.1 According to the one-page report of the gathering, after a steak dinner was served to 41 members, the meeting was called to order. The Secretary-Treasurer, Paul M. Wood, M.D., reported that 60 members were "paid up in full for the current year" and that the Society had \$199.74 in cash at Cliffside Park National Bank in New Jersey. A written document stated, "The Society having enjoyed the food and the

meeting room adopted a resolution to continue the practice of meeting here. The cost of the dinners not to exceed \$1 each."

Under new business, the "seal of the Society" was presented by Dr. Wood, its designer. He explained the significance of the pilot wheel, perfect circle, shield, stars, clouds, moon, ship, sea and lighthouse: *The patient is represented as a ship sailing the troubled sea with clouds of doubt and waves of terror. During a voyage through the realm of the*



Fred J. Spielman, M.D., is Professor, Department of Anesthesiology, University of North Carolina School of Medicine, Chapel Hill, North Carolina. He received a Wood Library-Museum Fellowship in 1993.

Figure 1



Seal of the American Society of Anesthesiologists

unknown, the patient is guided by the skillful pilot (the anesthetist) with constant and eternal (stars) vigilance (motto of the Society) by his dependable (lighthouse)

> knowledge of the art of sleep (moon) to a safe and happy outcome. The circle denotes the unity of a closed group.

> In a letter to Winthrop Hall, M.D., on June 5, 1961, Dr. Wood wrote that colors were suggested for the seal but never adopted. He wished to use silver for the stars, gold for the moon, gray and black for the clouds, brown for the lighthouse base, white for the shaft, white for the beams, blue for the ship, brown for the pilot wheel, a pale medical green for the background and black for the lettering.² This author's wish is that in the near future, the colored version of the seal will receive official approval.

> Wood's interest in symbolism and esthetics was largely the result of the influence of his mother, who was a

professor of religious art and architecture. Discussions about art and heraldry (the science and art of coats of arms) among students and professors filled the Woods' home. Both mother and son were avid and passionate collectors of books, pictures, stamps and coins. Dr. Wood roamed art galleries and bookstores of New York City. Early in his career, he dreamed of forming a library and museum devoted to anesthesia, and just eight years after completing his internship at Roosevelt Hospital, he housed — in his apartment — the New York Society of Anesthesiologists-ASA Library Museum. Dr. Wood's lifetime contribution to anesthesiology was honored in 1949 when the ASA established a nonprofit corporation known as the Wood Library-Museum of Anesthesiology, located at the ASA headquarters.

Why are the dates "1905" and "1936" on the seal, and how did the symbol of the New York Society of Anesthetists come to be the seal of ASA? On October 6, 1905, a group of anesthesiologists met at the Long Island College Hospital in Brooklyn, New York, and convened the first meeting of the Long Island Society of Anesthetists, whose goal was to "promote the art and science of anesthetics." The yearly dues were \$1. By 1911, there were 23 members, and Erdmann E. Woolsey, M.D., President of the Society, suggested that the organization change its name to the New York State Society of Anesthetists to emphasize the fact that members were no longer just from Long Island but also from the New York metropolitan area. The new organization's purpose was "...the advancement of the Science and Art of Anesthesia." Dues were raised to \$3 per year and soon the membership grew to 50, including anesthesiologists outside New York. In 1936, four years after Dr. Wood suggested the establishment of a seal, he promoted the idea that a committee be formed to investigate the need for national identification and appreciation of anesthesiology. By an overwhelming majority, the members voted to change their organization's name to the American Society of Anesthetists. In 1944, Dr. Wood once again proposed a name change for the association, and the American Society of Anesthesiologists was born.³

Seals, coats of arms, symbols, badges, buttons, crests, logos, flags and stamps have been employed for thousands of years to tell stories, identify people, create illusions of fame and wealth or separate the masses from royalty. The word seal (from the Latin, *sigillum*) denotes the result of the impact of a hard engraved surface upon a softer material such as clay or wax, producing an image in relief. Seals have been unearthed in Syria and Egypt from the 4th millennium B.C.E. Emblems originated when most people

were illiterate but were capable of recognizing bold and striking designs. The emblems were quite artistic, containing detailed drawings of plants, animals, musical instruments and chariots. Prominent citizens, those with a high rank in the army, owners of businesses and royalty had their own seals. The seals of merchants and craftsmen often depicted the tools connected with their trade.

Starting in the 12th century, the use of municipal seals was an important part of a town's independence. The seals of maritime villages often depictFigure 2



Caduceus, the staff of Hermes and Mercury

ed a ship; seals of inland cities featured a picture of the town itself. By the 13th century, seals were used by all classes, including small landowners. Simple seals could be bought ready-made. The use of personal seals declined as more people were capable of signing their names.

Heraldry was vital to differentiate friend from foe on the battlefield. A warrior in full armor was unrecognizable, so a distinctive coat was fashioned to be worn over his armor. This "coat of arms" made soldiers identifiable. In the 20th century, corporate seals (logos) are still popular and essential, signifying that we have come full circle. Once again, reading is not necessary — just the ability to recognize bold colors and the image.

The medical profession is associated with two seals, the staff of Aesculapius and the caduceus [Figure 2]. Aesculapius, the son of Apollo, is the Greek god of medicine and healing. He is associated with a serpent, usually twined around a staff, a traditional symbol of healing and rejuvenation as well as a powerful symbol of knowledge. He is frequently shown wearing a long robe and sandals. Hygeia (hygiene), goddess of health, and Panacea (cure-all, healer of the sick) are his daughters. His sons, Podalirius and Machaon, are also physicians. The seal of the American Medical Association shows a snake entwined around the staff of Aesculapius. Medicine's high profile symbol is the caduceus, the staff of Hermes and Mercury. The caduceus was not associated with the healing profession until Sir

Figure 3



Seal of the Royal College of Anaesthetists

William Butts, physician to Henry VIII, used it on his crest. Two versions of the caduceus are used, a single snake twined around a winged staff (Association of American Medical Colleges, Canadian Medical Association) or a two-snaked staff (American Medical Women's Association, American Veterinary Medical Association).⁴

A detailed examination of the seals of various medical societies reveal interesting symbolism, important history and visual attractiveness. The emblem of the Royal College of Anaesthetists (RCA) contains poppy plants (general anesthesia and analgesia), cocaine leaves (local anesthesia) and serpents (power of healing). John Snow, M.D. (1813-1858), and

Joseph Clover, M.D. (1825-1882), are on the seal. Snow holds his monograph *On the Inhalation of Ether in Surgical Operations*. Clover holds a portable ether inhaler. The RCA's motto, "divinum sedare dolorem," translates to "It is divine to alleviate pain." The motto was chosen to reflect the primary responsibility of the medical specialty and was thought to be easily translated, even by those unfamiliar with Latin [Figure 3].

In 1976, the president of the Australian Society of Anaesthetists, Brian Pollard, M.D., stated his concern that the society's seal should be changed. He did not think that a kangaroo jumping over a map of Australia conveyed the feeling of the society. After an exhaustive search, the seal was subsequently changed to display vapors rising from a bowl. The design committee believed that the new seal was clear, bold and distinctive and that it symbolized the principles of care, control, compassion and skill intrinsic to the practice of anesthesiology.⁵

A prize for the most interesting seal should go to the New York Society of Tropical Medicine. The emblem was adopted in 1975 in the hope that it would be employed on letterheads, invitations and engraved medallions for distinguished lecturers. The seal shows a mosquito flying over

Figure 4



Seal of the New York Society of Tropical Medicine

the New York City skyline. A pair of worms are present on the right side; on the left, protozoa [Figure 4]. Some members found the design lacking dignity, and some complained about an absence of symmetry. Nevertheless, members overwhelmingly approved the adoption of the seal.⁶

Seals come in all shapes, sizes and colors but share common characteristics. These symbols link the present with the past and convey the aspirations and aims of the profession. They announce and add brilliance to association. The most effective seals are bold, radiant and bright and are designed with intelligence and thoughtfulness. Members of the ASA should be proud of their seal, its history, meaning and message.

References:

- 1. Minutes of Meeting of the New York Society of Anesthetists, April 13, 1932. Collected Papers and Minutes of the Long Island, New York and American Society of Anesthetists (1905-1945). The Wood Library-Museum Collection, Park Ridge, Illinois.
- Letter from Paul Wood to Winthrop Hall, June 5, 1961. The Collected Papers of Paul Wood, M.D., The Wood Library-Museum Collection, Park Ridge, Illinois.
- Betcher AM, Ciliberti BJ, Wood PM, Wright LH. The jubilee year of organized anesthesia. *Anesthesiology*. 1956; 17:229-267.
- 4. Laughlin VC. The Aesculapian staff and the caduceus as medical symbols. *J Int College of Surg.* 1962; 38:82-92.
- 5. Hains JW. The search for a symbol. *Anaesth Intens Care.* 1987; 15:99-106.
- Imperato PJ. A history of the New York Society of Tropical Medicine. NYS J Med. 1990:450-462.

ASA — Leadership in Medicine: The National Halothane Study

R. Dennis Bastron, M.D.

I lecture to third-year medical students at Texas A&M College of Medicine about leadership in medicine using examples from ASA as case studies. One example I like to use is the National Halothane Study. This study, headed by John Bunker, M.D., was the largest, most expensive study ever performed on the subject. I have discovered that many

of my younger colleagues are not familiar with this landmark study, so I am happy to briefly review it.

During the 1950s and 1960s, E. M. Papper, M.D., chair of anesthesiology at Columbia University, convinced the National Institutes of Health that the high mortality rate in anesthesia was a public health threat that deserved attention in the form of financial support of anesthesia-related research and training of faculty. Dr. Papper later

became the chair of the Committee on Anesthesia of the National Academy of Sciences-National Research Council.

Halothane was first synthesized in 1951 by Charles W. Suckling in a systematic effort to develop a potent, nonflammable inhalation agent. By 1956, James Raventos had worked out the pharmacology of halothane; that same year, it was first used clinically in England by Michael Johnstone, M.D., and then in the United States by C. Ronald Stephen, M.D., and his associates at Duke University. Dr. Stephen reported preliminary results of halothane anesthesia in 145 patients at the 1956 ASA Annual Meeting in Kansas City, Missouri. Halothane was released for clinical use in the United States in 1958 and rapidly became the most commonly used general anesthetic because it is easy to administer, well tolerated by patients and loved by surgeons for its nonflammability.

The first reported death from "acute yellow atrophy" following halothane was in 1958. Dr. Bunker recalls that in 1960 or early 1961, he was asked by Charles Blumenfeld, M.D., a pathologist in Sacramento, California, about two patients who died with massive liver necrosis following relatively minor surgery under halothane anesthesia. Several cases had been reported from Dr. Papper's institution, and he was under pressure from some of his medical and surgical colleagues to stop using halothane (Papper personal communication, April 20, 2000). After 12 new cases of fatal liver necrosis, Ayerst Laboratories, the manufacturers of halothane in the United States, issued a drug warning. Dr. Papper felt that the Committee on Anesthesia

> was the best vehicle for a study to determine the safety of the anesthetic agent. He then established a subcommittee on the National Halothane Study chaired by Dr. Bunker.

> Dr. Bunker wrote, "What may not have been described by any of the reports are the extraordinary circumstances surrounding the study's initiation. The possibility of halothane-induced harm was raised shortly after the thalidomide tragedy, and

the risk of iatrogenic injury had become a matter of grave public health concern. The drug warning issued by Ayerst was clearly in response to a Food and Drug Administration (FDA) directive, and I have long believed, though without evidence in writing, that the FDA was poised to withdraw halothane from the market. That it did not do so can be attributed to the establishment of the halothane study" (personal communication, April 11, 2000).

The Subcommittee on the National Halothane Study included Leroy D. Vandam, M.D., editor of *Anesthesiology*

R. Dennis Bastron, M.D., is Professor of Anesthesiology, Texas A&M Health Science Center, Temple, Texas.



"The possibility of halothane-induced harm was raised shortly after the thalidomide tragedy... I have long believed...that the FDA was poised to withdraw halothane from the market. That it did not do so can be attributed to the establishment of the halothane study" and one of the most respected scientific editors in the country, along with prominent statisticians, hepatologists and pathologists. The subcommittee resembled a "who's who" of those special disciplines. A randomized, prospective, multi-institutional study was considered but eliminated after several more reports of deaths following halothane. For a variety of reasons, the subcommittee decided to do a retrospective study of 1 million cases done over the four-year period after the release of halothane for clinical use.

One of the statisticians, Frederick Mosteller, M.D., had been involved in anesthesia studies with Henry K. Beecher, M.D., at Harvard University. Big computers had just been developed and the statisticians were anxious to try them out on such a massive study. New statistical techniques and approaches were required and were subsequently developed. Pathologists were excited by the prospect of huge numbers of samples to study but were not thrilled about being blinded to the anesthetic used "since they only make diagnoses with the entire clinical record available to them" (Bunker personal communication). Fifty-four medical centers volunteered to participate in the study, but 16 dropped out when the requirements were made clear. Three more dropped out after the pilot protocol was tested, so 35 institutions collected data for the four-year period. However, one institution did not meet the criteria set by the committee and the final report was based on 865,000 patients from 34 institutions. (One of the "perks" when I was an anesthesiology resident at the University of Iowa in the mid 1960s was to have Leo DeBacker, M.D., hand me a pile of charts to abstract for the study.)

The results of this massive study were quite interesting. The incidence of fatal liver necrosis was 1:10,000. Most of the cases were explained by the patients' clinical course rather than the anesthetic. Only nine cases were unexplained. The overall mortality following halothane was better than average. A sample size of just under 1 million was simply not big enough to conclude that halothane did or did not cause massive liver necrosis. Another interesting, and as yet unresolved, finding was the variation in surgical mortality among hospitals that was not entirely explained by the nature of the patients and operations. (Those interested in more detail should read the report, "The National Halothane Study," published by the National Institutes of Health, Bethesda, 1969, or see "Summary of



THE NATIONAL HALOTHANE STUDY A STUDY OF THE POSSIBLE ASSOCIATION BETWEEN HALOTHANE ANESTHESIA AND POSTOPERATIVE

the National Halothane Study" JAMA. 1966; 197:775-788.)

Four decades later, we know that "halothane hepatitis" is a real but rare entity. Statistical methods developed for the study are now in common use. Differences in rates of medical and surgical complications and mortality still exist between institutions and are not understood. Anesthesiology continues to lead the way in patient care and safety thanks to the early leadership of Drs. Papper, Bunker and Vandam.

Incidentally, one of the advantages of entering the specialty in the 1960s is that I have had the privilege and honor to meet many of the giants of anesthesiology. Anyone who is interested in meeting the pioneers who made our specialty what it is may attend the Anesthesia History Association dinner at the ASA Annual Meeting. You may meet C. Ronald Stephen, M.D., Leroy D. Vandam, M.D., E.M. Papper, M.D., and many other leaders of years past.

Acknowledgements:

I am indebted to W.K. Hamilton, M.D., E.M. Papper, M.D., Arthur S. Keats, M.D., Leroy D. Vandam, M.D., and John P. Bunker, M.D., for their help with this article.

The Wood Library-Museum — Reflecting ASA Values

Douglas R. Bacon, M.D., Board of Trustees Wood Library-Museum of Anesthesiology

One of the best-kept secrets in Park Ridge, Illinois, is the Wood Library-Museum of Anesthesiology (WLM). Nestled in the headquarters building of ASA, the WLM serves as an active library with over 9,000 volumes and subscriptions to over 80 journals and as a repository of ASA documents. The museum collection contains instruments and machines that literally trace the history of anesthesiology from October 16, 1846, until today. In many ways, the



Original Wood Library-Museum, New York, circa 1934.

WLM helps to define ASA through its collections and reference materials.

What few people realize is that the WLM is perhaps the finest library devoted to anesthesiology in the country. Every journal that publishes in the specialty is represented in the stacks of the library. From common journals such as *Anesthesiology* and *Anesthesia & Analgesia* to the more obscure Chinese language *Chinese Journal of Anesthesiology*, references can be pulled and sent to investigators around the world. Assistant Librarian Karen Bieterman answers more than 100 calls per month from across the country and the world. Ms. Bieterman's activities reflects the WLM's hard-working, dedicated staff where, just like in ASA, service comes first.

The first floor of the headquarters building contains a display area used by the WLM. This museum area traces part of the history of anesthesiology and changes as the collection grows and matures. The brainchild of the WLM's honorary curator, George S. Bause, M.D., the exhibition combines large objects such as anesthesia machines and smaller pieces such as needle display, each of which trace a unique part of the history of the specialty. Under his dynamic leadership, the WLM has been able to obtain many rare pieces of anesthetic equipment, including an 1860s vintage nitrous machine and several ether inhalers from the latter half of the 19th century. Equipment aside, careers of the leaders of ASA during its formative years in the 1930s play a central role in the exhibit space. Thus by strolling through the space, a sense of the history of both ASA and the specialty is gained.

Behind the scenes, the archive collection awaits scholarly use. Collections Supervisor Judith A. Robbins works diligently to see that the museum artifacts and archival collections receive proper care. It is in the archives that the history of ASA is preserved. From the original minutes of the Long Island Society of Anesthetists to the most current Handbook for Delegates, the archival collection documents the course and values of ASA. In addition, private papers of leading anesthesiologists of the 20th century give a full picture of the times and evolution of anesthesiology.

The WLM, like ASA, has undergone a tremendous evolution. The library saw its inception in the 1930s when Paul M. Wood, M.D., donated his collection of books and antique equipment to ASA. Housed in the late 1930s in the Squibb building in New York, it was the destination of many anesthesiologists when they visited New York. The sign-in book lists many names of prominent 20th century anesthesiologists such as Emery A. Rovenstine, M.D., John S. Lundy, M.D., Ralph M. Waters, M.D., and E.M. Papper, M.D., who put the library to good use. But when ASA left the Squibb building, the WLM had several temporary



Douglas R. Bacon, M.D., is Associate Professor of Anesthesiology, Mayo Clinic, Rochester, Minnesota.



Wood Library-Museum display, New York, circa 1934.

homes. Vincent J. Collins, M.D., came to the WLM's rescue by arranging for the collection to be stored in a brownstone across from St. Vincent's Hospital in New York. For some time, the WLM collection found its home at the boathouse of the Foregger Company in Roslyn, Long Island, until the anesthetic equipment company sold its property. Afterward, the WLM collection returned to Dr. Wood's residence in Highland Falls, New York.

In 1961, after ASA built its first building in Park Ridge, Illinois, a two-story annex was planned and funds were raised by ASA to build a permanent home for the WLM. It was dedicated a year later, but its founder, Dr. Wood, did not live to see it. He died a few months before its dedication. The collection now had a permanent home, and the challenge before the WLM was to grow and develop. Many anesthesiologists helped in the growing process. Among them, Albert M. Betcher, M.D., helped establish the endowment fund. Charles C. Tandy, M.D., and K. Garth Huston, Sr., M.D., developed the rare book collection. Today, as Dr. Tandy continues to apply his unique and generous talents to this collection, the WLM rare book and document collections contain such gems as Morton's patent application, several copies of Pauchet's book on regional anesthesia and one of the most complete sets of 19th century literature on mesmerism.

For the last 29 years, the WLM has been watched over by its Head Librarian, Patrick P. Sim. Mr. Sim has seen tremendous growth in the WLM, from one librarian and several hundred volumes to the several thousand volumes and the many hundreds of requests for information handled each year. Under the watchful eyes of Mr. Sim, Ms. Bieterman and Ms. Robbins, research scholars in the form of Paul Wood Fellows descend upon the holdings each year. Yet Mr. Sim still takes time to assure his own scholarly activity. He is authoring a forthcoming annotated bibliography on the WLM's rare book collection and, in addition, he has become an expert on the history of 20th century Chinese anesthesiology.

The Wood Library-Museum is a unique resource for ASA and all of its members, and it is an important component of the education mission of ASA. While political issues tend to get most of the attention, the WLM strives to help anesthesiologists with current knowledge needs. The



Wood Library-Museum Reading Room, New York, circa 1934.

WLM also preserves current documents and objects for future study while preserving the pasts of both the specialty and ASA. Without this ongoing work, education about current issues and the history of ASA and the specialty would be lost.

As ASA approaches its 100th anniversary in 2005, it is time to reflect on where the specialty has been and where it is going. The WLM is uniquely positioned to help ASA and the specialty as a whole move into the 21st century in a new and exciting way.

Anesthesiology, Anesthesiologist, Anesthetics and Anesthetist: The Emerging Professionalism of a Medical Specialty

Patrick P. Sim, Librarian Wood Library-Museum of Anesthesiology

Villiam Thomas Green Morton made history on Friday, October 16, 1846, by unequivocally demonstrating an effective means of pain control for surgical operations. The goal for surgical preparation, true since time immemorial, has been to diminish or destroy the state of consciousness during surgical operations.¹ Morton's act was simply pioneering at the time, requiring a fair amount of entrepreneurial spirit that engendered an equal amount of courage. Yet such acts were requisite for all breakthroughs in anesthesia, surgery and medicine in the ensuing century and a half. Anesthesia has since become second nature to surgery, just as breathing is second nature to living. The term chosen to identify this blessing to humanity has never been a curiosity in people's mind. Indeed, the word "anesthesia" did not even occur in the literature during the first month of its introduction. The newly discovered method of pain control was meant to enhance surgery; it was never considered a vital function in the practice of medicine. The origin of the term describing pain control, and its subsequent development to become a special branch of medical science, should be of interest.

"Anaesthesia" Seeps Into Public Consciousness

The ancient Greeks were always concerned about physical pain, regardless of the origins of infliction. Not known for their expertise in alleviating physical pain, they tried philosophically and psychologically to solve this form of human suffering. The roots of the words of Greek origin, relative to pain relief or pain control, were mostly shades of escapism. The most obvious words of such nature are Lethe and Hypnos. Lethe was the silent stream of oblivion that flowed in the lower world. It was believed that a drink from Lethe would make one forget the sorrow and pain of real life. This was what the ancient Greeks could offer: trying to forget sorrow and pain without the means to alleviate or abolish it. The Greeks also promoted Hypnos, the god of sleep, the fatherless child of night and the twin brother of death. He was welcomed by those suffering and in pain, as sleep and artificial death obviate pain.² Hypnotism for pain relief had preceded chemical anesthesia. Of Greek origin, this word is carried to modern day medical and psychological terminology.

Pain relief by hypnotism indeed had been tried in India by Scottish surgeons prior to Morton's discovery of ether to alleviate surgical pain in 1846. The great gift to render surgery painless by chemical means during the frenzied early days following Morton's discovery was frequently referred to as "Dr. Morton's preparation," his "discovery," "etherization" or "ethereal inhalation." However, the Greek terms describing the relief of physical pain soon came to the minds of the medical men present at Morton's discovery. His physician friends August Addison Gould, Henry Jacob Bigelow and Oliver Wendell Holmes named his discovery *Letheon*, alluding to the Lethe River of Oblivion; again, myth was applied to block the harsh reali-

Anesthesia has since become second nature to surgery, just as breathing is second nature to living.

ty of pain. Dr. Holmes, however, was dissatisfied with the term. By November 21, 1846, he arrived at another Greek word, *anaesthesia*, which he interpreted as an altered physiological state rendering the body insensible to pain. For this altered state of painlessness, he used the term *anaesthetic*. He predicted that these terms for the new discovery would soon be widely accepted in the civilized world.³ In the ensuing year, however, Dr. Holmes' new terms did not appear in the literature at all until Sir James Young Simpson introduced chloroform as an anesthetic in Edinburgh in 1847.⁴ He referred to chloroform as an *anaesthetic agent* and an *anesthetic*. In February 1848, Bigelow, who was the most important messenger in bringing Morton's discovery to the world, discussed the clinical application of ether and chloroform and called this process of pain relief *ether*-

Patrick P. Sim, M.L.S., has served as Librarian of the Wood Library-Museum of Anesthesiology for 29 years.



Figure 1



M.J. Seifert, M.D. Courtesy of University Archives from the WLM Archives, Library of the Health Sciences, University of Illinois at Chicago.

ization. For the effects brought about by such application on the patient, he graded them in terms of the degrees narcotism and of labeled such effects the anesthetic state. He too predicted that anesthesia would soon be such a standard procedure for surgery that no surgeons would perform major surgery without it.⁵ Two decades later in June 1868, on the occasion of the dedication of the Ether Monument at the Boston Garden. Public Bigelow again affirmed the efficacy of etheriza-

tion and called it "an inevitable, complete and safe *anaes-thesia*."⁶ The term coined by Holmes gradually emerged in medicine. It was, however, still primarily regarded as a method of pain control.

In the last decade of the 19th century, the terms *anesthesia, anesthetics* and *anesthetist* began to acquire a new and expanded connotation when professionalism of a medical discipline on pain control began to develop. In Great Britain, the Society of Anaesthetists was formed in 1893.⁷ Defining the term *anaesthetist* in its membership qualification statement, that Society required the specialist to be a duly qualified medical practitioner who held office in a public institution or in private practice.

Specialty Emerges From Concept of Pain Control

In this early era of professionalism, physicians who did not practice anesthesia, but were especially interested in the subject of anesthetics, were also qualified for its membership.⁸ Thus a new profession in medicine had emerged from a concept of pain control. Efforts were made by the British Society to petition the official medical authority, the General Medical Council in England, to include anesthetic administration in the medical education curriculum. It was, however, rejected as being inexpedient. Nevertheless, the hospital anaesthetists in London pressed on to introduce the same issue and were successful in encouraging the Royal College of Physicians and Surgeons to require adequate instruction in anesthetics for, and satisfactory demonstration of practical skill by, candidates participating in qualifying examinations.⁹ Describing the duties of the anaesthetist, British medical authorities in 1909 required this medical specialist to direct the preparation of the surgical patient, select anesthetic drugs, give undivided attention to safety, attend to any emergencies during surgery and provide postsurgical recovery care. Under any circumstance, the anaesthetist was always a medical practitioner.¹⁰

Professionalism in American anesthesia formally began in 1905, half a century after its introduction, when nine physicians who had devoted full-time practice to anesthesia gathered to form the Long Island Society of Anesthetists in New York. Membership for this group was limited to qualified physicians for the purpose of promoting the art and science of anesthetics. This society evolved to become the American Society of Anesthesiologists as it stands today.¹¹ Such evolution of anesthesia, from a medical method to a medical specialty, has fulfilled the prophecy of Oliver Wendell Holmes in 1847 and Henry Jacob Bigelow in 1848. The process of its development was slow in America. Leroy D. Vandam, M.D., offered a theory for this, distinguishing early medical practitioners of anesthesia between the urban elite, as in the case of Great Britain and large American cities and the rural practitioners, mostly in America at the time. Dr. Vandam observed that training requirements, service orientation, and cultural and geographical isolation of these physicians in rural America engendered a fairly strong sense of sectionalism that in turn nurtured a free spirit and an attitude of independence from the so-called established authorities in anesthesia. Such factors eventually caused a retarding effect on the professional development in American anesthesia.¹² Nevertheless, professionalism in anesthesia was inevitable.

In the early days of professional anesthesia, the term *anesthetist* naturally was designated to the physician practitioner who administered *anesthetics*. The terms *anesthesiology* and *anesthesiologist* emerged in the 1940s, reflecting the maturation of a bona fide medical specialty through its history in a century. Central to this etymological evolution was Chicago surgeon M. J. Seifert, M.D. [Figure 1], who in early 1938 wrote to Paul M. Wood, M.D., Secretary of ASA in New York, and coined the terms to further differen-

Figure 2

M. J. SEIFERT. M. D. 30 N. MICHIGAN AVE. CHICAGO

February 7, 1938

Paul M. Wood, M.D., Secretary The American Society of Anesthetists, Inc. 745 Fifth Avenue, Room 1503 New York, N. Y.

Dear Doctor Wood:

In 1902, while teaching in the University of Illinois, I coined the word ANESTHESIOLOGY, and defined it as follows: the science that treats of the means and the methods of producing various degrees of insensibility to pain, with or without hypnosis.

An ANESTHETIST is a technician, and an ANESTHESIOLOGIST is the scientific authority on anesthesia and anesthetics.

I can not understand why you do not term yourselves the AMERICAN SOCIETY OF ANESTHESIOLO-GISTS.

MJS:LC

Seifert Letter to Wood. From the WLM Archives.

tiate between a medical authority and a technician in the management of pain control, which after a century had become a clinical science of medicine [Figure 2].

Dr. Seifert defined anesthesiology as a branch of medical science involved in engendering insensibility for medical and surgical purposes and further designated the scientific authority in this branch of medical science to the anesthesiologist, who is a physician. He considered the hitherto accepted term of medical specialist in pain control, the anesthetist, a technician. With this pronouncement, he revolutionized the common perception of the budding medical specialist in pain control from the status of a technician to its rightful place in the world of medicine. This was indicative of an evolving medical discipline that required a new definition for its medical specialist, relegating the formerly accepted term to a new category of nonphysician technical operator. In March of 1944, Dr. Wood took up this advice and proposed to the Society a change of its corporate name to "The American Society of Anesthesiology." This proposal was accepted with a wise modification of the word Anesthesiology to Anesthesiologists, indicating that it was an association of medical specialists devoted to the branch of medicine in pain control for surgery. By November of the same year, the name change of the Society was approved by its membership. In April 1945, the state of New York granted this corporate name change for a fee of \$100.13

Who was this Dr. Seifert who helped redefine an important concept in medicine as it had matured to a full-fledged medical science? Chicago physician-surgeon Mathias Joseph Seifert, M.D., (1866-1947) was a model Midwesterner in early 20th century medicine, as described by Dr. Vandam.^{13,14} Dr. Seifert's medical career was preceded by an equally successful career in music and education. He had graduated from the Chicago Musical College and attended the Normal School of St. Francis in Wisconsin. His early education was followed by a multifaceted career in music as an organist, pianist, choir master and orchestral conductor in the years 1885-96. He then entered medicine

and graduated from the University of Illinois College of Medicine in 1901 at age 36. Dr. Seifert's medical career was also multidimensional, involving obstetrics and gynecology, general surgery, nursing education, medical journalism, pharmacy and academic dentistry. His closest association with anesthesiology was his appointment as professor of physical diagnosis and anesthesiology at the dental department of the University of Illinois from 1901, the year he graduated from medical school, to 1909. His reference to anesthesiology in 1902 matched the time frame of his appointment as a professor of anesthesiology teaching dental students. Dr. Seifert reported only a few of his own clinical experiences in journals and wrote ephemeral manuals for allied health practitioners. He otherwise left few traces of his contributions. A typical Midwestern physician at the turn of the century and a Renaissance man in his own way, Dr. Seifert contributed to the terminology of a branch of medicine and elaborately explained its growth from a surgical preparation to a vital discipline of medical practice. His suggestion was a catalyst in defining a medical specialty a century after the introduction of anesthesia. When the national association of anesthesia practitioners changed its corporate name to American Society of Anesthesiologists, it properly explained its nature and its mission in medicine. Dr. Seifert's suggestion was pivotal.

Will We Evolve to Become "Metesthesiologists"?

The continued exponential growth of anesthesiology within medicine and surgery in the second half of the 20th century, involving itself in research and expanding its horizon in health care, certainly exceeded what Oliver Wendell Holmes and Henry Jacob Bigelow had envisioned. Although intraoperative care of surgical patients remains the focus of anesthesiology, more recently Yale anesthesiologist Nicholas M. Greene, M.D., realized that other involvement of the specialty demands a re-examination of its term. He pointed out that the word of Greek origin, esthesia, was joined by the prefix an to form the word, anesthesia, which means "without sensation." To better reflect the new reality of the specialty, Dr. Greene proposed a new prefix, met, meaning "beyond," to replace "an" and to create a new word, *metesthesiology*, to carry the specialty beyond its past 150 years into a new millennium.¹⁵ He asserted that the specialty is no longer young, and its maturity will be appropriately reflected by the etymological evolution of the Greek word originally coined by Oliver Wendell Holmes, as witnessed by the growth of the medical specialty.

References:

1. Flagg JF. The inhalation of an ethereal vapor to prevent sensibility to pain during surgical operations. *Boston Med & Surg J.* 1846; 35(18):356-359.

- 2. Robinson V. Victory Over Pain; a History of Anesthesia. New York: Henry Schuman; 1946:15-16.
- 3. Miller AH. The origin of the word anaesthesia. *Boston Med & Surg J.* 1927; 197(26):1218-1222.
- 4. Simpson JY. Anaesthetic and Other Therapeutic Properties of Chloroform. Edinburgh: Sutherland & Knox; 1847.
- 5. Bigelow HJ. The use of ether and chloroform. *Boston Med & Surg J.* 1848; 38(5):101-103.
- Bigelow HJ. Address at the presentation of the ether monument to the city of Boston. *Boston Med & Surg J.* 1868; 1(22); July 2:351-353.
- 7. Transactions of the Society of Anaesthetists, vol. II, 1899.
- 8. *Transactions of the Society of Anaesthetists, vol. III,* 1900. Laws and Regulations.
- 9. Transactions of the Society of Anaesthetists, vol.V, 1903. Report of Council.
- Collum RW. The Practice of Anaesthetics. In: James Cantlie, ed. *The Medico-Chirurgical Series No. 1*. New York: William Wood & Co; 1909:2-6.
- Betcher AM, Ciliberti BJ, Wood PM, Wright LH. The jubilee year of organized anesthesia. *Anesthesiology*. 1956; 17:226-264.
- Vandam LD. Early American anesthetists: The origins of professionalism in anesthesia. *Anesthesiology*. 1973; 38(3):264-274.
- ASA Board of Directors Meetings, March 30, 1944; February 9, 1945; April 13, 1945. ASA Archives; 1944, 1945.
- 14. Seifert MJ. Biographical information collected from "Who's Who in America." Located at: The University of Illinois Health Sciences Library Special Collection and the National Genealogical Society.
- Vandam LD. Early American anesthetists: The origins of professionalism in anesthesia. *Anesthesiology*. 1973; 38(3):264-274.
- Greene NM. The Changing Horizons in Anesthesiology. gy: The 31st Rovenstine Lecture. Anesthesiology. 1993; 79:164-170.

Fires and Explosions

Kim E. Turner, M.D.

From the beginning, the hazard of fires and explosions related to the administration of anesthesia has been an area of concern to ASA. Fires and explosions were relatively uncommon events, but as Philip D. Woodbridge, M.D.,^{*} stated: "Although statistically their importance is minute, they are of great emotional importance. The dramatic nature of the accident and of the death that may occur leads to publicity. The noise, the dramatic suddenness and the publicity all tend to produce a wave of fear and under the emotional tension of fear it is felt that something must be done, and done quickly."

The ignition of vapors by static sparks had been demonstrated as early as 1745. Reports of fires related to the administration of inhalational anesthesia began soon after William T.G. Morton's demonstration in 1846. These early descriptions were often dramatic, as in the ignition of ether by a candle during a dental extraction reported in 1866. The author wrote, "When I beheld the flames gushing forth from his mouth, I almost believed it was a veritable firedemon sitting before me." When the patient was later asked how he felt, it was noted that "a rather ghastly smile illumin(ated) his pale countenance ... his only answer was 'what a wonderful occurrence.'" The patient's toothache did not return.

Reports of explosions became more frequent as anesthesia techniques evolved to include the use of inspired oxygen. The sources of ignition were no longer open flames but cautery, electrical equipment and static electricity. A representative medicolegal report in 1924 documented an incident involving a nitrous oxide–oxygen anesthetic. The cautery was utilized distant to the head and neck, or "zone of danger," where the concentration of anesthetic gases was greatest. The ensuing explosion during this urethral procedure resulted in burns to the patient's face and injury to her eyes.

The agents employed were themselves flammable. Acetylene, as amazing as it may seem, entered the armamentarium of the anesthesiologist in 1924. Its explosive capacity, as one would expect, resulted in its discontinuation as an anesthetic the following year. Ethylene was also introduced in 1924. Initial laboratory studies suggested that the likelihood of explosion from ethylene entering the operating room air during its administration was "only in the remote realms of possibility." This prediction was proven inaccurate a few months later during hemorrhoid surgery utilizing cautery. The resulting explosion burned the face and shoulder of the patient and singed the eyebrows of the assistant. The following year, Isabella Herb, M.D., reported five ethylene-oxygen explosions that had occurred in her hospital as well as two explosions with nitrous oxide-oxygen, which the doctors had substituted for ethylene as a result of their concerns. No injury resulted from these incidents. Dr. Herb made a series of recommendations for the control of electrostatic conditions, but the situation worsened.

In November 1927, an ethylene-oxygen mixture was being administered to a 16-year-old for analgesia during labor. The explosion was heard throughout the four-story building. The patient and her child died despite resuscitative efforts. Among the autopsy findings were lacerations of her trachea and massive pulmonary hemorrhages. The source of ignition was static electricity.

In January 1929, an anesthetist was manipulating the valve on a tank of gas that exploded. The force of the explosion, as reported in *The Evansville Courier*, "hurled the physician's body through a six-inch wall." There were further detailed descriptions of the physicians' fate that do not bear repeating. The hospital officials, assuming the tank to be ethylene, immediately discontinued its use. The investigation of this fatal incident revealed no ethylene tank that had exploded was contaminated with ethylene while attached to an "old-time anesthetic machine" that allowed flow between tanks.

In 1930, the American Medical Association (AMA)

Kim E. Turner, M.D., is Assistant Professor, Department of Anaesthesiology, Queens University, Kingston, Ontario, Canada. She was a 1999 Paul M. Wood Fellow of the Wood Library-Museum.



^{*}Dr. Woodbridge was a pioneer anesthesiologist who, among other contributions, collaborated with Massachusetts Institute of Technology physicist Warren Horton to invent a device to prevent static electricity explosions.

Council on Physical Therapy, in its examination of the "Explosion Hazard in Anesthesia," made the statement that "a certain carelessness regarding this matter has developed." This contrasted with the statement made later in the same year by the AMA Committee on Anesthesia Accidents that "care does not now completely forestall this hazard." This report discussed the necessity of weighing the potential advantages and

disadvantages of each anesthetic technique. The risk of death from postoperative pneumonia, the "chief general hazard of anesthesia and major surgery," was quoted as between 1:2 and 1:300 versus that of explosions estimated at 1:100,000. The report concluded with the statement, "Explosion is statistically today the least of the hazards of anesthesia." This was similar to the opinion of Harold Griffith, M.D., one year later: "Respiratory complications and shock from improperly administered anesthetics cause a hundred times more deaths than all the explosions."

Then came cyclopropane. George Lucas, M.D., and Vilyien Henderson, M.D., of Toronto, Ontario, Canada, discovered cyclopropane's anesthetic and explosive properties in 1929. Unable to proceed with cyclopropane's development, Professor Henderson encouraged Ralph Waters, M.D., from Wisconsin, to experiment and use the drug clinically. Dr. Waters began experimentation in 1930. Cyclopropane was very expensive and the Great Depression hampered its further development, or so most have thought. Betty Bamforth, M.D., in her review of Dr. Waters correspondences, noted that there may have been other reasons. In a letter written to Professor Henderson several years later, Dr. Waters related that he had delayed experimentation on cyclopropane in hope of the discovery of an agent without the added hazard of fire. The existing hazard of fires and explosions therefore may have delayed the introduction of cyclopropane, which most modern anesthesiologists would consider synonymous with explosions.

In 1937, ASA appointed a subcommittee to study the hazards of fires and explosions. The February 1938 scientific session of the Society's regular meeting was occupied entirely by a symposium on "fire and explosion hazards with anesthetic agents and techniques." Dr. Ruth concluded the meeting with the statement that "two factors stand out: one, the tremendous work ahead for our Research Commit-

"When I beheld the flames gushing forth from his mouth, I almost believed it was a veritable fire-demon sitting before me.

> Description of the ignition of ether during a dental extraction, 1866.

tee, and, the other, the possibility of interesting future meetings."

Dr. Ruth's prediction was correct. At the meeting that followed on October 20, 1938, the reports of the Subcommittee on Fires and Explosions again occupied the entire scientific session. Dr. Tyler reviewed the reports that had been submitted by members. This was followed by a lengthy and enlightening presentation by Mr. G. W. Jones, a chemist from the Explosion Division of the Bureau of Mines. In his demonstration, Mr. Jones illustrated the combustion of varying concentrations of ether with and without oxygen. The results in the Society's minutes are recorded variously as: "small explosion and flare," "very loud report" and "a violent explosion," followed by the applause of the members present.

Just 11 days later, a 44-year-old woman died as a result of a cyclopropane explosion while undergoing breast surgery at the Lahey Clinic in Boston. The source of ignition was static electricity. Dr. Lahey asked Phillip Woodbridge, M.D., to coordinate an investigation by experts of this tragic event. Dr. Woodbridge conducted a survey of 100 anesthetists who he knew were using cyclopropane in the United States and Canada. Dr. Woodbridge reported at the April 14, 1939, regular meeting of ASA that those surveyed, recognizing the potential advantages of cyclopropane, were almost unanimously in favor of continuing its use.

The ASA subcommittee's report of the clinical investigation of 230 fires and explosions involving anesthetic agents appeared in Volume Two of *Anesthesiology*, March 1941. This review revealed that "at least 152 (70 percent) of the explosions and 23 (60 percent) of the deaths were due to causes about which effective prophylactic informa-

Continued on page 23

ASA Antitrust Suit 1975-1979: United States of America (Plaintiff) v. The American Society of Anesthesiologists, Inc. (Defendant)

Jess B. Weiss, M.D.

The ASA Relative Value Guide (RVG), as currently published, is a resource-based RVG, in contrast to other specialty charge-based fee schedules. It has evolved from the anesthesia formula devised in 1953 by a group of California anesthesiologists, led by Joseph H. Failing, M.D., for the original California Relative Value Study (RVS).¹ This formula took into account anesthesia risk, surgical problems, technical skills required and time. Each of the first three factors were assigned unit values from one to four, while time units ranged from one to 18 for times of 30 to 300 minutes.

In 1961, the ASA House of Delegates directed its Committee on Economics to construct an RVG, and in 1962, it approved the first RVG based on the California RVS. Since then, the RVG has been reviewed and revised essentially annually since 1970, up to and including the current 2000 edition.

Why did ASA create and disseminate the 1962 RVG? Did this have an anticompetitive purpose or effect of raising, fixing, maintaining or stabilizing anesthesia fees, as eventually charged by the federal government? Or was creation of the ASA RVG a lawful response to the increasing significance of third-party payers, intended to facilitate determination of fees by the individual anesthesiologist or group?

The impetus for the ASA RVG is clear. During the 1950s, the National Association of Blue Shield Plans, military insurance (Champus) and various private insurance companies all had requested ASA to develop a method to enable them to evaluate anesthesia charges and to predict their costs. Additionally, these insurers needed to separate anesthesia costs from hospital charges as well as accumulate statistics upon which rates and extent of coverage could be based. ASA's RVG responded to these needs, but questions soon arose whether this action was legally permissible.

During the 1960s and early 1970s, several medical associations developed relative value scales or guides. These included the American College of Obstetricians and Gynecologists, the American College of Radiologists, the California Medical Association, the Illinois Podiatry Society and the American Dental Association.

The climate for relative value documents began to change, however, with the issuance in 1975 of a decision by the Supreme Court, holding that the learned professions were, with limited exception, just as subject to the federal antitrust laws as were commercial enterprises. Soon thereafter, relative value guides came under broad attack by the Federal Trade Commission, which charged that they represented conspiracies to fix prices for medical services. In time, all of the named associations, other than ASA, agreed to consent orders with the FTC, under the terms of which they agreed to cease publication of their guides.

In a quirk of fate, the FTC did not pursue ASA and its guide, but instead the Justice Department – the other federal antitrust enforcement agency – brought suit against ASA in 1975,²⁴ alleging anticompetitive purpose and effect in "per se" (that which speaks for itself) violation of the pricefixing prohibitions of the Sherman Act.⁵ Based on advice of its then legal counsel, John Lansdale, Jr., ASA decided to fight the allegations. Document discovery in the case, dating back to the 1940s, resulted in enormous cost to the Society — not to mention the expenditure of countless hours of ASA officer and staff time in preparation for the lawsuit.

As if the Justice Department case was not enough, the FTC in 1977 filed a proposed complaint against ASA, claiming that its membership standards – which then prohibited membership by most employed physicians – also violated the antitrust laws. In this case, ASA chose – again on the advice of counsel – to negotiate a consent order, but the terms of that order preserved the right of a physician to choose whatever method of compensation for services he or she preferred and, further, the right of ASA to advocate on physician compensation issues. Approval of this consent order required a special meeting of the House of Delegates and in time led to a restructuring of the organic documents of most of ASA's component societies.

The trial of the Justice Department's lawsuit over the

Jess B. Weiss, M.D., is Associate Professor of Anesthesiology, Harvard Medical School, Cambridge, Massachusetts, and Emeritus Vice-Chair, Anesthesia Department, Brigham and Women's Hospital, Boston, Massachusetts. He was ASA President in 1979.



RVG was held before District Judge Kevin T. Duffy in New York City, beginning on November 20, 1978, and ending on December 4, 1978. In the course of six actual days of trial, nine witnesses appeared on behalf of ASA, including former ASA Presidents Richard Ament, M.D., Nicholas G. DePiero, M.D., and myself and President-Elect John S. Hattox, Jr., M.D. Expert testimony on the history of the development of the specialty of anesthesiology was given by Emanuel M. Papper, M.D., then Dean of the School of Medicine at the University of Miami. Herman M. Somers, M.D., Professor of Politics and Public Affairs at Princeton University, testified as to the economics of the practice of medicine. Other ASA witnesses were Presley H. Chalmers, M.D., of Houston, Texas; Lyman D. Covell, M.D., of the Spring Anesthesia Group in Los Angeles, California; and Dale C. Baker, of Pennsylvania Blue Shield. In addition, more than 250 documents were submitted as evidence to support ASA's position that its development and publication of the RVG was primarily a response to the rise and needs of the third-party payment system and was not intended to constitute and did not result in an agreement as to actual charges that anesthesiologists would make for their services to patients.^{6,7}

On June 22, 1979, Judge Duffy issued his decision, finding that the RVG did not violate the antitrust laws and ordering the government suit dismissed. The core of his decision is found in the concluding paragraph of the 40page opinion:

"I must conclude after a careful review of all the evidence and assessment of the testimony adduced that plaintiff has simply failed to meet its burden of proof. It has demonstrated neither an agreement to adhere to a pricing formula nor any concrete anti-competitive effect on the market for anesthesia services by virtue of the use of the ASA RVG. I find its attempt to rely on a per se analysis, without consideration of the unique circumstances surrounding the anesthesiology profession and the adoption of relative value guides, to be much too narrow an approach to the problem at hand. Moreover, when the evidence is analyzed under the Rule of Reason, it is clear that defendant is entitled to judgment in its favor."

Of interest is that on August 23, 1979, while ASA was waiting to be informed as to whether the Justice Department would appeal this verdict, ASA was served with a new subpoena from the FTC to produce more documents related in general to nurse anesthesia. This investigation was kept open for several years, but was eventually closed without the agency making any allegations against the Society.

Just prior to the opening of the second meeting of the House of Delegates in San Francisco, California, on October 24, 1979, I was able to announce as then ASA President that ASA's successful defense of its RVG against the U.S. Department of Justice antitrust suit would not be appealed.

It is appropriate at this time to acknowledge the magnificent effort to defend ASA made by its legal counsel on the case — John Lansdale and Rickard Pfizenmayer. Perhaps the sweetest victory of all was their success in requiring the government to pay ASA's court costs of \$5,000 – a paltry sum compared to the \$500,000 expended by ASA in its defense, but satisfying nonetheless.

References:

- 1. Failing JH. Anesthesiology. 1957; March-April:18:344-348.
- Weiss JB. Has the FTC overplayed its hand in trying to control your fees? *Legal Aspects of Medical Practice*. 1980; February:8:29-31.
- 3. Weiss JB. The anesthesiologist's experience. *The Internist*. 1987; March:283-316.
- 4. Weiss JB. December 1978; President's Bulletin; 1-2.
- 5. Weiss JB. November 1978, President's Bulletin; 1-2.
- 6. Defendant's trial memorandum. 1979:1-37.
- Defendant's supplemental trial memorandum. 1979:1-19.

Bean Counters

Continued from page 2

operating expenses. Realized and unrealized income from the Society's equity investments has traditionally been reinvested.

A number of items in the expense category are actually the costs of programs that break even or produce a net revenue, such as the expenses for the Annual Meeting. True expenses can be divided into several broad categories: the work of the officers, committees and sections, governmental affairs, the Executive Office and support to other organizations.

A little over \$2 million is spent on the work that the members do to advance the organization's goals.

The first year that there was a line item in the budget for the Washington Office was 1983, and the amount was \$155,000. This year we will spend over \$2 million on governmental affairs! In my opinion, it is a serious indictment of today's society that we must spend 15 percent of our budget defending our patients' interest in the political arena — but that is the real world.

Executive Office expenses are a little more than one-

fourth of the total, or around \$4 million. The officers carefully scrutinize the Executive Office's performance and regularly find that its efficiency is remarkable. The Executive Office functions with fewer dollars and fewer employees per member than most other comparable medical organizations.

The Society provides support funds to other organizations. The bulk of this money is \$1,050,000 to the Foundation for Anesthesia Education and Research and \$400,000 each to the Wood Library-Museum of Anesthesiology and the Anesthesia Patient Safety Foundation. It is unfortunate that we must spend twice as much to deal with government than we spend to promote research and patient safety and to preserve our heritage.

I hope that this broad overview of the ASA budget is helpful and that it illustrates the link between what we collectively believe we ought to be doing (the strategic plan) and how we are spending our resources (the budget). The leadership at the House, Board and Administrative Council levels are eager for your input.

Fires and Explosions

Continued from page 20

tion has long been available and repeated cautions have been urged." The report concluded with the optimistic statement that "our present-day knowledge of the etiology and prophylaxis of all anesthetic fires and explosions is sufficient to prevent all further anesthetic combustions." This was accompanied by the report from Professor Horton, Massachusetts Institute of Technology, titled "Present Status of the Problem of Preventing Anesthetic Explosions" that included detailed explanation of recommended practices. Professor Horton's concluding statement remains applicable today: "The chief value in adequate physical equipment is not that it makes eternal vigilance unnecessary, but that it makes eternal vigilance effective."

ASA was represented in the formulation of the recommended Safe Practice for the Use of Combustible Anesthetics in Hospital Operating Rooms," sponsored by the National Fire Protection Association, that appeared in *Anesthesiology* in September and October 1941. These were the earliest formal recommendations relating to the safe conduct of anesthesia to appear in *Anesthesiology*.

The hazard of fires and explosions in the operating room continued to be an area of great concern until the introduction and acceptance of the first nonflammable agent, halothane.

The reminders of our explosive history endure in the form of the conductive flooring in some operating rooms and the occasional drag chain on an old stretcher. The danger of fires and explosions associated with anesthesia, though much less than that which confronted our past colleagues, requires our continued vigilance whenever an increased oxygen concentration is employed in the presence of a source of ignition.

References available from the author and on the ASA Web site.

House of Delegates to Convene October 15

Eugene P. Sinclair, M.D., Speaker House of Delegates

Il ASA members are invited, in fact urged, to attend the reference committee hearings and both sessions of the ASA House of Delegates. All meetings of the House of Delegates and reference committees will be held at the San Francisco Marriott Hotel, San Francisco, California, from Sunday through Wednesday, October 15-18, 2000. Times and locations of these meetings will be listed on the hotel bulletin board.

How Does the ASA Legislative Process Work?

The voting members of the ASA House of Delegates represent constituencies that include the entire ASA membership. Each of the 30 districts elects a director, and the component and specialty societies elect delegates. There is approximately one voting member for every 100 ASA active members. The legislative process permits members of the House to hear the facts, give proper consideration to every item before the House and debate and vote on these items in an open and democratic deliberative assembly.

Materials are sent to delegates and alternates in a "Handbook for Delegates" before the meeting. These materials constitute the agenda for the House of Delegates. The sources of these business items include reports from the officers, district directors and committee chairs and resolutions from individual delegates. The Speaker of the House of Delegates refers each item to a reference committee.

Lack of familiarity with the "Handbook for Delegates" is probably the biggest obstacle for participation for a member who is not familiar with the operations of the House. ASA officers, particularly the Speaker and Vice-Speaker, and ASA staff are eager to explain to any member how to use the handbook to find the issues in which the member is interested. The House of Delegates Office, located at the



Eugene P. Sinclair, M.D., is Medical Director, Healthsouth Surgery Center, Wauwatosa, Wisconsin. San Francisco Marriott Hotel during the 2000 Annual Meeting, is the best location to obtain such assistance.

The first session of the House of Delegates will convene at 9 a.m. on Sunday, October 15. At this session, ASA President Ronald A. MacKenzie, D.O., and President-Elect Neil Swissman, M.D., will present their remarks and comments regarding the past and forthcoming year. Officers will be nominated at this meeting, and candidates for office will address the entire House. Adjournment usually occurs by 11 a.m.

Sunday afternoon will provide the best opportunity for individual members to comment on any issue coming before the House. Again, officers and staff in the House of Delegates Office will assist members who wish to find out where discussion on the issues in which they are interested will take place.

Four concurrent reference committee hearings will be held on Sunday beginning at 1 p.m., with issues being divided among these four committees. Reference committees are composed of seven members who are appointed by the President with consideration to geographical distribution as well as experience with the issues and processes of the House.

At these open hearings, when an issue of interest is discussed, any member may step to the microphone and comment. All members are welcome and are encouraged to attend and participate. Discussion is rarely curtailed. The chair will impose limits only when discussion is repetitive or if the extent of the committee's agenda demands it.

Open hearings will continue until 3 p.m. or until testimony has concluded. Hearings must adjourn or recess no later than 5 p.m. and will reconvene at 8 a.m. the next morning if necessary. When the hearings are concluded, the reference committees go into closed (executive) session, at which time they will decide recommended action on each item of business that was assigned to the committee. The written reports of the reference committees' recommendations are usually available by 5 p.m. Tuesday in the House of Delegates Office.

The second session of the House of Delegates will convene at 8 a.m. on Wednesday, October 18. Its adjournment time cannot, of course, be anticipated. Elections will be conducted, then the House will proceed to other business. Usually little debate occurs at this time because the refer-

Continued on page 30

Postoperative Visual Loss Data Gathered and Analyzed

Lorri Anne Lee. M.D.

) ostoperative visual loss is one of the most devastating complications that has been reported to occur after cardiopulmonary bypass, neck dissection, general surgical abdominal procedures, hip arthroplasty, craniotomies, thyroidectomy and prone spine cases. The incidence of symptomatic postoperative visual loss varies depending upon the population studied and has been reported as low as one in 60,965 for all nonocular operations and as high as 3.6 per-

cent in cardiopulmonary bypass cases.^{1,2} Atheromatous, or air emboli, prolonged hypotension and anemia, inadequate venous drainage of the globe and direct pressure to the eye have all been implicated as causative factors.

Ischemic optic neuropathy is the most common diagnosis in postoperative visual loss. Ischemic optic neuropathy is divided into anterior and posterior, depending upon the loca-

tion of the lesion on the optic nerve. The majority of anterior ischemic optic neuropathy cases occur during cardiopulmonary bypass procedures (53 percent), followed by prone spine cases (12 percent). Most posterior ischemic optic neuropathy cases have occurred during neck, nose or sinus operations (48 percent) followed by prone spine cases (16 percent) and cardiopulmonary bypass procedures (11 percent).2

position.

Case reports and retrospective reviews have suggested that although direct compression of the globe can cause postoperative blindness, it seldom occurs intraoperatively. Postoperative ischemic optic neuropathy has occurred in patients in the prone position whose eyes are free from compression with the head in Mayfield pins and during cardiopulmonary bypass cases in the supine position.³ Procedure-dependent factors that have been suggested to be associated with the development of postoperative ischemic optic neuropathy are: large estimated blood loss, systemic hypotension, long duration of procedure and anemia.^{2,4,5} Patient-dependent factors include hypertension, tobacco use, atherosclerosis, diabetes and morbid obesity.^{2,4,5} Outside the hospital setting, anterior ischemic optic neuropathy

is one of the most common causes of sudden visual loss in middle-aged and elderly people. In these nonoperative cases, risk factors include atherosclerosis, hypertension, diabetes mellitus and nocturnal hypotension, among others.6

The etiology of postoperative ischemic optic neuropathy is unclear but may be associated with decreased oxygen delivery to the optic nerve.⁴ Severe and/or prolonged

Postoperative ischemic optic neuropathy has occurred in patients in the prone position whose eyes are free from compression with the head in Mayfield pins and during cardiopulmonary bypass cases in the supine

hypotension has frequently been associated with postoperative ischemic optic neuropathy, particularly when it is combined with anemia. However, it is important to emphasize that cases of postoperative ischemic optic neuropathy have occurred in the absence of these factors. Many cases of postoperative ischemic optic neuropathy are reported from head and neck dissections and prone spine procedures

where there is significant facial swelling and where venous hemodynamics may be altered.

Due to a perceived increase in the incidence of postoperative visual loss over the last decade, the ASA Committee on Professional Liability established the Postoperative Visual Loss Database on July 1, 1999, in order to better identify associated risk factors so that this tragic complication might be prevented in the future. Patients who develop visual deficits within seven days after nonophthamologic

Lorri Anne Lee, M.D., is staff anesthesiologist at Group Health Permanente, Seattle, Washington, and Acting Assistant Professor, Department of Anesthesiology, University of Washington, Harborview Medical Center, Seattle, Washington.



surgery are eligible for inclusion in the registry, and data are collected on standardized forms from the registry Web site <www.depts. washington.edu/asaccp>. Information is collected anonymously, and reporting is voluntary.

Thus far, we have received and analyzed data on 23 patients. The most common operations associated with postoperative visual loss were spine surgery in the prone position (57 percent) followed by procedures using cardiopulmonary bypass (22 percent) [Table 1]. Ischemic optic neuropathy was diagnosed or strongly suspected in 20 out of the 23 cases. The other three cases were diagnosed as either central retinal artery obstruction, retinal ischemia or a questionable transient ischemic attack. All 23 cases involved an anesthetic time of more than 5.5 hours and a median estimated blood loss of 2.2 liters (range 100ml to >12 liters). Significant hypotension (defined as systolic blood pressure or mean arterial pressure ≥ 40 percent below baseline) was present in 52 percent of cases. Controlled hypotension was utilized in 42 percent of these cases. The lowest hematocrit during the operation averaged 25 percent (range 13 to 40 percent). Bilateral lesions were present in 56 percent of the 23 patients. There was partial

Table 1

Variable	All Cases (n=23)
Procedure	CPB*5(22 percent)Prone13(56 percent)Other5(22 percent)
OR* Time (median)	9.9 hrs (range 5.75 to 18 hrs)
EBL* (median)	2.2 liters (range 100 ml to > 12,000 ml)
Hypotension	12 (52 percent)
Lowest Hct* (median)	24.5 percent (range 13-40 percent)
Percent Bilateral Lesions	13 (56 percent)
Partial Recovery of Vision	9 (39 percent)
AION*	8 (35 percent)
PION*	11 (48 percent)
*OP - operating room EBL - esti	mated blood loss. Het - bematocrit. AION - anteri-

Procedure-Dependent Associated Factors

*OR = operating room, EBL = estimated blood loss, Hct = hematocrit, AION = anterior ischemic optic neuropathy, PION = posterior ischemic optic neuropathy, CPB = cardiopulmonary bypass.

recovery of vision in 39 percent of

patients in the database overall, consistent with a reported partial recovery rate of 30 percent to 43 percent.^{5,7}

Data on preoperative or patient-dependent factors cited in other series were collected (Table 2). Median patient age was 58 years. Obesity was present in 57 percent, hypertension in 48 percent, diabetes mellitus in 22 percent, atherosclerotic disease in 48 percent, a smoking history in 52 percent and superior vena cava syndrome in one patient. Only two of the 23 patients had no known preoperative patientrelated factors. Of these two patients, one patient had a prolonged back operation (10.3 hours) with significant hypotension for brief periods of time, and the other patient received an anesthetic with controlled hypotension and dropped his hematocrit to 24 percent.

There has been speculation that postoperative visual loss in supine operations that do not involve head and neck

Table 2

Patient-Dependent Associated Factors		
Variable	All Cases (n=23)	
Median Age (range) Obesity (percent cases) Hypertension Diabetes Mellitus Smoking History Atherosclerosis	 58 (24-73) years 13 (56 percent) 11 (48 percent) 5 (22 percent) 12 (52 percent) 12 (52 percent) 	

surgery are due primarily to hypotension and/or anemia in patients with occlusive vascular disease.⁶ In contrast, venous congestion may be more important in head and neck procedures and in prone spine operations, perhaps in association with hypotension and/or anemia.⁸ This concept is supported by previously published case series in which anterior ischemic optic neuropathy is most commonly diagnosed in supine cases (mostly cardiopulmonary bypass cases) in patients with atherosclerotic disease, while posterior ischemic optic neuropathy is most commonly diagnosed in prone operations or in cases in which the venous pressure of the head and neck is elevated.² The fact that the different types of operations are not equally distributed between anterior and posterior ischemic optic neuropathy suggests that the etiology of visual loss differs between the two.

Although our data support this hypothesis, the number of cases reported thus far is too small to draw any conclusions, and any data published at this time must be considered preliminary. We need additional cases of postoperative visual loss in order for the database to provide meaningful data. This project is expanding to be prospective in scope, accepting reports of cases occurring after 1999 (pending institutional review board approval), which will make more cases available and make it easier to reach the goal of 100 cases for analysis.

For more information, please visit our Web site <www.depts.washington.edu/asaccp> and see our poster presentation at the ASA 2000 Annual Meeting in San Francisco on October 16, 2000, in the Moscone Center, Exhibit

Hall A-C. Information on postoperative visual loss and the database will also be available at the Anesthesia Patient Safety Foundation exhibit area at the ASA Annual Meeting.

References:

- Roth S, Thisted RA, Erickson JP, et al. Eye injuries after nonocular surgery. *Anesthesiology*. 1996; 85:1020-1027.
- Roth S, Gillesberg I. Injuries to the visual system and other sense organs. In: Benumof, Saidman LJ. eds. *Anesthesia and Perioperative Complications*. 2nd Ed. St. Louis, Missouri: Mosby. 1999:377-408.
- 3. Roth S, Roizen M. Optic nerve injury: Role of the anesthesiologist? *Anesth Analg.* 1996; 82:426-439.
- 4. Williams EL, Hart WM, Tempelhoff R. Postoperative ischemic optic neuropathy. *Anesth Analg.* 1995; 80:1018-1029.
- 5. Myers MA, Hamilton SR, Bogosian AJ, et al. Visual loss as a complication of spine surgery. *Spine*. 1997; 22(12):1325-1329.
- 6. Hayreh SS. Anterior ischemic optic neuropathy. *Clinical Neuroscience*. 1997; 4:251-263.
- 7. The Ischemic Optic Neuropathy Decompression Trial Research Group. Optic nerve decompression surgery for nonarteritic anterior ischemic optic neuropathy (NAION) is not effective and may be harmful. *JAMA*. 1995; 273:625-632.
- Dilger JA, Tetzlaff JE, Bell GR, et al. Ischaemic optic neuropathy after spinal fusion. *Can J Anaesth.* 1998; 45 (1):63-66.

Malignant Hyperthermia and the Malignant Hyperthermia Association of the United States

Henry Rosenberg, M.D., President

Malignant Hyperthermia Association of the United States

s every anesthesiologist knows, malignant hyperthermia (MH) and MH-like syndromes are very uncommon life-threatening pharmacogenetic disorders. The Malignant Hyperthermia Association of the United States (MHAUS) is the only organization in the United States dedicated to providing information and education concerning MH and related syndromes. In addition, MHAUS supports research into the causes and clinical presentations of MH. This is motivated by the desire to prevent death and disability. MHAUS has been carrying out its mission for over 20 years. Following is a review of our current programs and concerns.

Many anesthesiologists are aware of the activities of MHAUS because of the very popular MH Hotline. Since 1982, the Hotline has been a service to medical professionals who are dealing with a clinical problem related to MH, or problems that are felt to be related to MH. Of the 1,500 or so calls to the Hotline each year, about 400 are actual clinical cases. The expertise provided by the 31 volunteer anesthesiologists who serve on the Hotline has been life saving and has been a source of valuable information concerning the presentations of MH. Those consulting the hotline tell us that the service is invaluable for answering straightforward as well as complex questions.

Others become aware of MHAUS while researching specific issues about the disorder. They may consult the office directly for information concerning biopsy centers, current treatment protocols, current recommendations concerning preparedness for dealing with MH and similar issues. The treatment protocol, for example, may be found in most operating rooms in the United States. Information is constantly updated by members of the Professional Advisory Committee of MHAUS.



Henry Rosenberg, M.D., is Professor of Anesthesiology, Thomas Jefferson University, Philadelphia, Pennsylvania. Others have consulted the MHAUS Web site <www.mhaus.org> for information or to review the entire topic of MH using our slide presentation.

Many physicians have referred a patient or his/her family to MHAUS for information on the implications of the disorder to their daily lives.

Anesthesiologists who become members of MHAUS receive the quarterly newsletter, The Communicator, which summarizes recent information concerning MH and MHAUS activities.

If you have attended the ASA or other major anesthesia meetings, you may have stopped by the booth to pick up free educational material or to discuss problem cases with one of the members of the MH Hotline who are present during the exhibit hours.

Given that MH was first identified about 40 years ago and dantrolene, the specific antidote, was introduced in 1979, it might seem that the MHAUS organization has a limited role in furthering the clinical management of MH episodes. However, the reality is quite different. In fact, there is much more that we would like to accomplish if we had adequate resources. Here are some examples of recent, ongoing activities and others that are in active development.

The North American MH Registry (NAMHR)

In 1988, MH biopsy centers in North America organized an MH Registry. The Registry is now an integral part of MHAUS. The Registry was originally based at Pennsylvania State University, Hershey, Pennsylvania, but has recently moved to the University of Pittsburgh, Pittsburgh Children's Hospital. The purpose of the Registry is to characterize MH in order to learn more about the presentations, treatment, outcome and inheritance of MH. Many papers and abstracts explaining the management of MH and its variants have emanated from the data contained in the Registry.

The Registry also plays a vital role in refining the contracture test for MH and facilitating the development of newer, less invasive diagnostic tests.

The over 3,000 clinical records of MH episodes (together with diagnostic status as determined by the halothane caffeine contracture test in most cases) is the largest detailed database of this disorder in the world. The clinical information is derived from reports from biopsy centers as well as reports from anesthesiologists through "Adverse Metabolic Reactions to Anesthesia" or American Medical Record Association (AMRA) forms. We invite and encourage clinicians to submit reports of MH or MH-like episodes to the Registry using the AMRA forms available through MHAUS.

The database may be queried by members of the medical community for legitimate research questions through application. Inquire at the NAMHR office at 412-692-5464.

At the present time, resources are being applied to completing the entry of close to 400 additional reports into the database, answering research questions and developing a secure methodology to make specific patient data available (with consent) to physicians treating patients with MH or presumed MH.

In the future, the Registry hopes to provide a 24-hour service so that patients, their families and their physicians could obtain information about the MH status of specific individuals when questions arise concerning the possibility of MH.

A tissue repository is also envisioned in order to study the basic biochemistry and molecular genetics of MH "Policy and Procedure Manual for MH." Over the past several years, with the help of grant support from AstraZeneca corporation, MHAUS has developed a state-of-the-art, easyto-use protocol manual for managing MH occurring in the hospital setting. This manual sets out in detail the roles and responsibilities of the many individuals needed to successfully manage an MH episode, ranging from the orderly who obtains the ice, to the laboratory technician who needs to be prepared to accept a large number of specimens, to the nursing and physician personnel who need to mix and administer dantrolene. This manual is suitable to guide the implementation of drills in order to be prepared for a MH episode. It is available through the MHAUS office.

Recognizing that surgery and anesthesia is moving out of the hospital and into ambulatory centers and offices, a second manual is in preparation.

In those settings, personnel are often in short supply and back-up systems are not always available. Last year, at least one death from MH occurred in an office setting, and several cardiac arrests from MH or MH-like variants occurred in ambulatory centers. MH can occur wherever potent general anesthetics and succinylcholine are administered.

Testing for MH

One of the most exciting areas of MH research, and the one that holds the greatest promise for improving patient care, is the identification of the genetic loci for MH. Once the sites of mutations in DNA responsible for MH are identified, it will be possible to screen family members at risk for MH using a simple blood test. However, MH turns out to be a very difficult disorder from the point of view of molecular genetics. There are many complex reasons for this difficulty. One of them is that about 30 point mutations have been found in the gene locus that is linked to about 50 percent of cases of MH: the ryanodine receptor. In addition, linkage to several other gene loci has been found in specific families. Based on genetic information from many countries, certain mutations in the ryanodine receptor have been seen with greater frequency than others. A recent study from Sheila M. Muldoon, M.D., has found that the incidence of mutations in American MH patients is about the same in the United States as it is in Europe. However, the distribution of frequency of specific mutations is different in this country than in Europe. Without the Registry, it is unlikely that we will be able to characterize the molecular genetics of the MH population in the United States. MHAUS has begun to raise funds to further clarify the molecular genetics of MH and to develop a diagnostic test. The special fund is named for a young patient who died from MH, Kristin Duell.

Last year, MHAUS awarded its first research grant to fulfill the aims of this fund. The search for the genes is laborious and time consuming and will require significant resources. Because of the difficulty in acquiring funding for MH from standard sources, there are only two laboratories in the United States actively engaged in the investigation of the molecular genetics of MH. In addition, there are only nine active MH biopsy centers in the United States because of the problems of reimbursement for this timeconsuming test. Europe, by contrast, maintains about 25 biopsy centers.

MH and Exercise-Induced Rhabdomyolysis

Researchers from Germany have recently presented data that shows that some patients with exercise-induced rhabdomyolysis are MH-susceptible, both by contracture tests and by molecular genetic testing. In one case, an MH-like episode was precipitated under laboratory conditions by exercise only. This is an intriguing and very important observation that will need to be corroborated by others. The finding builds on several reports in the literature of patients who experienced heat/exercise-related prostration and on further evaluation were MH-susceptible. The study adds further detail and also documents the presence of DNA mutations that have been associated with classic MH. MH is indeed a very surprising and still enigmatic metabolic myopathy!

Other Programs

Other programs of MH that serve patients and the medical community include an identification bracelet program for MH-susceptibles, a fax-on-demand information service, support of regional patient conferences and response to requests for information from thousands of patients and health professionals per year.

What programs would we like to support that are beyond our resources? Regular patient and medical professional conferences via the Internet, training programs to help health professionals prepare for an MH crisis (e.g. through the use of a simulator), assessment of the incidence and prevalence of MH, creation of a database for Hotline calls from the 8-10 MH hotlines that exist in other countries, educational programs for nonanesthesiologists, support of research into the relation between MH and other muscle disorders, ensuring that all surgical facilities have an adequate supply of dantrolene and are prepared to diagnose and treat MH and encouraging others to investigate the molecular genetics of MH.

There are approximately 2,500 members of MHAUS. The board and staff are particularly grateful to Proctor and Gamble Pharmaceuticals for their generous support over many years as well as ASA and many individual members of the anesthesia community for their support of Hotline activities.

For further information, please contact us at P.O. Box 1069, Sherburne, NY 13460, call (800) 98-MHAUS (986-4287) or e-mail <mhaus@norwich.net>.

House of Delegates to Convene October 15

Continued from page 24

ence committees will have provided ample opportunity for discussion and will have responded with appropriate and broadly acceptable recommendations for action based on all available information.

Should members differ with the recommendations, however, debate is heard, limited only by order of the House itself. Motions are received and considered for amendment, referral to committees or such other action as the House may desire to take. Because of the size of the House of Delegates (over 300 voting members this year), formal parliamentary procedure guides the actions under the direction of the speaker and vice-speaker, who chair these sessions.

Those who have never participated in such an assembly and who wish to do so might find of value the new delegates' briefing that will be held from 9 a.m. to 10 a.m. Saturday. The speaker and vice-speaker conduct this briefing for new members of the House, and it is open to any other interested member. The hour consists of an introduction to the delegate handbook, ASA Annual Meeting processes and a brief introduction to parliamentary procedure as used by the House of Delegates.

Just as in public legislative bodies, much of the work of the House of Delegates is done outside of the formal process, but these sessions are not secret; they consist of the meetings of the caucuses. Five geographical areas have organized into unofficial but well-organized caucuses that usually meet on Saturday and Tuesday afternoons at the Annual Meeting. At these caucuses, issues and candidates are discussed in free and open discussion (sometimes more open than in the House because of the smaller size and more informal atmosphere). Your district director or delegates can be of great assistance in helping you participate in caucuses. The meeting locations will be posted in the House of Delegates Office.

Attendance at the caucuses, sessions of the reference committees and the House of Delegates is open to all members of ASA. Opportunities exist for all Society members to participate actively in the affairs of ASA. It is not necessary to be an elected official.

... the World Federation of Societies of Anaesthesiologists

Bernard V. Wetchler, M.D., Past Chair, Executive Committee World Federation of Societies of Anaesthesiologists

adies and gentlemen, the baby is now born. The 661 Confinement has been prolonged, but nevertheless, I think has been accomplished without serious complications." With these words, Harold R. Griffith, M.D., (Canada), on September 9, 1955, announced the establishment of the World Federation of Societies of Anaesthesiologists (WFSA). The occasion was the closing session of the World Congress of Anaesthesiologists (WCA) that was held in Scheveningen, in the Netherlands. The congress, attended by more than 800 anesthesiologists from 44 countries, was held for the express purpose of establishing the WFSA. Twenty-six national societies became charter members of the federation. Lewis H. Wright, M.D., who was the official observer for ASA, took the opportunity to explain why, at that time, ASA did not wish to become a member. His comment, as transcribed by the secretary responsible for the minutes: "The only reason why ASA cannot yet adhere to the world federation, is a lack of liaison in former days between it and the composing societies ... it is only a matter of time for the ASA to join the federation." ASA became a member in 1960 at the second WCA.

The WFSA is a physician-based, education-focused organization whose current membership includes 104 national anesthesiology societies who annually contribute \$1.25 in dues for each active member. A world congress is convened every four years. The principle objective of the WFSA is "to make accessible the highest standards of anaesthesia and resuscitation to all peoples of the world." This mission is carried out through committees on education, publications, paediatrics, obstetrics, pain relief, safety and quality of practice, resuscitation, trauma and intensive care medicine and technology, information and equipment.

During the period between the 2nd and the 8th congresses, WCA income from dues, plus a revenue sharing plan established with WCA host societies, provided insufficient funds to allow WFSA to reach its educational objective. There was no permanent headquarters and methods of communication were slow; individual officers, usually the secretary, maintained contact with member societies. A series of highly successful world congresses, the first of these hosted by ASA in 1988 in Washington, D.C., followed by the Netherlands (The Hague, 1992) and Australian (Sydney, 1996) societies, saw the WFSA realize income of more than \$3 million. It is expected that the 12th WCA, hosted by the Canadian Anaesthesiologists' Society this past June in Montreal – where total registration exceeded 10,000 (over 6,500 anesthesiologists) – will aid WFSA in having greater involvement in anesthesia education worldwide.

Due to the excellent management of revenues by its two past treasurers, Richard Ament, M.D., United States, and Michael Rosen, M.D., United Kingdom, the WFSA now finds itself able to not only meet but to expand its educational commitment. The two largest items in the recently approved quadrennial budget are for education and publications; combined they will total more than \$330,000 per year by 2005. Over the past four years, a total of 25 refresher courses and 15 visiting professorships have been provided (sub-Saharan Africa, Asia, South America, Pacific Islands and eastern Europe). Additionally, the obstetrics (Chair D. Anthony Rocke, M.D., South Africa) and the paediatrics (Chair Charles J. Cote, M.D., United States) committees established specialist training centers in Africa and South America. It has been proposed that over the next four years, additional centers should be established in Africa, South America and Asia. The George Soros Foundation recently committed to funding 16 fellowships in pain medicine for anesthesiologists from eastern Europe.

WFSA publications include *Update in Anaesthesia* (published two to three times per year in six languages), which contains articles on simple practical procedures with explanations of the basic theory behind them. It is aimed at practitioners in countries with limited resources and poor access to educational material. Available on the Internet at <www.nda.ox.ac.uk/wfsa>, the site has had over 34,000 hits from people in more than 115 countries. *World Anaesthesia*, published twice a year and mailed to all member societies, contains federation news and articles from correspondents throughout the world. It is expected that WFSA

Bernard V. Wetchler, M.D., is Clinical Professor of Anesthesiology, University of Illinois at Chicago, Illinois. He was ASA President in 1995.





Art imitating life? Pictured above is a rendition of World Federation of Societies of Anaesthesiologists members at the 12th World Congress in Montreal, Quebec, Canada. Signatures of the American delegates appear below the sketch.

will develop a separate newsletter while providing assistance for the continuation of *World Anaesthesia*.

The past half dozen years has seen greater cooperation between ASA and the WFSA. Donations of teaching materials (books, journals, refresher courses and videos), a joint effort of the WFSA, ASA and the Wood Library-Museum of Anesthesiology (WLM), initiated in 1995 by my direction as chair of the WFSA Executive Committee, has distributed educational packages to 99 anesthesia departments in underserved countries. The WFSA commits \$15,000 per annum toward distribution costs; Roger J. Eltringham, M.D., United Kingdom, coordinates this worthwhile project. More efficient utilization of existing programs and resources in Africa and other regions of the world are taking place through the efforts of Phillip O. Bridenbaugh, M.D., United States (Chair, ASA Committee on Overseas Anesthesia Teaching Programs). At the suggestion of Elliott V. Miller, M.D., United States, the WFSA, through its publications and Web site, will make member societies aware of Internet access to WLM resources.

At the Montreal congress, I completed my four-year term as honorary vice-president of the federation. The ASA will be well-represented in the future: John R. Movers, M.D., who completed eight years on the executive committee (EXCO), was elected honorary vice-president and deputy secretary of the EXCO: Charles J. Coté, M.D., was elected to an eight-year term on the EXCO. H. Jerrel Fontenot, M.D., as chair of the Committee on Finance, will be a member of the EXCO for at least four years. Ira J. Rampil, M.D., will chair the Committee for Technology, Information and Equipment, replacing N. Ty

Smith, M.D., who will chair a Web site development working party (federation language for a task force or ad hoc committee). ASA also has representation on all standing and special committees.

The next World Congress of Anaesthesiologists will convene April 18-23, 2004, in Paris, France. Information about the congress or the federation can be obtained from Karen McMurchy, Administrative Coordinator, WFSA Headquarters: WFSA Level 8, Imperial House 5616, 15-19 Kingsway, London WC2B 6TH, United Kingdom; Telephone: (011) 44 20 7836 5652, fax: (011) 44 20 7836, e-mail: wfsa@compuserve.com.

PRACTICE MANAGEMENT

This year's "Proposed Rule" describing potential revisions to payment policies under the Medicare physician fee schedule addresses two subjects of major interest to anesthesiologists. One of these subjects is a change in the definition of "medical supervision," a specific variant of "medical direction" for Medicare Part B payment purposes. (This change would have no effect whatsoever on the Part A Conditions of Participation requirement that nurse anesthetists be supervised by a physician; nor would it affect the government's proposal

'Medical Supervision' Payment Revisited; Critical Care Code Relative Values Increased in Proposed Medicare Physician Fee Schedule for 2001

Karin Bierstein, Practice Management Coordinator

to eliminate that requirement.) The other proposal concerns the valuation of the two critical care codes, Current Procedural TerminologyTM (CPT)TM 99291 and 99293.

Payment for Incomplete Medical Direction: Redefining "Medical Supervision"

As noted in the July "Practice Management" column, the Health Care Financing Administration (HCFA) is considering changes to its policy on payment for "medical supervision" of nurse anesthetists and anesthesiologists' assistants under Medicare Part B. "Medical supervision" is the Medicare term for medical direction of more than four concurrent anesthesia cases. It *may* also be used to bill for cases that start out as "medically directed" but in which the anesthesiologist becomes involved in other activities and is therefore unable to fulfill all seven requirements of medical direction:

- 1. Perform a preanesthesia examination and evaluation;
- 2. Prescribe the anesthesia plan;

3. Personally participate in the most demanding procedures of the anesthesia plan, including induction and emergence;

4. Ensure that any procedures in the anesthesia plan that he or she does not perform are performed by a qualified anesthetist;

5. Monitor the course of anesthesia administration at frequent intervals;

6. Remain physically present and available for immediate diagnosis and treatment of emergencies; and 7. Provide indicated postanesthesia care.

Thus, for example, if the anesthesiologist is unable to "participate" in a patient's emergence from anesthesia, some Medicare carriers would recommend billing the case as "medical supervision" – but there is currently no such national policy. That is why ASA asked HCFA some months ago to clarify that the proper way to bill for incomplete medical direction would be to use the supervision modifier (–AD). (Quite a few carriers have advised anesthesiologists to bill such cases as "non-

medically directed nurse anesthesia" using the –QZ modifier, but that option is only available to practices employing the anesthetists and it also understates the anesthesiologist's service.)

ASA also asked HCFA to consider changing the payment amount for medical supervision. Currently, Medicare will allow three units for supervision, plus a fourth unit if the anesthesiologist documents participation in induction, with no additional time units. We suggested that the payment amount be 40 percent of the total allowable units to bring the structure in line with the reimbursement for medical direction (50 percent) while maintaining an incentive to perform "complete" medical direction.

The HCFA announcement indicates that the agency is also considering, for the first time, specifying a minimum level of service before it will pay for medical supervision. It may require "that the physician furnishing medical supervision perform, at a minimum, the preoperative evaluation, participate in induction, remain available for consultation and provide a minimum level of monitoring." ASA is evaluating this proposal, which we did not originate. We support the concept that supervision be limited to a maximum of five cases, as our leadership does not wish to encourage leveraging a single anesthesiologist to any greater extent than that.

When, if ever, will these changes to the medical supervision rules take effect? They are currently only ideas on which HCFA has solicited input from interested parties – not formal proposals. Consequently the earliest implementation date would be January 1, 2002, allowing for a full proposal cycle.

ASA, having put most of the suggested medical supervision changes on the table, will encourage their adoption. We will also continue our efforts to persuade HCFA to adopt a new and more workable policy on the activities in which anesthesiologists may engage while performing medical direction.

Relative Values for Critical Care Services To Increase

The Proposed Rule for 2001 would bring reimbursement for critical care services back up to their 1999 level. HCFA decreased the relative values for "work" for the two CPTTM codes affected, 99291 (first 30-74 minutes) and 99292 (each additional 30 minutes), by 10 percent each on January 1 of this year. The rationale for the decrease was the change in the definition of critical care services in CPT 2000TM. The CPTTM editorial panel had deleted the word "unstable" from the definition and HCFA decided that the deletion made the services much more comparable to lower-intensity evaluation and management services. ASA was among the physician organizations that vigorously protested the decrease.

The CPT^{$^{\text{M}}$} editorial panel and HCFA have now agreed on a revised definition for 2001 that does not include the word "unstable" – patients can be critically ill without being unstable – but that does speak in terms of "a high probability of imminent or life-threatening deterioration in the patient's condition." The new language has satisfied HCFA that the codes will be used appropriately and it has therefore proposed to restore the work relative values to 4.0 and 2.0 respectively.

Call Schedules and Group Boycotts

Can an anesthesiologist who is kept off the call schedule successfully allege a group boycott in violation of the antitrust laws? This is a recurring question that tends to arise most frequently in instances where an anesthesiologist is denied access to the schedule because another group holds an exclusive contract. The Court of Appeals for the Tenth Circuit, the latest federal appeals court to consider the issue, upheld the trial-level court's decision in favor of the defendant physicians, who controlled the schedule, in a decision issued on June 27.

Instead of an exclusive contract, the plaintiffs in Diaz v.

Farley challenged an agreement that provided that all anesthesia services for the patients of one obstetrics group would be performed by either a specific anesthesiologist with privileges, or by an anesthesiologist chosen by that individual. The purpose of the agreement was for the obstetricians to avoid using the plaintiff anesthesiologists, in whose skills they had no confidence.

The question for the court was whether the agreement to boycott the plaintiffs was automatically or "per se" illegal under the antitrust laws or whether it should be analyzed (and perhaps justified) under the "rule of reason." Traditionally, group boycotts, like price-fixing and a few other arrangements, were considered so inherently anticompetitive that there was no need to consider their effect on the market. Accordingly, courts held those arrangements per se illegal. In 1985, however, the U.S. Supreme Court ruled that group boycotts could be analyzed under the rule of reason where the following three factors are present:

1. the defendants do not hold a dominant position in the "relevant" market;

2. the defendants do not control access to an element or facility "essential" to allow the plaintiffs to compete; and

3. the arrangement may enhance overall efficiency and make the market more competitive.

Applying these three factors, the Diaz court found that the plaintiffs had not attempted to show that the defendants had market power or a dominant position, nor did the agreement preclude the plaintiffs from providing anesthesia services to other patients or from improving their skills so as to compete for the obstetrics business at issue. Finally, the challenged agreement might enhance competition since it increased the obstetricians' ability to choose among anesthesiologists (before, the obstetricians had largely had to accept whichever anesthesiologist was scheduled for the shift).

The court concluded by noting that the per se standard of antitrust illegality is to be applied cautiously in health care litigation. The issues of professional medical judgment that come into play in so many decisions involving physicians – notably peer-review issues – make rule of reason analysis far more appropriate.

This preference for the rule of reason was consistent with the 1984 decision in Jefferson Parish Hospital District No. 2 v. Hyde, where the Supreme Court declined to apply the traditional per se standard to an alleged "tying" violation. There, the plaintiff argued that an exclusive contract impermissibly tied the use of the group's anesthesia services to the use of the hospital. The court disagreed, emphasizing the ability of patients to select alternative hospitals and anesthesiologists.

In Diaz, the outcome was driven by the fact that the plaintiffs continued to be able to practice at the hospital involved and especially by the existence of professional competency issues. The Diaz case joins a solid line of decisions upholding the right of physicians to select their colleagues on the basis of quality and efficiency.

Source Materials:

• Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 2001; Proposed Rule, 65 Fed. Reg. 44176 (July 17, 2000), <www.hcfa.gov/medicare /pfsmain.htm>.

• Diaz v. Farley, 2000 WL 827348 (10th Cir.)

Practice Management Committee Offers You Its Expertise

One of ASA's newest committees, the Committee on Practice Management, plans to begin answering the "Question of the Month" in this column. Do you have specific questions about such issues as benchmarking productivity, valuing an anesthesia practice, optimum staffing ratios and ways of improving scheduling? The committee, chaired by Eric W. Mason, M.D., will try to develop answers to those questions that seem to be of widespread interest. (Not all questions have immediate answers; for example, the effort to define benchmarks is already a year old.)

ASA members may forward questions to K.Bierstein @ASAwash.org. Make sure to identify yourself and to give your geographic location. As is the case with other *NEWSLETTER* columns, we will not be able to respond to inquiries individually, but we do hope in this manner to make the "Practice Management" section of the *NEWSLET-TER* even more useful.

Certificate in Business Administration for Physicians

The Committee on Practice Management has launched an educational program leading to a Certificate in Business Administration. The first of the program's 10 modules will be held in Houston, Texas, in March 2001. The 10 modules will span 100 hours, including three onsite weekend sessions and 70 hours of videotaped lectures plus intranet communications with the faculty and other students.

Topics will include "Successful Leadership and Management," "Financial Management and Budgeting," "Legal Aspects of Health Care" and "Health Care Services Marketing."

For further information, please visit the ASA Resource Center in the North Lobby of the Moscone Center at the Annual Meeting in San Francisco.

Society of Cardiovascular Anesthesiologists: Taking It to Heart

Daniel M. Thys, M.D., President Society of Cardiovascular Anesthesiologists

ver the last 12 months, the Society of Cardiovascular Anesthesiologists (SCA) has seen continued growth in its existing activities and has launched a number of new initiatives. Education in cardiac, thoracic and vascular anesthesiology remains one of the primary activities of SCA. In addition to its Annual Meeting (Orlando, Florida, May 6-10, 2000), SCA sponsored three other large meetings in 2000. The 3rd Annual Echo Review Course (February 8-13, 2000), organized in collaboration with the American Society of Echocardiography (ASE), attracted more than 550 participants to San Diego, California, for six days of intense instruction in perioperative echocardiography. The faculty consisted of 15 anesthesiologists, nine cardiothoracic surgeons and 11 cardiologists and provided more than 50 hours of continuing medical education (CME) credit.

The 5th Update on Cardiopulmonary Bypass was held in Breckenridge, Colorado, from March 19-25, 2000. This meeting was a collaborative effort between SCA, the American Society of Critical Care Anesthesiologists, the American Society of Extracorporeal Technology and the Canadian Society of Clinical Perfusionists. The more than 230 participants and faculty consisted of anesthesiologists, perfusionists, cardiothoracic surgeons and cardiologists. Finally, SCA held its 7th International Meeting in Quebec City, Canada (June 1-3, 2000), immediately before the World Congress of Anaesthesiologists in Montreal, Quebec, Canada. The meeting was a collaborative effort between SCA and the cardiovascular and thoracic section of the Canadian Anaesthesiologists' Society. It brought together more than 290 participants from 38 different countries.

In April 2000, CME made its debut on the SCA Web



Daniel M. Thys, M.D., is Chair, Department of Anesthesiology, St. Luke's-Roosevelt Hospital Center, and Professor, Department of Anesthesiology, Columbia University, New York, New York. site <www.scahq.org> with two educational vignettes. Ivan S. Salgo, M.D., from the University of Pennsylvania, Philadelphia, authored "Echocardiographic Assessment of Patients Undergoing Ventricular Assist Device Placement." It described the clinical course of a 35-year-old male who suffered from ventricular failure and required a left ventricular device placement. The case report provides clinical information and shows echocardiographic images, including video clips and a number of questions concerning the clinical findings and the patient's management.

The second vignette is titled "The Bleeding Patient Following Cardiopulmonary Bypass" and was authored by E. Price Stover, M.D., from Stanford University. The case describes a 38-year-old male who had undergone a Ross procedure with a prolonged cardiopulmonary bypass (CPB) time. Diffuse mediastinal bleeding followed CPB. The vignette proceeds with 14 multiple-choice questions concerning the patient's management and general knowledge about hemostasis. At the completion of the quiz, answers can be scored. CME credits are not yet available for completion of the educational quizzes, but they may become available in the near future. SCA is fully committed to a strong presence on the Internet, and recent statistics suggest that demand for Web-based information is great. Successful requests for <www.scahq.org> are approaching 3,000 per day.

In the area of graduate medical education, SCA has come to the conclusion that accreditation of subspecialty training in cardiothoracic anesthesiology by the Accreditation Council for Graduate Medical Education (ACGME) will enhance the care of patients with cardiothoracic diseases who undergo procedures. A task force under the leadership of Joseph G. Reves, M.D., and Alan Jay Schwartz, M.D., has completed the subspecialty application documents. At the end of July 2000, they were forwarded to ACGME with a recommendation from SCA that cardiothoracic anesthesiology be recognized as an accredited subspecialty. Numerous letters of support from anesthesiology program directors and other specialty societies accompanied the documents.

The role of anesthesiologists in perioperative echocardiography continues to be a dominant interest of SCA. The SCA Task Force for Certification in Perioperative Transesophageal Echocardiography and the Council for Intraoperative Echocardiography of ASE jointly developed guidelines for performing a comprehensive intraoperative, multiplane transesophageal echocardiography examination. The guidelines were published simultaneously in the October 1999 issues of *Anesthesia & Analgesia* and the *Journal of the American Society of Echocardiography*. SCA and ASE have also agreed to jointly develop guidelines for training in perioperative transesophageal echocardiography. A task force is presently being appointed and the training guidelines should be forthcoming in 2001.

When the National Board of Echocardiography (NBE) was created in 1998, three SCA representatives were appointed to its board of directors. They have played an active role in the deliberations of NBE, particularly as they relate to the NBE examination of Special Competence in Perioperative Transesophageal Echocardiography. NBE has recently decided to proceed with a board certification process for echocardiography. For board certification in general echocardiography, the applicant will be assessed on the successful completion of training dedicated to the study of cardiovascular diseases, with specialty training in echocardiography and success in the comprehensive echocardiography examination of NBE. While most anesthesiologists will probably have little interest in becoming board-certified in general echocardiography, it is worth noting that nothing precludes qualified anesthesiologists from obtaining such board certification.

Finally in February 2000, the board of directors of SCA conducted a strategic planning retreat to better define the Society's goals for the next three years. The mission of SCA as an international organization of physicians that

promotes excellence in patient care through education and research in perioperative care for patients undergoing cardiothoracic and vascular procedures was confirmed. Some of SCA's major goals will be to provide the highest caliber of education, to advocate for the care and education of patients and interests of members, to increase membership from the worldwide physician community and to increase cardiothoracic and vascular scientific knowledge. SCA envisions itself as providing leadership in the perioperative care of the patient with cardiac, thoracic and vascular diseases.

Anesthesiology Aphorisms: Chicken Soup for the Doctor's Soul

Continued from page 1

- When you think it's in (the epidural space), it's not!
- When you have a problem with regional anesthesia, look to the proximal end of the needle (Alon P. Winnie, M.D.).
- Don't dance on the periosteum (with the needle) (Leroy D. Vandam, M.D.).

In closing, my all-time favorite adage deals with the need for adequate resources, effort or protoplasm to produce a favorable result. Common maxims include, "You can't make a silk purse out of a sow's ear" or "garbage in garbage out." I first heard the following quip in Brooklyn about 20 years ago. Apart from the barroom vernacular for "dung," it really does sum up the need for putting forth one's best effort: **"You can't make chicken soup out of chicken** —!

(If you have an appropriate maxim to share, please send it to me at Newsletter_Editor@ASAhq.org. I will produce another list of "Anesthesiology's Aphorisms" in a future issue if I receive enough maxims.)

— M.J.L.

Call for Residents to Serve on ASA Committees

Tripti C. Kataria, M.D., Chair-Elect Resident Component Governing Council

SA continues to show a strong commitment to resident involvement and one of the ways in which this can be seen is in the more than 50 existing ASA committees, subcommittees and ad hoc committees. We are fortunate to have residents helping to mold the future of our specialty by sitting on many of the organization's committees. Membership on any of these committees - where our ideas and concerns are researched, deliberated and finally presented for evaluation to the Board of Directors and House of Delegates – is an excellent way to get involved with ASA.

President-Elect Neil Swissman, M.D., has appointed 21 residents to the committees [Table 1] for the upcoming year. They will begin their appointments at the conclusion of the ASA Annual Meeting in October 2000.

In November, a request for applications from interested residents to serve on 2002 ASA committees will be sent to each anesthesiology residency program. Applications should include a cover letter describing the resident's interest in serving on an ASA committee, a current resume and a preference list of three committees. Descriptions of the committees can be found in the ASA Bylaws section in the ASA Directory of Members.

For consideration for a 2002 committee appointment, the ASA Executive Office must receive applications by **January 1, 2001**, and candidates will be appointed in the summer of 2000. The address for mailing is: Ronald A. Bruns, Director of Administrative Affairs, ASA Executive Office, 520 N. Northwest Highway, Park Ridge, IL 60068-2573.

Feel free to contact any of the current resident committee members for more information, or contact me via email at <tckataria@pol.net>. We are always happy to get more residents involved in ASA.



Tripti C. Kataria, M.D., is an anesthesiology resident in her CA-3 year at the Brigham and Women's Hospital, Boston, Massachusetts.

Table 1

2001 Resident Committee Appointments

Cynthia M. Taber, M.D.	Anesthesia Care Team, Professional Diversity
Jeffrey B. Glaser, M.D.	Communications
Christine A. Doyle, M.D.	Critical Care Medicine and Trauma Medicine
John D. Cabral, M.D	Economics
Roy G. Soto, M.D. Michael P. Sprintz, D.O.	Electronic Media and Information Technology
Laura M. Watkins, M.D.	Ethics, Physician Resources
Jane M.H. Mason, M.D.	Governmental Affairs
Michael P. Herndon, M.D.	Membership
John A. Cooley, M.D.	Newsletter
Marie Durbin, M.D.	Obstetrical Anesthesia
Troy J. Ockerman, M.D.	Occupational Health
Allan R. Escher, D.O	Pain Management
Jessica Palumbo, M.D.	Patient Safety and Risk Management
Ihab A. Ayad, M.D.	
Fran Thayer, M.D.	Pediatric Anesthesia
Elizabeth A. Alley, M.D.	Problem-Based Learning Discussions, Young Physicians
Amir Friedman, M.D	Professional Liability
Tripti C. Kataria, M.D	Residents and Medical Students
Basem B. Abdelmalak, M.D	Research
Nathaniel F. Simon, M.D.	Surgical Anesthesia
Roy G. Soto, M.D.	Young Physicians



Candidates Announce for Elected Office

Fight ASA members recently have announced their candidacies for elected office. The anesthesiologists and the offices they seek are: **President-Elect** Barry M. Glazer, M.D. **First Vice-President** James E. Cottrell, M.D. L. Charles Novak, M.D. Vice-President for Scientific Affairs Bruce F. Cullen, M.D. **Assistant Secretary** Peter L. Hendricks, M.D. Assistant Treasurer Roger A. Moore, M.D. **Speaker, House of Delegates** Eugene P. Sinclair, M.D. Vice-Speaker, House of Delegates

Candace E. Keller, M.D.

The ASA Board of Directors has approved the following regulations for the announcement of candidacies for elected office:

1. On or before August 1, any candidate for ASA office may send to the Executive Office a notice of intent to run for a specific office.

2. The Executive Office shall prepare a list of candidates submitted to be published in the September issue of the ASA *NEWSLETTER* and the Handbook for Delegates.

3. The announcement for candidacy does not constitute a formal nomination to an office nor is it a prerequisite for being nominated.

4. Nominations shall be made at the Annual Meeting of the House of Delegates for all candidates as prescribed by the ASA Bylaws.

As approved by the Board of

Directors in August 2000, a Candidates' Forum is now available on the ASA Web site. ASA members can view candidates curriculum vitaes at <www.asahq.org/candidates>.

Workshop to Focus on Business Skills

The "Workshop on Business Skills for the Anesthesiologist" is intended to enhance the personal business skills of the participants and provide a skill-set not previously offered by ASA. The program will be held on November 10-11, 2000, at the Westin Francis Marion Hotel in Charleston, South Carolina.

This workshop will introduce a number of core business skills that will provide the basic precepts of each learning module. The initial presentation will be taught by a member of the faculty who will present the new Certificate in Business Administration (CBA) program, followed by an anesthesia-related application taught by a practicing anesthesiologist. Most modules will have a take-home tool that can be used to enhance the participant's own practice.

• Asa C. Lockhart, M.D., M.B.A., is the program chair. He will speak on "Legal Issues in Health Care" and "Human Resources and Career Dynamics." The other faculty and their topics are:

• Amr E. Abouleish, M.D., M.B.A., "Organizational Behavior," "Principles of Management" and "Managed Care – Academic Practice Perspective";

Dianne B. Love, Ph.D., "Activity-Based Costing" and "Managed Care";
Eric Mason, M.D., "ActivityBased Costing" and "Managed Care – Private Practice Perspective";

• Marcelle Willock, M.D., M.B.A., "Human Resources and Career Dynamics";

• Ivan Wood, Jr., J.D., "Legal Issues in Health Care" and "Managed Care";

• Kevin Wooten, Ph.D, "Organizational Behavior," "Principles of Management" and "Human Resources and Career Dynamics."

All of the above topics are the titles of the learning modules, each of which includes many subtopics.

The Accreditation Council for Continuing Medical Education (ACCME) has approved ASA to sponsor continuing medical education programs for physicians.

ASA designates this continuing medical education program for 11 credit hours in category 1 of the Physician's Recognition Award of the American Medical Association.

Registration is suggested by **October 10, 2000**. Registration fees are \$385 for ASA active members, \$210 for resident members and \$735 for nonmembers. A block of rooms is being held at the Westin Francis Marion Hotel until October 18, 2000. Reservation information will be sent to registrants upon receipt of registration.

Got E-Mail?

When news happens, nothing gets it to members faster than e-mail. But many still have not supplied ASA headquarters with their addresses. To receive member alerts, contact <membership@ASAhq.org>.

FAER REPORT



FAER Booth at the ASA Annual Meeting

or the first time in several years, there will be a Foun-dation for Apacthesis Education dation for Anesthesia Education and Research (FAER) exhibit at this year's ASA Annual Meeting on October 14-18 in San Francisco, California. We are excited to once again have another opportunity to share news about FAER with the ASA membership. Carl C. Hug, Jr., M.D., asked Joanne M. Conroy, M.D., and Steven C. Hall, M.D., to coordinate the planning and preparation of this effort. The exhibit will be located within the large ASA Resource Center area that also houses the Electronic Media and Information Technology, Communications, Wood Library-Museum of Anesthesiology and Anesthesia Patient Safety Foundation exhibits, book sales, member services, practice management information, e-mail and message and placement centers. This area is located in the North Lobby of the Moscone Center on street level above the meeting registration and close to the entrance where the shuttle buses stop.

The focus of the exhibit will be to tell the membership about the goals and objectives of the Foundation; to delineate the return on their investment in FAER; to thank sponsors and individuals who have supported the foundation; and to receive feedback on future activities of the organization. More than 50 prior FAER award recipients have agreed to staff the exhibit and share their experiences with FAER funding. In particular, they can describe their specific areas of research and define how their work impacts clinical practice. In addition to the award recipients, several FAER directors will be available to discuss their perspectives on research, the foundation and anesthesiology as well as to answer other questions and listen to ideas and suggestions.

The Foundation strives to provide a bridge to subsequent research funding for new investigators beginning their research careers. The fundamental problem of low National Institutes of Health (NIH) research funding to medical schools for anesthesiology will be graphically shown along with the results of a survey of FAER award recipients that demonstrates their success in obtaining further research funds. The message is that the money invested through FAER in these investigators has yielded substantial subsequent research dollars; yet more NIH funds are available. FAER wants to support competitive scientists who can obtain and use these existing funds.

Access to the newly designed Web site will be available at the booth. Alan W. Grogono, M.D., has greatly improved the FAER Web site <www.faer.org>. Please look at it and send us your comments. The Web site and the booth will list the names and project titles of all FAER award recipients. ASA and FAER have funded nearly 400 projects. We urge you to stop by and see who and what you have supported through FAER.

We hope you plan to visit the FAER exhibit and use it as a place where you and your friends can meet with the FAER directors and current and former award recipients. We are enthusiastic about the future of the Foundation and anesthesiology and want to speak with you and hear your ideas. 2000 AMERICAN SOCIETY OF ANESTHESIOLOGISTS

Officers

President Ronald A. MacKenzie, D.O., Rochester, Minnesota President-Elect Neil Swissman, M.D., Las Vegas, Nevada Immediate Past President John B. Neeld, Jr., M.D., Atlanta, Georgia First Vice-President Barry M. Glazer, M.D., Indianapolis, Indiana Vice-President for Scientific Affairs James E. Cottrell, M.D., Brooklyn, New York Secretary Thomas H. Cromwell, M.D., Belvedere, California

Treasurer

Orin F. Guidry, M.D., New Orleans, Louisiana Assistant Secretary Peter L. Hendricks, M.D., Birmingham, Alabama Assistant Treasurer Roger A. Moore, M.D., Browns Mills, New Jersey Speaker of House of Delegates Eugene P. Sinclair, M.D., Elm Grove, Wisconsin Vice-Speaker of House of Delegates Candace E. Keller, M.D., Hattiesburg, Mississippi

District Directors

DISTRICT 1 - Maine, New Hampshire, Vermont Timothy J. Quill, M.D. **DISTRICT 2 - Massachusetts** Alexander A. Hannenberg, M.D. **DISTRICT 3 - Rhode Island, Connecticut** Jan Ehrenwerth, M.D. **DISTRICT 4 - New York** Jared C. Barlow, M.D. **DISTRICT 5 - New Jersey, Delaware** James R. Tyler, M.D. **DISTRICT 6 - Pennsylvania** Richard P. Albertson, M.D. **DISTRICT 7 - Maryland, District of Columbia** Raafat S. Hannallah, M.D. **DISTRICT 8 - Florida, Puerto Rico** Jimmie D. Moore, M.D. **DISTRICT 9 - Alabama, Mississippi, Louisiana** Mack A. Thomas, M.D. **DISTRICT 10 - Tennessee** James M. West, M.D. **DISTRICT 11 - Ohio** Thomas B. Bralliar, M.D. **DISTRICT 12 - Michigan** Charles R. Schmitter, Jr., M.D. **DISTRICT 13 - Indiana** Gopal Krishna, M.D. **DISTRICT 14 - Illinois** Susan L. Polk, M.D. **DISTRICT 15 - North Dakota, Minnesota, South Dakota** Mark A. Warner, M.D.

DISTRICT 16 - Nebraska, Iowa Charles D. Gregorius, M.D. **DISTRICT 17 - Missouri, Kansas** Gregory K. Unruh, M.D. **DISTRICT 18 - Arkansas, Oklahoma** Vacant **DISTRICT 19 - Texas** Robert P. Viles, M.D. **DISTRICT 20 - Colorado, Wyoming** Bruce R. Brookens, M.D. **DISTRICT 21 - Nevada, Arizona, New Mexico** Casey D. Blitt, M.D. **DISTRICT 22 - California** R. Lawrence Sullivan, Jr., M.D. **DISTRICT 23 - Washington, Alaska** L. Charles Novak, M.D. **DISTRICT 24 - Wisconsin** John F. Kreul, M.D. **DISTRICT 25 - Georgia** William D. Hammonds, M.D. **DISTRICT 26 - Hawaii, Oregon** Richard R. Johnston, M.D. **DISTRICT 27 - North Carolina, South Carolina** Bertram W. Coffer, M.D. **DISTRICT 28 - Virginia, West Virginia** Roger W. Litwiller, M.D. **DISTRICT 29 - Idaho, Montana, Utah** Paul N. Clayton, M.D. **DISTRICT 30 - Kentucky** Linda F. Lucas, M.D.

Executive Staff

Glenn W. Johnson, **Executive Director** Frank W. Connell, **Director of Scientific Affairs** Ronald A. Bruns, **Director of Administrative Affairs** Denise M. Jones, **Director of Communications** Michael Scott, **Director of Governmental and Legal Affairs** Susan M. Rogowski, **Director of Finance** Janice L. Plack, **Director of Information Services**

San Francisco

2000 Annual Meeting October 14-18



Registration opens at 3 p.m. Friday, October 13, 2000, at the Moscone Center.