



# NEWSLETTER

SEPTEMBER, 1994

**VOLUME 58 NUMBER 9** 

# Wood Library-Museum of Anesthesiology Celebrates Its Founder's Centennial Paul Meyer Wood, M.D.





This year, ASA joins the WLM in celebrating the centennial of the birth of Paul Meyer Wood, M.D. Dr. Wood was a pioneer in the emerging specialty of anesthesiology. He was a compulsive collector of books, journals, papers and equipment. His collection became the foundation for the library-muse-um that bears his name.

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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.

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#### TO THE MEMBERSHIP

#### Who's on First?

here is an interesting triad of pioneers for surgical anesthesia: Crawford Long, M.D., 1842; Horace Wells, D.D.S., 1844; William T.G. Morton, D.D.S., 1846. In this issue, Stephen D. Small, M.D. (page 14) addresses the forthcoming Horace Wells Sesquicentennial.

While Crawford Long practiced in rural Georgia and was relatively isolated, the careers of Horace Wells and William Morton were intertwined. Upon graduation from dental school, Morton first practiced in Farmington and Cheshire, Connecticut; both towns were located near Hartford and Wells. Ironically, both dentists longed to practice in Boston, Massachusetts, and accordingly, they entered into a partnership. With borrowed funds, they opened a Boston office in 1842. The following year, they parted company, amicably it would appear, as noted in a letter of resignation by Wells who opined "...for the reason that our receipts will barely pay the cost of materials used."

Wells returned to Hartford and once again began a dental practice. In December, 1844, he attended a nitrous oxide exhibition, and after witnessing a volunteer with no recall of a painful injury, he decided to have one of his own teeth extracted while under the influence of nitrous oxide. Needless to say, the extraction went well enough for Wells to employ the gas clinically.

With but a modest success rate behind, Wells once again headed for Boston. He obtained permission from Harvard to demonstrate nitrous oxide anesthesia. A Harvard student volunteered, the attempt at a painless extraction failed, and Wells left Boston in an expedited fashion. Eventually, he gave up dental practice.

Morton's success and fame enraged Wells, who felt that the concept of a pain-free state was his; Morton had simply substituted ether vapor for laughing gas. Ironically, neither Morton nor Wells could know that they were only parts of a triad and, ultimately, no definitive victor was ever named.

Erwin Lear, M.D. Editor



Erwin Lear, M.D.

#### PRESIDENT'S PAGE

#### **Through the Looking Glass**

Wilson C. Wilhite, Jr., M.D., President

rilliant minds of numerous, well-intentioned academicians and clinicians have been concerned about the future of anesthesiology for many years.

The concern is not new! In the 1950s and '60s, the focus of concern was considerably different from that of today as many parts of the country, even large desirable cities, could not attract qualified anesthesiologists and were heavily dependent on the anesthesia care team. Residency programs in anesthesiology were small, and there was some difficulty in attracting the best students into anesthesiology, despite the fact that anesthesiologists were in demand everywhere.

In the 1970s and '80s, the situation changed; now there is less reliance on nurse-administered anesthesia and the perception is that, in the 1990s, almost all anesthesia care could be provided by physicians. That has created the present dilemma of how to deal with what is now open competition among providers of care, both among physicians and between the classes of providers.

In the last 40 years, research in anesthesiology has contributed immensely to the tremendous advances in surgery. We are now able to attack diseases and anatomical defects in ways that were previously thought impossible; we are able to do that with greater safety because of our advances in technology. These advances principally relate to monitoring in anesthesiology and, through research in anesthesiology, to a new understanding of how drugs work and, with the evolution of new classes of drugs, a greater margin of safety. These advances have also been brought about because of the greater personal involvement of physicians in the delivery of anesthesia care as well as research.

Medicine's concern that these advances will be stymied as a result of reform is legitimate. We must not, however, whine about from where the support for research will come; medicine must find the way to fund research while the government is preoccupied with the delivery of basic care to all until it recognizes and accepts the importance of continued research. We cannot depend on the public to demand research in areas for which it has no knowledge, particularly at a time when clinical care is perceived to be inaccessible to a large segment of the population.

It is premature to respond to concerns of anesthesiologists about what ASA and the academic community are doing to plan for the future; but, I shall summarize a few of the activities from the past nine months, the results of



Wilson C. Wilhite, Jr., M.D.

which are not yet in. It has been difficult to plan a response to unknowns: the effects of potential reform on graduate medical education, the number of physicians needed for an unknown volume of patients requiring anesthesia care as well as the effects of an ever-decreasing reimbursement pattern for care.

Over the past nine months, the academic community has been working closely with ASA in searching for solutions to these critical problems. That effort has been a collegial and sincere one, devoid of organized politics, with the common goal being to find an answer that will be fair and far-sighted.

Early this year, I appointed a task force, composed of leaders in our specialty, to address the "future" of anesthesiology. The "task-force" approach was chosen to allow a rapid response, outside of the political structure of ASA, yet provide a means by which the results of its deliberations would be reported to and considered for implementation within ASA and the academic community.

Over the past few years, the leaders of the Society of Academic Anesthesiology Chairs, the Association of University Anesthesiologists, the Association of Anesthesiology Program Directors and ASA have held numerous meetings to discuss mutual concerns in an attempt to chart a course for an uncertain future. That dialogue will continue. I have recently appointed another group that will function under the task-force concept to address the immediate future of graduate medical education, irrespective of what

Congress does or does not do regarding health care system reform.

Within ASA, last year I appointed a revitalized Committee on Physician Resources to address our concerns, and the Board of Directors approved the use of an outside consulting group, Abt Associates, Inc., to study provider resources in light of predicted changes in population and requirements for anesthesia services. The preliminary report of that consulting group has just been received, and the findings will be a part of the deliberations of the above mentioned task forces and committees of ASA.

The problems of anesthesiology are not unique to any one group. They are important, not only to academicians and not only to clinicians, but to any group that is involved in the training of any class of providers, whether physician or nurse anesthetist. Although the antitrust laws prevent the development of any broad-based agreement to limit the supply of providers, we can urge those in charge of training programs to make their individual training decisions based not only on the needs of the particular program, but on the market the graduates of that program may face in the years ahead.

Decisions made today will surely impact the lives of all patients and all providers for years to come. Just as responsible research must follow an orderly method, subject its data to review and have its conclusions verified, so must this critical evaluation of the future of our specialty undergo a careful and responsible process in order for the results to be credible and acceptable.

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#### WASHINGTON REPORT

#### Congress Set to Begin Floor Debate on Health System Reform Proposals

Michael Scott, Director Governmental and Legal Affairs

runch time. As this column is written in mid-August, the Senate has begun debate on the 1,400page reform bill introduced by Majority Leader George Mitchell (D-Maine), and a proposal by Senator Jesse Helms (R-North Carolina) to delay consideration of health system reform until next year has been defeated strictly along party lines. In the House, the leadership through Majority Leader Richard A. Gephardt (D-Missouri) has made public the outline of its own reform measure, but the actual leadership bill has not been introduced.

Although both bodies are currently scheduled to vote on health system reform before departing for the Labor Day recess, that goal is appearing increasingly problematic — especially in the House, where it is already clear that the Gephardt proposal is between 60 and 100 votes shy of the number needed for passage.

The Gephardt and Mitchell plans are at this point radically different, but in all likelihood, these differences will become less substantial before any final votes occur. The Mitchell plan reflects the reality of the Senate, made clear by last month's vote in the Finance Committee, that a reform plan based upon the employer mandate - a central feature of the President's plan — simply cannot muster enough votes to pass. Senator Mitchell merely invokes the possibility of a mandate (set at 50 percent of premium cost rather than the 80 percent in the President's bill), in the event the market reforms and modest subsidies contained in his bill do not result in 95 percent coverage in a state by the year 2000.

Representative Gephardt's propos-

al, on the other hand, hews to the 80-percent employer mandate — even though almost everyone agrees such a mandate cannot pass the House, even with significant subsidies for small businesses. This was, after all, the issue over which the Energy and Commerce Committee plan fell apart, and the narrow affirmative vote in the Ways and Means Committee on the mandate has been generally regarded as more symbolic than real.

A second major difference between the two bills is that the House bill contains the concept originally devised by Representative Pete Stark (D-California) — of Medicare Part C for the unemployed, the indigent, part-time workers and low-income workers in firms with less than 100 employees. The Mitchell plan is much less ambitious (and less expensive), in that it provides relatively modest subsidies for the poor and the temporarily unemployed. The Mitchell proposal rejects the various cost control proposals contained in the Gephardt plan and instead relies on recommendations of a new health care commission to Congress, beginning in 1999, as well as a 25percent assessment on "high cost" health plans.

This is not to say that the Mitchell plan is without serious problems for organized medicine. Many of those problems were outlined in a memorandum sent by President Wilhite to the ASA membership in August, and there is increasing evidence that the complexities of the Mitchell bill are creating great concern among Senators — not all of them Republicans.

Whether the Senate ultimately turns to the type of more conservative bipartisan measure being crafted under the leadership of Senators John B. Breaux (D-Louisiana) and John H. Chafee (R-Rhode Island) is going to depend on the success of various proposed amendments to the Mitchell bill; much the same scenario could play out in the House, where within the past two days the bipartisan bill introduced by J. Roy Rowland (D-Georgia) and Michael Bilirakis (R-Florida) has finally been agreed to.

It is perhaps useful at this point to review the positions taken by ASA on health system reform at the outset of the congressional process and try to speculate where things stand with respect to each of these issues. A caution in advance, however: as this column is written, we do not have the terms of the House leadership bill, and much could change dramatically in the weeks ahead.

#### **Universal Coverage**

The Gephardt bill, through use of the employer mandate, is designed to provide coverage for everyone by 1999. The Mitchell proposal provides that if by January 15, 2000, 95 percent coverage has not been achieved, the new health care commission will send recommendations to Congress as to how to reach universal coverage. This "soft trigger" contemplates the use of a 50-percent employer mandate to achieve universal coverage.

#### **Override of State Licensing Laws**

Neither of the Gephardt nor Mitchell bill summaries included reference to this concept, which first appeared as section 1161 of the President's bill, but the Mitchell bill in final version includes the concept of federal preemption. Its inclusion in the final Gephardt version is unlikely, in view of the fact that Mr. Gephardt's bill is principally based on the Ways and Means bill, which did not include the 1161 concept.

There is substantial opposition in the Senate to federal preemption of state licensing laws, and Senator Bob Graham (D-Florida) has agreed to sponsor an amendment by which the preemption provision would be stricken. ASA is working with coalitions of both physician and nonphysician providers in support of the Graham amendment, and the outcome is presently unclear.

ASA's ability to work out an amendment with Senator Kent Conrad (D-North Dakota) dealing with anesthesia payment rules, described at length in President Wilhite's memorandum to the membership, will as a practical matter work to our significant advantage in gaining elimination of the federal preemption concept.

#### Access to Specialty Care

ASA has been extremely active in a coalition of medical specialty societies and consumer groups, seeking to assure that every health plan would be required to allow its enrollees access to specialists outside the plan's network, at reasonable cost. We were successful in gaining inclusion of such a provision in the Ways and Means bill, but the provision was dropped in the Gephardt draft in favor of a simple requirement that each plan offer a fee-for-service option. The Mitchell proposal is only slightly better, in that it requires plans to offer, in addition to a fee-for-service option, a point-of-service option as well as an health maintenance organization (HMO) option. This still falls short of the coalition's goal to require that every plan, including HMOs, permit out-of-network access to specialists, at reasonable cost. Work continues in both bodies to achieve inclusion of our proposal. As of this writing, Senators Tom Harkin (D-Iowa) and Orring Hatch (D-Utah) have jointly agreed to sponsor an amendment to the Mitchell bill, guaranteeing out-of-network access under all plans.

#### **Any Willing Provider**

ASA did not take a position during committee deliberations on the proposal to require managed care organizations to open their provider panels to any qualified individual seeking to join. Such a requirement is contained in Mr. Gephardt's summary, but it does not appear in the Mitchell proposal. The Congressional Black Caucus strongly supports an "any willing provider" mandate, and the managed care organizations equally strongly oppose it.

#### **Graduate Medical Education**

The Gephardt summary is vague on the issue of all-payer support for graduate medical education (GME) and the allocation of residency programs by specialty. The Mitchell bill would supplement current Medicare support for GME with a 1.5-percent premium assessment, with the total pool being allocated to residency training programs and academic health centers. Senator Mitchell also calls for the phasing of primary care residency positions to 55 percent by 2001, and reducing total slots to 110 percent of U.S. medical school graduates by the same year. The GME account would be \$27 billion over five years. A new national council on

GME would be created to implement residency allocation policies.

The Association of American Medical Colleges has signed on to the Mitchell proposal, but ASA as well as many other segments of organized medicine, including the American Medical Association (AMA), remain opposed to any kind of quota system for residency slots.

#### **Antitrust Reform**

Neither proposal contains antitrust relief for physicians. The Mitchell bill would repeal the McCarran Act antitrust exemption for health insurance companies. An amendment approved by the House Judiciary Committee by a very narrow vote would codify into statute the "safe harbors" identified by the federal antitrust agencies last September, but it is doubtful this provision will find its way into the leadership bill.

#### **Professional Liability Reform**

Senator Mitchell's bill contains modest, if not seriously counter-productive malpractice reform proposals, but does not include a cap on noneconomic damages, as had been narrowly voted by the Senate Finance Committee. The House Judiciary Committee has approved the same proposals, but to date, they have not been made part of the Gephardt bill. ASA is assisting the AMA in attempting to defeat these proposals.

#### **Medicare Cuts**

ASA opposed the imposition of cuts in Medicare spending as a means to finance health system reform. This will probably become the major issue

Continued on page 36

### Paul Meyer Wood, M.D. 1894-1963

Adolph H. Giesecke, Jr., M.D., Trustee Wood Library-Museum of Anesthesiology

his year we celebrate the centennial of the birth of Paul Meyer Wood, M.D. whose portrait is featured on this *NEWSLETTER* cover.

Paul Wood was already a man of distinction when he joined the New York Society of Anesthesiologists in 1925. Born of well-educated parents in rural Indiana in 1894, he had become a decorated hero of World War I. He had completed medical school at Columbia University and had become Obstetrical Anesthetist to the Fifth Avenue Hospital in New York City.

His brilliant career in organized anesthesiology has been eloquently



WLM Librarian-Curator Paul M. Wood, M.D., right, with WLM President Lewis H. Wright, M.D., preparing to move the Wood Library-Museum of Anesthesiology from New York to Chicago, circa 1963.



Adolph H. Giesecke, Jr., M.D. is Jenkins Professor of Anesthesiology, Department of Anesthesiology and Pain Management, University of Texas Southwestern Medical Center, Dallas, Texas.



described in the journal, *Anesthesiology* (1963; 24:612). He was a productive dynamo whose accomplishments on our behalf are difficult to summarize. The 40 years of his professional career spanned the most prolific developmental phase in the history of the specialty practice of anesthesiology, and this remarkable man had an important role in all of it.

The American Society of Anesthetists (now Anesthesiologists) was formed as a direct descendant of the New York Society of Anesthetists during the years that Dr. Wood was secretary of the NYSA. Rarely does a man act alone in forming a society or institution. Dr. Wood, with his mentors and colleagues, founded the American College of Anesthesiologists, the American Board of Anesthesiology and the Academy of Anesthesiology. He was administrative business manager of the New York Postgraduate Assembly and the journal, *Anesthesiology*, during their development.

He was a compulsive collector of books, journals, papers and equipment. His collection became the beginning of the library-museum which bears his name and is now housed at the ASA Executive Office. For his service to his specialty, he was bestowed with the first ASA Distinguished Service Award in 1945.

Each year, the September issue of the ASA NEWSLETTER features the work and collections of the Wood Library-Museum, and this year, we proudly join in the celebration of the centennial of Paul M. Wood's birth.

#### Blissful Sleep

The following Invocation was delivered at the 1993 ASA Annual Meeting by the Reverend Richard J. Ward, M.D., Seattle, Washington.

Creator, in the story of the beginning of the world, we read of your great gift, that we human beings would share in creation itself by bringing new life into the world. What a marvelous gift you gave us!

But in the story, before you gave us that gift, you caused a deep sleep to overcome the first creature, so that man and woman could be formed. And you have further decreed that a few of us men and women would have the privilege of duplicating your action, by bringing blissful sleep to our suffering brothers and sisters.

Those few of us who have been given this great gift acknowledge our debt to you for the honor you have bestowed upon us. We beg you to keep giving skill to our hands, wisdom to our minds and love to our hearts, as we care for our patients and as we deliberate on ways to make our care even better.

#### From Indiana to New York: Dr. Paul Meyer Wood's Hoosier Roots

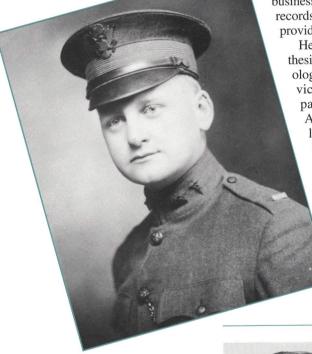
Patrick P. Sim, M.L.S., Librarian Wood Library-Museum of Anesthesiology

In the annals of modern anesthesiology, Paul Meyer Wood, M.D. occupies a significant place. Early in his medical career, he associated himself with pioneers of anesthesiology such as James Tayloe Gwathmey, Thomas Drysdale Buchanan, Thomas L. Bennett, Paluel J. Flagg and F. Adolph Erdmann. It was the last mentioned who invited him to join the New York Society of Anesthetists in 1925.

After that, Dr. Wood became closely involved with the development of a budding medical specialty and, in many ways, large and small, helped to nurture the specialty of anesthesiology to a mature, full-fledged medical discipline. As secretary-treasurer of the Society, business manager of its journal and librarian-curator for its literature, records and equipment, his untiring efforts in the ensuing decades provided a sound foundation on which the specialty flourishes.

He was also active in the American Society of Regional Anesthesia and in the founding of the American Board of Anesthesiology. He deservedly received the first ASA Distinguished Service Award, given to him by a grateful Society to which he patiently and unassumingly dedicated his professional life. Always behind the scenes, Dr. Wood rarely sought the limelight. His achievements speak for themselves. The life and contributions of this pioneer of modern anesthesiology have been ably told by Albert M. Betcher, M.D. and David A. Davis, M.D. 1-3

Dr. Wood's Midwestern roots are known to historians, but not to a great extent. It is known that both of his parents were secondary school teachers from Indiana. His familial origins in Indiana have never been studied at length. By coincidence, three other Midwestern physicians, all contemporaries of Dr. Wood who shared the same Hoosier heritage, were also destined to shape the specialty of anesthesiology in their separate but related



Paul M. Wood, M.D., circa 1917. Photograph courtesy of Albert M. Betcher, M.D.



Patrick P. Sim, M.L.S. has served as Librarian of the Wood Library-Museum of Anesthesiology for 23 years.

ways. They were Dennis E. Jackson, M.D., Arthur E. Guedel, M.D. and Emery A. Rovenstine, M.D.

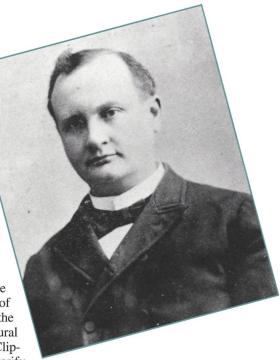
The Hoosier roots of these leaders of anesthesiology have not been explored. Were there common social and intellectual elements in the Hoosier state that were stimulated in the preparation of these leaders in anesthesiology? How did life in the last quarter of the 19th century in Indiana shape the future of these individuals? The task to determine the extent to which such a Midwestern environment was responsible for their nurturing of anesthesiology leadership remains in the realm of historical research.

On the occasion of the centennial of Paul Meyer Wood's birth, the lives of his forebears who were high school teachers in the state of Indiana were explored. Sources of information were extracted from the fragmented entries of an extensive collection of diaries kept by a rural Indiana teen-age girl whose family was close to the Wood family.<sup>4</sup> Clippings of local newspaper announcements also were consulted to verify events in the diary and to provide additional facts about life in central Indiana in the last decade of the 19th century.<sup>5</sup> Facts from these sources have been liberally referred to in this article. The diary entries began in 1889 and continued intermittently to the 1930s, when the Wood family was well-settled in New York and Paul Wood began to be actively involved in his chosen medical specialty.

Understandably, the story of Dr. Wood's immediate family is less than complete with the limited available resources. Nevertheless, the available facts presented here reconstruct a skeletal account of an Indiana couple who chose the teaching profession as a career and went on to raise their family, first in Indiana and then in New York. The Wood family did not just anchor in a small rural community in central Indiana, but was active in many communities, the names of which dotted the map of the entire state of Indiana at that time [right].

Edith Blanche McCaughey was a 15-year-old girl from rural Frankfort in central Indiana when Paul Meyer Wood was born to John Anderson Wood and Louise Meyer Wood on June 8, 1894. The McCaughey and the Wood families were close neighbors. John and Louise Wood taught at the Frankfort High School; the McCaugheys were farmers. The Woods belonged to the Presbyterian Church, while the McCaugheys were Methodists. Besides being good neighbors, Mr. Wood was also Edith's Latin and grammar teacher at the high school. This daughter of rural Indiana faithfully kept a diary chronicling her life and time from the last decade of the 19th century to the late 1930s.

John Anderson Wood came from Seymour in southern Indiana, and Louise Meyer was a native of Brookville, 70 miles to the northeast. They were both graduates of Indiana State Normal University at Terre Haute. In late summer of 1889, John Wood and Louise Meyer applied for positions at Frankfort High School. John Wood was appointed Principal and Professor of the school, and Louise Meyer was one of two assistant teachers. The other teacher on the staff



John A. Wood, father of Paul M. Wood, M.D., was a high school principal in Frankfort, Indiana from 1889 to 1896. Photograph courtesy of E. L. Mundell.



FRANKFORT DAILY CRESCENT (Sat., Aug. 3, 1889) V.1, No. 72, p.1, c.3.

Wants a Position: Prof. J. A. Woods, of Seymour, has been here for the past few days looking after the position in our Public Schools left vacant by the resignation of Prof. Goss. Mr. Woods comes highly recommended."

FRANKFORT TIMES, (Sat., Aug. 10, 1889) v.13, no.5, p.6, c.5.
The city school trustees have filled all the vacancies in the corps of instruction and school will be ready for opening on Sept. 9th.
John A. Wood, of Seymour, and Miss Louise Meyer, of Brookville, were nominated respectively for the positions of High School professor and assistant. They are both graduates of the Indiana State Normal at Terre Haute and bring with them the highest recommendations as successful educators.

FRANKFORT TIMES (Sat., Nov. 30, 1889) v.13, no.21, p.1, c.4. Professor Reeser, resigned his position in the city schools this week. to go in the hardware business with Epperson & Anderson. The pupils of his room called upon him for a speech last Wednesday at the close of school, but he declined. They persisted so hard that he finally gave in and made the school a neat little talk. He wound up by saying that he hoped that the time would soon come when he would be able to sell them all a cook stove including Prof. Wood and his lady assistant. Of course no one needs a cook stove until they are married and some of the scholars say that the remark caused some blushing...

<u>TIMES</u> (April 5, 1890) Vol 13, #39, p.1, c.5. Miss Meyer, Assistant High School Teacher, spent the week with Terre Haute friends. (Public Schools closed for week vacation.)

CRESCENT (Sat., July 4, 1891) vol. XLI, #27, p.3, c.2. Prof. John A. Wood, Principal of the Frankfort High School, and Miss Louise [Meyer], formerly an assistant in the High School, were united yesterday at the residence of the bride's parents in Brookville, Ind. Prof. Wood and his bride will return to Frankfort after an extended wedding tour.

was Professor James W. Reeser. The incumbent Principal, Professor Goss, had resigned to accept the position of superintendent of public schools in the neighboring town of Lebanon.

Professor Wood's arrival quickly gained credence for the high school. It soon experienced the highest enrollment in the history of the school with 114 students. The three educators also attracted "Delphi" teachers from all over Frankfort to seek advice from them. Both Mr. Wood and Miss Meyer were also active members of the Indiana State Teachers' Association. They attended its annual meeting in late December, 1894 in Indianapolis, which attracted several thousand teachers from throughout the state. This large turnout of a professional association meeting certainly was indicative of the priority given to education throughout the state of Indiana.

Soon after they began their teaching careers at Frankfort, John Wood and Louise Meyer developed a romantic relationship. A local newspaper reported the courtship by noting that "Professor Wood is becoming well known to theater-goers, and the professor seldom goes alone." This courtship was confirmed at the high school later in the year when assistant teacher James Reeser, Louise Meyer's colleague, announced his resignation in late 1889. Professor Reeser was forsaking the teaching profession to join the hardware business of Epperson & Anderson. During a farewell speech, Professor Reeser asserted the sales pitch of his new-found profession by offering to sell a cook stove to Professor Wood and his assistant. The implication was that only married couples would need a cook stove in their home. It was reported in the local press that this remark caused some blushing.

In the ensuing year, John Wood and Louise Meyer were busily engaged in their professional activities. Traveling throughout the state in their separate ways on both personal and official trips, they visited Terre Haute, Lafavette, Plymouth and their hometowns of Brookville and Seymour. In May, 1890, Louise Meyer resigned her position as assistant high school teacher at Frankfort to accept the position of Principal of the Plymouth Schools System in northern Indiana. With her new position, Miss Meyer would receive an annual salary of \$700; the amount was an increase of \$200 over her salary at Frankfort. John and Louise left Frankfort in early June for the summer, returning to their native Seymour and Brookville. While they were away from Frankfort, the local paper reported that Mr. Wood had renewed his contract with the Frankfort School Board for the next school year. During Mr. Wood's tenure as Principal, Frankfort High School continued to be rated highly by state educational authorities. During an on-site visit to the school in May, 1891, D. H. Smart, Ph.D., President of Purdue University and a member of the state Board of Education, complimented Mr. Wood's contributions in making his school one of the finest in the state.

A year after she had accepted her new position in Plymouth, the *Frankfort Saturday Banner* reported in late June, 1891, that Miss Louise Meyer would marry Mr. John Anderson Wood in Brookville at the home of the future bride. It further reported that the friendship leading to the engagement had sprung up during their association on the teaching staff at Frankfort High. The new cou-

ple chose to settle in Frankfort after their wedding. 10

The next two years apparently were happy and productive for the young Mr. and Mrs. Wood. Among their travels was a trip to Chicago to visit the World's Fair in August, 1893. In rural Frankfort, the Woods became good friends with their neighbors, George and Etta McCaughey. They kept house for the McCaugheys when the latter visited Chicago later that same year. Louise Wood gave china painting lessons and organized a Shakespeare club, both of which were very popular. John was the McCaughey children's teacher in Latin and grammar at school. Louise also loaned their family encyclopedia to Edith, the teen-age daughter of the McCaugheys who idolized her teacher Mr. Wood and had great affection for the entire Wood family. Even long after the Woods left Frankfort, Mrs. Wood continued to correspond from Brooklyn, New York with her former teen-age neighbor well into the late 1930s. In an entry dated Friday, June 15, 1894, young Edith wrote in her diary:

"A number of things have occurred since I wrote last. The one that seems the best is about Mr. Wood's baby. The Professor will be called 'papa.' It was born a week ago today. June 8th is its birthday. He is a boy. They have named him Paul Meyer Wood. Meyer was her maiden name."

Edith McCaughey further told us that Paul weighed 7 pounds at birth, and Mrs. Wood suffered considerably with the birth of her first child. Two months later, baby Paul was baptized at the Presbyterian Church, attended by many relatives including great-grandma Anderson. Mrs. Louise Wood at that time was still suffering from pain and had to use morphine for its relief.

By the end of 1894, Edith revealed some troubling signs regarding Mr. Wood's tenure at the high school. She reported that Miss Middleton was the new Latin teacher, and she feared that the students might lose Mr. Wood. She concluded that Frankfort High would soon be noted for its trouble with the teachers. A few days later, on January 3, 1895, Edith went on to observe that "Mr. Wood looks half-distracted." Aside from this, John Wood's relationship with the school met further setbacks. Edith noted that Principal Wood's subordinate, Mr. Moore, would not cooperate with the Principal, and worked contrary to what he was told. In the spring of 1896, Principal Wood was criticized for being partial by students of the junior and senior classes. He requested that the School Board grant him a leave of absence for a year so that he could pursue further study at Indiana State University in Terra Haute. <sup>11</sup> On May 29, 1896, John Wood resigned and was succeeded by Mr. Major in August, 1896.

After leaving Frankfort High, Mr. and Mrs. Wood pursued further education at Indiana University in Bloomington. In August, 1896, Mrs. Wood took Paul back to Brookville while Mr. Wood remained in Frankfort to pack and move the family to Bloomington. The move to Bloomington was completed on August 29, 1896. In less than a year, on Paul's third birthday, John and Louise Wood graduated from Indiana University at Bloomington on June 9, 1897. The Woods then moved on to settle in LaPorte in northern Indiana in August,

EBMc's Diary, Monday, July 9, 1894. Mrs. Wood is up and around but the doctors are nearly killing her with medicine. The baby weighed 7 pounds when it was born and when one month old 9-1/2 pounds. It is very sweet and looks like him (Mr. Wood) but I think it is extremely little, a little too little to be very nice to look at yet.

EBMc's Diary, Sunday, October 21, 1894.

Paul Wood is just as sweet as he can be. He looks exactly like Mr. Wood. He is so chubby and fat. And he laughs, and likes to be amused. His grandpa is here all the time.

EBMc's Diary, Sunday, March 24, 1895, cold.

We all went in to Mr. Woods for dinner and then went to S.S. (Sunday School). Paul is just as cunning as he can be. He stands alone now, and will soon walk. He is only nine months old. Tomorrow is grandpa's birthday. He would be 66 years old if he was living. It is also Mrs. Wood's birthday.

EBMc's Diary, May 30, 1896. The Junior Class at FHS hosted a farewell reception for Mr. Wood to honor his service and wish him well. Some factions said he was partial to the Seniors, others that he favored the Juniors. As a result of the conflict, Mr. Wood resigned.

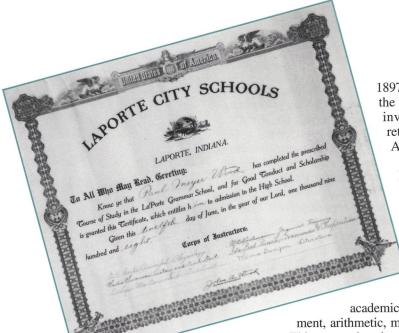
EBMc's Diary, Wednesday, August 26, 1896. Mrs. Wood and Paul left this morning. Dear little Paul I hated to see him go.

He is so cunning.

EBMc's Diary, Wednesday, September 15, 1897.

John Hodge, our president has written to Mr. Wood and asked him to come and give us a lecture on hypnotism. I hope he will come.

EBMc's Diary, April, 1926. The sad news came today of the death of our dear friend, Mr. John A. Wood. He died very suddenly of heart failure at his home in Brooklyn, NY Easter Sunday morning, April 4th. The funeral services were to be held today and burial will be tomorrow morning in a New York City cemetery.



1897, where Mr. Wood became Superintendent of the LaPorte City Schools. Mr. Wood was later invited by the High School Class of 1897 to return to Frankfort to lecture on hypnotism on April 22, 1898.

With his father as Superintendent of the LaPorte City Schools, Paul would grow up in LaPorte, Indiana, and complete his grammar school from 1897 to 1908. The diploma he received upon graduation from grammar school in LaPorte was signed by his father and the "Corps of Instructors." It was dated June 12, 1908 [left]. The grammar school curriculum in Indiana, as indicated on his diploma, exposed young Paul to

academic disciplines in physiology, history and government, arithmetic, manual training, grammar, composition and literature. This comprehensive curriculum for high school education in Indi-

ana serves as evidence of a solid scholastic preparation for Paul Wood's subsequent medical training and his extensive interest in academics.

From 1909 to 1912, Paul attended South Bend High School. He went on to study at Notre Dame as a special student in 1913. In the same year, John Wood gave up his position as Superintendent of Schools and took the family to New York where he trained missionaries at the Biblical Seminary. Paul studied at Columbia University and graduated in 1917. He stayed at Columbia for his medical education, but it was interrupted by the First World War, during which he volunteered to organize an ambulance unit to serve in Italy. He completed his medical degree in 1922 after returning from the war. <sup>12-14</sup>

Long after the Woods' move to New York, Edith McCaughey continued to correspond with Louise Wood. In 1917, Mrs. Wood informed Edith that Paul had left for Allentown, Pennsylvania, for military training and would not be expected home again until the war was over. Edith also learned of Paul's commission as first lieutenant of the ambulatory corps, leaving for Italy in 1918. After the war, Paul returned to Columbia to complete his medical education and received his medical degree one day prior to his 28th birthday in 1922. In the same year, Paul lost his maternal grandmother, who died in Chicago and was buried in Dixon, Illinois.

Firmly settled in New York, Louise Wood also provided Edith McCaughey with additional news of Paul's brother, John Meyer Wood. She informed Edith that John and his wife had a baby boy, born on September 12, 1924. They had named him John Meyer Wood, Jr. Mrs. Louise Wood was so preoccupied with her grandchild that she had forgotten to break important news to Edith. Dr. Paul Meyer Wood married Miss Harriet Muller, a young school teacher from Highland Falls, New York, on September 30, 1924! Paul and Harriet had a quiet wedding at the Episcopalian church. They lived in a four-room apartment in Fordham, New York. As Paul was starting his medical career at Roo-

First lieutenant of the ambulatory corps, Paul M. Wood was stationed in Italy during World War I,

circa 1918.

sevelt Hospital, Harriett continued her teaching career.

In one of her diary entries in 1926, Edith McCaughey broke the sad news of the sudden death of John A. Wood. On Easter Sunday, April 4, 1926, Dr. Wood's father died of heart failure at his Brooklyn home. He was buried in a New York City cemetery.

By this time, Dr. Wood's family had transferred completely from its Indiana roots to become true New Yorkers. Dr. Wood's emerging career in anesthesiology continued to take root in his transplanted home state. Intellectually nurtured by educated parents and growing up in a state that placed priority on the education of its youth, Dr. Wood was well-prepared for a distinguished career in anesthesiology.

#### Acknowledgment:

The author expresses his indebtedness to Eric L. Mundell, with the Indiana State Historical Society Library, and the Clinton County Historical Society in Frankfort, Indiana, for making their archives available to this research.

(References available on request from the Wood Library-Museum of Anesthesiology.)



Dr. Wood atop an automobile at the American Medical Association meeting, circa 1932.

Paul M. Wood, M.D., right, with Ralph M. Waters, M.D. in Atlantic City, circa 1945.

#### **Death Mask of Horace Wells**

Stephen D. Small, M.D., Fellow (1991) Wood Library-Museum of Anesthesiology

ar back in the collective consciousness of the human race, one can find threads intertwining the mysteries of sleep and death. Represented by the brothers Hypnos and Thanatos in Greek mythology, these realities today still defy our thorough comprehension.

The birth of anesthesia in New England a century and a half ago and the subsequent explosive growth of the concept of inducible, reversible coma intensified cultural dialogues about mortality, the human will and the afterlife. Even today, the most common fears patients report in the perioperative period concern waking up in the middle of surgery, being aware without being able to communicate it or not waking up at all after relinquishing their consciousness voluntarily to the control of another.

The discovery of general inhalation anesthesia by Horace Wells in Hartford, Connecticut in December, 1844 has commonly been understood to have been sparked by Wells' chance observation at a nitrous oxide public exhibition. A drugstore clerk under the influence of the gas injured his leg badly while cavorting about, and Wells questioned him after he regained his senses. The man reported feeling no pain during the trial. Wells then allegedly applied the gas to his dental patients and himself with happy results. The actual preface and setting of the story is probably much more complex and provides a few tantalizing clues about why a death mask of Horace Wells exists at all.

After Wells' birth in 1815 and during his adolescence, an entire culture of death began to grow. The rural cemetery movement began formally with the opening of the Mount Auburn Cemetery by the banks of the Charles River outside of Boston in 1831. Children were taken to meditate on their own mortality among the landscaped graves, and the Second Great Awakening of revival Protestantism occurred throughout the land. Ralph Waldo Emerson's aunt slept in a shroud and coffin, Mesmerism was practiced, and cults abounded.

1831 was also a signal year in the life of Horace Wells; his father passed away, he underwent a religious conversion and considered entering the ministry. In his high school chemistry book of that year, he penciled "To sleep, as in eternity" in the margin by the passage describing the production of nitrous



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oxide. This was 13 years before any known experimentation by Wells, and 15 years before William Thomas Green Morton's public demonstration of the properties of ether. Another of Wells' books containing marginalia is titled *Meditations Among the Tombs*.

The night after the public exhibition during which Wells saw drugstore clerk Sam Cooley bang his leg, Wells did not return home, but proceeded to have a long discussion with one of his peers, dentist John M. Riggs. The talk centered on Wells' idea that the use of nitrous oxide could be pushed to a limit hitherto unknown, to achieve some state during which dental surgery could be practiced without pain.

The two young dentists were afraid that their first patient might die, and Wells therefore volunteered to be the first subject and insisted he take the gas himself, by his own hand, and that Riggs then pull an infected molar that was troubling Wells. He deemed the procedure a success.

Riggs himself was another fascinating character, veiled by time and the absence of evidence. He studied for the ministry as well, was a trained blacksmith, made his own dental tools and remained a confirmed, opinionated bachelor to the day he died.

Wells lived a much shorter life than Riggs, committing suicide in 1848 at age 33 with a razor after securing a chloroform-soaked rag to his face. It had been four years since his discovery of general anesthesia, four long years that had been marked by personal and public humiliations. Unable to convince the public or academia that he introduced Morton to the idea of general anesthesia, and without a medical degree, university affiliation, scientific bent or track record, he succumbed eventually to what appears to have been a lethal combination of mood swings and personal use of inhalant drugs. Something native to his personality, however, some combination of risk-taking behavior, fascination with the tension between life and death and a protosuicidal nature may have been responsible for the fact of his initial, ground-breaking experiment.

The death mask of Wells was last published in the scholarly literature in 1944, when Harry Archer, D.D.S. included a picture of it in a long article composed largely of Wells' letters upon the centenary occasion of his discovery of anesthesia. At that time, it was unknown who made the mask or when. It has recently come to light that the mask was made by John M. Riggs, three weeks after Wells' death.

Wells died in the middle of winter, and his body was returned to Hartford by train, possibly packed in ice. Scant evidence indicates that Wells may have been buried soon after, so it is not known if Riggs made a plaster death mask before Wells was interred or if his body was exhumed by Riggs as an afterthought. Graverobbing for anatomy classes was not uncommon, and Emerson dug up his son's body, after decay, to contemplate it.

The whereabouts of the original plaster cast, if it exists, are unknown, but a blackened bronze mask was found at the Francis A. Countway Library in Boston in 1992. The 19th century donor of the mask was T. H. Bartlett, a professor and sculptor at the Massachusetts Institute of Technology.

If Riggs made the bronze mask from his plaster mold before 1850, it would

Horace Wells'
death mask
will be on display
at the WLM exhibit
during the ASA
Annual Meeting in
San Francisco,
October 15-19,
1994.

represent one of the first such extant castings from America, as there were no foundries at that time there. All statuary was produced in Europe, mainly France, for the American market. Riggs was capable of doing it, as he knew how to run a forge. Sophisticated metallurgic studies performed by the Fogg Museum at Harvard University on the mask in possession of the Countway Library have failed to reveal the identity of the forge, country of origin or date of construction.

The possibility remains that T. H. Bartlett had the bronze mask cast for him in France. Bartlett was commissioned by a group honoring Wells in 1872 (about the time that the American Medical Association credited Wells with the discovery of anesthesia) to create a nine-foot statue of the man in Bushnell Park, Hartford, Connecticut. Riggs was still alive, and he might have loaned Bartlett the plaster mold to assist in creating the facial likeness of Wells.

Although death masks are not rare, well-preserved metal ones from mid-19th century America are, and written source and critical materials about them are rarer still. The fact that Riggs made one of Wells, and that it has survived in one form or another to this day in probably at least two copies, is also remarkable considering the eclipse of Wells' stature in the historiography of anesthesia in the last 100 years.

Adding to the numerous mysteries cloaking the preface to Wells' discovery and the making of the mask, it seems fitting that a poem should be discovered in Riggs' pocket after his demise. Reportedly his favorite verse, Sir Edwin Arnold's "Death in Arabia" begins:

He who died at Azen sends This to comfort all his friends: Faithful friends! It lies, I know, Pale and white and cold as snow, And we say, "Abdallah's dead!" Weeping at the feet and head. I can see your falling tears, I can hear your sighs and prayers; Yet I smile and whisper this, I am not the thing you kiss ...

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#### The Historical Controversy Surrounding Nitrous Oxide

Steven J. Luke, M.D. Adolph H. Giesecke, Jr., M.D., Trustee Wood Library-Museum of Anesthesiology

itrous oxide represents the primordial mist in the evolutionary development of inhalation anesthetic drugs and practice. Horace Wells introduced nitrous oxide to clinical medicine 150 years ago in a demonstration that was perceived as a failure at the time but was subsequently recognized as a success.

Nitrous oxide was born in controversy and has generated more controversy throughout its pharmacological life; yet, it remains an important part of our practice and possesses characteristics that give it a bright future.

#### **Nitrous Oxide Continues to Raise Controversy**

After the controversy of efficacy was settled, the controversy of safety began. In 1868, Edmund Andrews of Chicago wrote that nitrous oxide was "safer and pleasanter than any anesthetic known." In the same year, Benjamin Ward Richardson of the Medical Society of London wrote that nitrous oxide was "the most dangerous of all substances that has been applied for the production of general anesthesia."

The passage of time has done little to resolve the controversy, with eminent clinicians writing both for and against nitrous oxide's continued use in clinical practice.<sup>3</sup> Despite disagreement, nitrous oxide remains firmly established in the anesthetic armamentarium and is the most commonly used inhaled anesthetic in the world today.

Now, concerns are being expressed because nitrous oxide causes irreversible oxidation of monovalent cobalamin in methionine synthetase to divalent cobalamin, permanently inactivating the enzyme. Methionine synthetase is a key enzyme in DNA synthesis and maintenance of the

myelin sheath around nerves. Destruction of the enzyme can lead to neurologic effects such as subacute combined degeneration of the spinal cord and defects in hematopoiesis such as megaloblastic anemia.

Recent case reports have shown that patients who are deficient in Vitamin  $B_{12}$  preoperatively and are given an anesthetic containing nitrous oxide have a greater likelihood of developing neurologic deficits two to six weeks later, even though the exposure to nitrous oxide was brief.<sup>4</sup> These patients were not known to be deficient in Vitamin  $B_{12}$ , and the only clue in retrospect was an increased mean corpuscular volume in three of the five reported patients. All the patients recovered after parenteral administration of Vitamin  $B_{12}$ .

Since the inhibition of methionine synthetase is permanent, new enzymes must be manufactured by the body in order to restore normal function. This process usually takes three to four days. A recent study showed an earlier return of methionine synthetase to normal in patients who were pretreated with methionine 100 mg/kg orally before exposure to nitrous oxide anesthesia.<sup>5</sup> This finding may be clinically significant for patients known to be at risk for side effects from nitrous oxide.

#### Occupational Exposure Still Subject of Concern

In addition to concerns for the patient's safety, many authors have questioned the safety of occupational exposure to trace amounts of nitrous oxide. In 1977, the National Institute of Occupational Safety and Health recommended that no health care worker be exposed to a time-weighted average of greater than 25 parts per million nitrous

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oxide.<sup>6</sup> This recommendation, which was based on psychomotor performance studies, is being disputed by authorities who now advocate higher maximum exposure levels based on the absence of lasting adverse health effects.

While maximum safe exposure is yet to be precisely determined, we cannot doubt that trace concentrations of nitrous oxide have an impact on our well-being. A retrospective study published in 1980 showed that women chronically exposed to trace levels of nitrous oxide in dental operations had a 2.3 times higher rate of spontaneous miscarriage than unexposed female dental personnel. The wives of male dental personnel exposed to nitrous oxide in the workplace had a 1.5 times higher rate of spontaneous miscarriage.

Additionally, the study documented an alarming increase in the incidence of liver, kidney and neurologic disease in the chronically exposed.

While this study can be criticized for flaws inherent in any retrospective study, it has prompted continued interest in the subject. A retrospective study published in 1992 that controlled for co-variates found that female dental assistants who were exposed to nitrous oxide in the workplace for five or more hours per week were only 41 percent as likely as unexposed women to conceive during each menstrual cycle.<sup>8</sup>

#### **Advantages May Outweigh Disadvantages**

One of the most unusual uses of nitrous oxide today is in the treatment of the alcohol withdrawal state. Investigators in Johannesburg, South Africa, have been using nitrous oxide in analgesic concentrations to ameliorate mild to moderate symptoms of alcohol withdrawal syndrome since the early 1980s.<sup>9</sup>

Analgesic concentrations of nitrous oxide were given to more than 7,000 patients for 20 minutes via a dental analgesia machine. Symptoms improved rapidly, and repeated treatments were necessary in only 5 percent of patients. The authors theorize that the efficacy of this treatment lies in nitrous oxide's stimulation of the endogenous opiate system, causing release of endorphins.

What, then, does the future hold for nitrous oxide?

- The use of self-administered (patient-administered) nitrous oxide for analgesia in prehospital settings and during some painful diagnostic and therapeutic procedures in emergency rooms and radiology suites seems to be growing.
- · Research will continue into nitrous oxide's effect on

methionine synthetase. A few preliminary studies have been performed to determine whether its antifolate properties can be used to advantage in patients with leukemia. 10

• Nitrous oxide may be tumor-selective in certain groups and could provide some benefit as a chemotherapeutic adjuvant.

One of the purported advantages of nitrous oxide is its low solubility in blood. Now that desflurane is available, will its low solubility married to high potency be another nail in nitrous oxide's coffin?

We continue to use nitrous oxide because its advantages outweigh its disadvantages. It has a proven safety record in the average surgical population. It is familiar and predictable, economical, readily available, easily stored and not irritating to the airway.

Its uses are myriad, but the past 150 years have taught us that the observed advantages of nitrous oxide are accompanied by some risk to patient and anesthesiologist. Efforts will continue to be made to determine the risk we ourselves take daily by using nitrous oxide. Should we all be taking supplemental methionine and Vitamin  $B_{12}$  in our diets?

Nitrous oxide may someday be eliminated from anesthetic practice, but until then, the controversies that began with Horace Wells 150 years ago will persist.

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#### Joseph Lister on Chloroform: Unique Holograph Now Resides in WLM

Charles C. Tandy, M.D., Chair Wood Library-Museum of Anesthesiology Acquisitions and Depositions Committee

he most significant unpublished manuscript relating to the history of anesthesiology has now found its appropriate home in the Wood Library-Museum of Anesthesiology (WLM), after having been carefully preserved

by descendants of its recipient Edward Lawrie (1846-1915).

Most would agree that Joseph Lister (1827-1912) was England's greatest surgeon. He literally changed surgery from an art to a science by the methods he developed to prevent bacterial contamination of the surgical wound. Few, however, would recall his contribution to anesthesiology, but his remarkable letter to his friend and colleague Lawrie in 1890 most assuredly authenticates his position.

Lister's presence as a student at the first public demonstration of surgery under ether anesthesia in England (1846) by Robert Liston undoubtedly impacted his career as a surgeon. Lister subsequently trained with James Syme in Edinburgh, Scotland, where chloroform was the

agent of choice, and he gained extensive experience with the drug in his practice in Glasgow. He supported the use of chloroform over ether and was influential in promoting chloroform in the standard text, Holmes and Packard, *System of Surgery*, in several editions.

The decades-long controversy surrounding chloroform is pointedly discussed in this 15-page letter to his respected friend Lawrie. Lawrie, the surgeon at Hyderabad, India, and Principal of the Hyderabad Medical School had headed the two Hyderabad Commissions on Chloroform to determine its effect on the heart and the cause of sudden death that had been argued by John Snow and many others from the beginning.

Multiple experiments were performed on animals with the best monitoring of the time in an attempt to settle the issue. Conclusions were drawn from the observations; yet, controversy continued to rage.

Lister's letter in April of 1890, written in Wiesbaden, Germany, where he had gone for their famous baths, praises Lawrie's work of "remarkable value" that should "silence forever the argument that chloroform, even though well-diluted with air, is liable to arrest the action of the heart before the respiration."

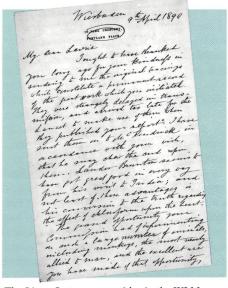
In spite of the conclusions drawn from the experimenta-

tion and Lister's basic agreement, the British journal, *Lancet* continued to disagree. To deal with the controversy that followed the Hyderabad Commissions' reports and Lister's strong position so well-documented in the letter, a survey of the use of anesthesia in Britain, the United States, Europe and the colonial countries was begun, and so possibly was the beginning of modern scientific anesthesia.

Lawrie's best evidence for the action of chloroform on the heart, the kymographic tracings, were questioned as well as the animal preparations used. Thus, Lawrie's work and Lister's comments had ramifications in the development of experimental physiology as significant as their observations in the pharmacology of anesthesia.

For the WLM to be the posses-

sor of such an important document relating to the history of anesthesiology is a true milestone in the increasingly important rare book collection. It is hoped that the scholar and even the casual observer interested in the heritage of our medical specialty will avail themselves of this treasure.



The Lister Letter now resides in the WLM.

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#### History Is Too Important to Leave to Historians

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dvances in medical theory, practice and education improved the length and quality of life. The discovery of surgical anesthesia in 1846 ranks among the first and, possibly, among the most dramatic of many therapeutic triumphs. Anesthesia caught the imagination of the public, stimulating interest and optimism. Physicians and laypeople alike believed the future of medicine to be unbounded. In 1870, Harvard physician, William Clark, M.D., predicted, "Anesthetic agents ... enabled the physician at his will to compel pain to disappear and distress to be quiet."

The exciting progress in medical practice also stimulated interest in its history. Charles Rosenberg notes that medicine has always had its historians.<sup>2</sup> He points out, however, that early medical historians were usually physicians, many of whom believed that contemporary practice could only be understood and practiced in its own historical context. This situation began to change 50 years ago when university departments added faculty to teach the history of science and medicine and employed historians as members of a humanities program, and when journals of medical history increased in number and readership.

In England, The Wellcome Trust founded an institute dedicated to the study of the history of medicine, in addition to satellite units at four major universities. Professional historians, rather than practicing physicians, dominated the field to an ever-increasing extent. Not coincidentally, the number of books and monographs increased.

The involvement of professional historians changed the character of medical history. They brought with them more critical methods of research. Some, with formal



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training in other languages, explored the influence of ancient cultures. Sensitive to broad trends in history, they sought to relate medical developments to social, political, demographic and economic events.

As the health of the individual and the community became a more important part of daily life, their books and papers found an ever-increasing audience. The public wanted more information about modern medicine, the way physicians think, and the social factors and personalities that contributed to great discoveries. Politicians and administrators responsible for the formulation of public policy looked to history for insight about health issues. It is this insight from history that has given us the modern hospital and traditions of medical care among special groups of citizens.

#### Benefits, Limitations of Historians

The involvement of historians has been beneficial, particularly to physicians, since their perspective is different than ours. For example, they help to remind us that the practice of medicine is not simply a technical discipline governed by scientific discoveries and statistics. They tell us that the character of our work is shaped by the cultural values, including political, economic and social factors. They show that medical practice consists not only of those things that we can do, but also those things that patients will allow us to do; the latter may have little to do with medical science.

The perspective of professional historians, however useful, also has limitations.

Many modern historians interpret events in relation to the accumulation and exercise of power. Where once they used this kind of analysis only for political, military or economic events, now they often use it to understand medicine as well as other social phenomena. For example, some recent and widely read books<sup>3-5</sup> suggest that early physicians began to use anesthesia because they recognized its potential to increase their "power" over patients. To these writers, "power" may mean one of several things, ranging from the ability to keep patients still during surgery to the ability to prevent patients from participating in medical decisions during surgery, by rendering them unconscious. Others imply that physicians saw in anesthesia the "power" to improve their financial and social status by using a potent, new, publicly acclaimed therapeutic agent.

Some arguments ring true. Clearly, the "power" to keep patients still and unconscious during surgery was a significant advantage, one which made possible the delicate and extensive operations that are so common today. On the other hand, the perception that early physicians used anesthesia to deprive patients of the "power" to participate in "surgical decisions" seems very unlikely. Anyone who has practiced medicine knows that fear, pain and severe disease disrupt thought, independent of anesthesia or narcotics.

#### **Keeping the Human Element in History**

This example illustrates an important point. Even though the works of modern historians are interesting and helpful, some historians lack the perspective that can only be obtained by working with patients. Medicine is a relationship between two human beings, the patient and the physician. Micro- and macro-economics, political power and social issues may be useful to describe historical trends; however, such descriptions are far removed from the realities and the decisions made by the individual physician who must care for a patient in great pain or deal with a family faced with the loss of a loved one.

This experience affects what physicians think and do, and it has shaped the development of our specialty. Historians, who have neither been responsible for handling these situations nor experienced the resultant pressures, may be no more aware of these problems than are the politicians and members of the lay public who read their books.

It is, therefore, extremely important to keep the human element in the history of medicine and, in particular, the history of anesthesia. No group is better qualified to describe and explain this aspect of our tradition to students, to the public, to politicians and to administrators than anesthesiologists. We cannot delegate this responsibility to others. Preserving and transmitting the human as well as the technical and scientific traditions of anesthesiology is the mission of the Wood Library-Museum.

#### Anesthesia and Modern Medicine

Most people forget that anesthesiology is almost exactly the same age as modern medicine. Consider the timing of some of the important events in each area.

In 1809, the year that Serturner first isolated morphine and codeine from opium, Western societies had just entered

a period that historians call the "Age of Heroic Medicine." Physicians of that time still attributed disease to an imbalance among the four "humors." Common modes of treatment included purging, bleeding, blistering and cupping.

In 1838, as Crawford W. Long set out from rural Georgia to study medicine in Lexington, Philadelphia and New York, the "Parisian School of Medicine," founded by Laennec, Louis and Charcot, had just begun to establish the idea that different organs have different functions. They encouraged physicians to identify the clinical signs and symptoms unique to different diseases and then to correlate each pattern with post mortem findings. This approach formed the basis for the current physiological, biochemical and bacterial theories of diseases and their treatment.

In 1884, when Viennese ophthalmologist Karl Kohler performed the first surgery with a local anesthetic, Robert Koch and his contemporaries had just discovered the bacteria that caused tuberculosis, typhoid, cholera and diphtheria.

In 1898, as August Bier perfected his method for spinal anesthesia, the distinguished faculty that William Henry Welch assembled at Johns Hopkins graduated its first group of medical students.

In 1920, Arthur Guedel described his scheme for using eye signs to estimate the depth of anesthesia, only six years after Joseph and Abraham Flexner published the critique of American medical schools, which profoundly altered medical education for almost a century.

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#### WLM Art Collection: Reflections of Old and New

Franklin B. McKechnie, M.D., Secretary-Treasurer Wood Library-Museum of Anesthesiology Board of Trustees

he Wood Library-Museum of Anesthesiology (WLM) is indeed a gem in the crown of ASA. And like most gems, it has many facets.

One is a large collection of books and journals related to all aspects of anesthesia, its origins, developments over the years and present research. Another is its rare book room, which contains a small but world-renowned collection of books dating to the beginning of our specialty. The work and writings of those early pioneers in anesthesia to whom we owe so much are found there.

An additional facet is the WLM's magnificent collection of anesthesia equipment showing the almost step-by-step developments leading to our modern gas machine and monitoring devices that are so crucial to the safety of our patients.

Under the leadership of WLM President Elliott V. Miller, M.D. and with the hard work of Museum Curator George S. Bause, M.D., the museum equipment is now on permanent display and beautifully presented at the ASA Executive Office in Park Ridge, Illinois. Take a little extra time when in Chicago and visit the WLM.

A very small but particularly brilliant facet of this gem is a fine collection of paintings, drawings, lithographs, photographs and engravings by anesthesiologists or about anesthesiologists. Among these are: 1) First Demonstration of Ether at Massachusetts General Hospital, 2) Sir Humphry Davy in his laboratory painted by Thomas Laurence for Mrs. Davy, 3) a photograph of Crawford W. Long, M.D., 4) a picture of Henry Hill Hickman, F.R.C.S. and 5) a painting by Joyce R. Sumner, M.D., past ASA Assistant Secretary (1972-73), titled "Still Life."



Franklin B. McKechnie, M.D., Winter Park, Florida, is retired from practice. He is a past ASA President (1986).



When William T.G. Morton was 8 years old, his father bought the Waters-Morton house on Cemetery Road in old Charlton Center, Massachusetts.

The heart of the WLM art collection, however, is four original watercolor paintings by Leroy D. Vandam, M.D. Dr. Vandam is Professor Emeritus of Anesthesia at Harvard Medical School and is affiliated with Brigham and Women's Hospital, Boston, Massachusetts. Well-known for his teachings and writings on anesthesia history and other subjects for many years, these paintings depict early homes of W.T.G. Morton (1819-1868), one of the truly great pioneers in anesthesia to whom, with Drs. Long and Horace Wells, we owe homage. Watercolor painting has long been a hobby of Dr. Vandam, and we are indeed fortunate to have four originals as part of the WLM art collection.

These four paintings have been reproduced as art prints on fine paper as the WLM "Our Heritage" Art Series and will be available singly or in sets of four at the ASA Annual Meeting in San Francisco, California. Dr. Vandam has graciously agreed to sign 100 sets of limited-edition, numbered prints. The signed sets will be limited to only these 100 sets. However, unsigned sets and single prints will be available as well.

The prints are in full color and depict the "Waters-Morton House" as well as two views of another house that Morton lived in, titled "Morton House I" and "Morton

House II." The fourth print is of the "Red Barn" that was on the Morton homestead in Charlton Center, Worcester County, Massachusetts.

The "Morton House I" has appeared on the covers of the August 14, 1987 *Journal of the American Medical Association* and the August, 1989 *ASA NEWSLETTER*. The "Red Barn" appeared on the cover of the September, 1991 *ASA NEWSLETTER*. The "Waters-Morton House" also was featured on the cover of the *ASA NEWSLETTER* in September, 1993.

Note cards will also be available, three each of the same four scenic prints in boxed sets of 12. Both the prints and note cards would make fine gifts for the graduating resident, as a thoughtful donation to the hospital for its lobby or doctors' lounge, or to give as a holiday, birthday or other special event gift.

The WLM will be exhibiting the Vandam watercolor series at the ASA Annual Meeting. Drop by, say hello and take a look at this portion of your WLM Art Collection.



Across the way at the intersection of Stafford Street and Cemetery Road, James Morton conducted a farm supply business where the red barn now stands.

#### Task Force on Blood Component Therapy

he American Society of Anesthesiologists Task Force on Blood Component Therapy will hold an Open Forum in conjunction with the ASA Annual Meeting on October 15-19, 1994 in San Francisco.

The Open Forum will be held in the Moscone Center Ballroom 103 on Monday, October 17 from 2:00 p.m. to 4:00 p.m.

All interested practitioners are invited to attend and discuss the development of a practice parameter on blood component therapy.

The Task Force on Blood Component Therapy is chaired by Linda C. Stehling, M.D., Scottsdale, Arizona. Other members of the task force include: Dennis

C. Doherty, D.O., Atlanta, Georgia; Ronald J. Faust, M.D., Rochester, Minnesota; A. G. Greenburg, M.D., Providence, Rhode Island; Chantal Harrison, M.D., San Antonio, Texas; Dennis F. Landers, M.D., Omaha, Nebraska; Russell Laros, Jr., M.D., Tiburon, California; Ellison C. Pierce, Jr., M.D., Boston, Massachusetts; Randall S. Prust, M.D., Tucson, Arizona; Andrew D. Rosenberg, M.D. Roslyn Heights, New York; Richard B. Weiskopf, M.D., San Francisco, California; and John F. Zeiger, M.D., Fort Wayne, Indiana. Members of the task force will be on hand to participate in the discussion of the practice guideline.

#### Helping to Preserve Our Past and Plan Our Future

he Board of Trustees of the Wood Library-Museum of Anesthesiology wishes to acknowledge and thank the following individuals and organizations who have made monetary contributions to the WLM from September, 1993 through August, 1994 (does not include endowment contributions):

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#### An Oral History of Anesthesiology

John W. Pender, M.D., Chair Wood Library-Museum of Anesthesiology Living History Committee

In addition to the superb collection of videotapes of interviews with pioneers in anesthesiology available for loan from the Wood Library-Museum, a complete collection of historical audiotapes also resides in the archives. The availability of this collection of audiotapes is not widely known and, hence, the valuable historical information therein has been rarely used in the past.

On each cassette is a 60-minute recording by several speakers on subjects of interest to anesthesiologists. Most of the material was recorded from lectures at anesthesiology meetings on various scientific subjects. The subject material was considered by program committee chairs to be important enough to warrant presentation at a meeting.

Even more interesting than the subject material are the actual voices of many famous anesthesiologists since 1958



John W. Pender, M.D. is a retired anesthesiologist, Palo Alto Clinic and Emeritus Clinical Professor at Stanford University, Stanford, California.

when the collection was started: John Adriani, M.D., Virginia Apgar, M.D., Henry K. Beecher, M.D., Stuart C. Cullen, M.D., Robert R. Dripps, M.D., Harold R. Griffith, M.D., Forrest Leffingwell, M.D., M. Digby Leigh, M.D., David M. Little, Jr., M.D., Oswald S. Orth, M.D., Ralph M. Tovell, M.D., Ralph M. Waters, M.D. and many others. The total number of speakers is more than 1,500.

Most of us revere our mentors, and listening to their voices should bring back nostalgic memories. The availability of these tapes makes possible the rendition of the voice of an anesthesiologist for whom a dedication is being planned. In addition to the giants of our specialty, the tapes contain the lectures of many less well-known but nevertheless well-prepared and articulate speakers.

To expedite the location of the words of any particular speaker, a 35-year index of the speakers and their subjects has been compiled, from 1958 to 1993. Volume number, issue and year of each presentation is found easily. Copies of this index can be purchased at a nominal cost from the Wood Library-Museum for exhibition in local libraries.

Who furnished the energy and perseverance to collect such a large number of audiotapes? Each year, the Audio-Digest Foundation prepared, edited and distributed these tapes and gave a complimentary subscription to the Wood Library-Museum and the Guedel Anesthesia Center. Diligent librarians at these two institutions recognized the historical value of the tapes and catalogued and preserved them. To these librarians, we owe a debt of gratitude, which can be expressed best by use of the historical audiotapes that they have collected.

#### The Historical Controversy

Continued from page 18

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#### **Occupational Hazard:**

#### Cell Savers Spray Anesthesiologists with Blood

William P. Arnold III, M.D., Chair Committee on Occupational Health of Operating Room Personnel

uring a recent liver transplant, an anesthesiologist sustained a major exposure to blood when tubing attached to a blood-recovery device made by the Haemonetics<sup>®</sup> Corporation, Braintree, Massachusetts, ruptured under pressure. Although the anesthesiologist was more than three feet away from the cell saver, his entire face and upper torso were explosively enveloped in blood when tubing running from a reservoir for processed blood burst.

At least six other identical incidents have been discovered nationwide through an informal survey conducted via Internet using two list server groups dedicated to discussion of topics related to anesthesiology. Each of the reported cases has involved blood collection devices manufactured by Haemonetics. The accidents have all occurred with *Cell Saver® 3 Plus* or *Cell Saver 4 Autologous Blood Recovery Systems*. In each case, tubing connected to a reinfusion bag had been clamped inadvertently by the machine's operator.

Neither of the *Cell Saver* devices is equipped with an alarm or a mechanism to halt the roller pump in the event that excessive pressure develops in tubing leading to the reinfusion bag. However, the Owner's Operating and Maintenance Manual for the *Cell Saver 3 Plus* contains a chapter of at least 14 warnings, including the following two sentences: "Avoid blocking any tubing carrying blood from the pump. A buildup of pressure in this tubing can result in the widespread dispersal of blood."

ASA has discussed this potentially dangerous hazard with the Haemonetics Corporation. At this time, the company has no plans to retrofit either reported model of the *Cell Saver* with protective devices, although a newer model, the *Cell Saver 5*, is so equipped.

Members of ASA who work in proximity to Haemonetics *Cell Saver 3 Plus* or *Cell Saver 4* blood recovery machines should be aware of the potential hazards presented by these machines. A protective barrier placed between the blood recovery device and personnel in the operating room might decrease the possibility of contact with blood in the event of a mishap.

William P. Arnold III, M.D. is Associate Professor at the University of Virginia Health Sciences Center, Charlottesville, Virginia.



#### Pain 101

James N. Rogers, M.D. Committee on Pain Management

The "ethics" of pain therapy can pose many questions and stimulate many conversations. Unethical practices do occur and are indeed cause for concern! In reality, most physicians' practices demonstrate humanness, compassion and a continuing search for understanding pain mechanisms and treatment. The following personal pain story, as told by former police officer and current anesthesiologist James N. Rogers, M.D., vividly demonstrates principles which the ASA Committee on Pain Management seeks to publicize and promote. Your comments (or other similar articles) would be greatly appreciated.

— Gale E. Thompson, M.D., Chair Committee on Pain Management

was asked to write about my experiences as a patient in pain from the viewpoint of a physician. It is not easy to write about such a personal experience as pain without depressing the reader. I do feel that my own experience with pain has helped to make me a better physician. While experiencing pain might be an excellent teaching method for physicians, and some of our patients might like to see us enrolled in this as a medical school course, most of us would do our best to avoid that class. I was not so fortunate. In fact, for a while I thought I was majoring in pain.

My class in pain began on a cold December morning in 1978. I was riding my motorcycle back to the police station, just five minutes before going off duty, when I was broadsided by a car that ran a stop sign. My left leg was crushed, severing the major arteries. Fortunately, perhaps



James N. Rogers, M.D. is Staff Anesthesiologist at the University of Texas Health Science Center and Director of the Pain Clinic at the Audie L. Murphy Veterans Administration Hospital, San Antonio, Texas.

because I was a police officer, emergency care was almost immediate. Eventually, I lost consciousness and underwent emergency surgery. My family was told that I was not expected to live.

Obviously, they were wrong. I was still alive the next morning. When I awoke, I was in the intensive care unit with my left leg in the most complicated traction device I had ever seen. The pain was excruciating. I received intramuscular meperidine as needed for the pain, but it never went completely away. When the meperidine made me nauseated, phenergan was added.

When I was awake, I was in pain, and asleep, I seemed to dream of pain. Pain medication was only available if I asked. This was embarrassing, especially in front of my family and fellow police officers. It makes you feel like you are weak and helpless, ripping away any self-respect you may have left.

I remained in the intensive care unit for two weeks and underwent a series of 10 amputations of my left leg. The surgeons were never able to restore adequate blood flow to my leg, and I was eventually left with a high, above-the-knee amputation. Intramuscular injections were continued every three to four hours, yet the pain continued.

#### An Experience That Defies Explanation

Eventually, the major surgical procedures were over, and I began to heal. To everyone's surprise, especially mine, the pain did not subside. Instead, the pain became more intense and severe. The character of the pain also began to change; it was becoming more burning in nature with frequent, sharp, shooting pains like a lightening bolt that caused my missing limb to cramp and spasm with unbelievable intensity. It was hard to understand such intense pain in a missing limb. I had heard of phantom limb pain before my injury, but now I was experiencing it firsthand. It is an experience that defies explanation.

The intramuscular injections were changed to morphine, and I settled into a routine. I would awake in pain, call for the nurse, wait, get frustrated, ask for a shot, wait, get more angry and frustrated, hurt more, get the shot, and the pain would improve but never go away. I also became a clock watcher since the nurses would not even think about dispensing the medicine before four hours.

This cycle went on for weeks. We would argue about how much time had passed since the last injection. It was like a cruel game. The nurses were on one side, and I was "I would awake in pain, call for the nurse, wait, get frustrated, ask for a shot, wait, get more angry and frustrated, hurt more, get the shot, and the pain would improve but never go away... This cycle went on for weeks. We would argue about how much time had passed since the last injection. It was like a cruel game."

on the other. My wife was forced, on many occasions, to act like the referee, trying to mediate between the opposing sides.

The injections themselves were also becoming increasingly painful. There was not a spot on my body that had not been subjected to a needle, and each new injection felt like the needle was being driven into wood. At times, it was difficult to know which was worse, the pain or the injections. When awake, I spent at least half my time in what I would describe as severe pain. I began to feel like I would be in pain for the rest of my life.

The pain persisted for several years, despite continued treatment with narcotics and other medications. My physicians did the best they could under the circumstances.

#### Valuable Lessons Learned About Pain

Two things eventually relieved my pain: freedom from medications and receiving my first prosthetic leg. Both of these events helped improve my body image and began to restore my self-esteem. The pain did not magically disappear, but it did become significantly better. Over the years, with biofeedback (yes, the psychological stuff), the pain has continued to decrease. Today it only rarely flares, usually when I am overtired or with stress.

I am not bitter about losing my leg; in fact, it has brought me a great many blessings. My wife and I are closer than we have ever been, and I was able to retire from the police department, go to college and eventually medical school. I would never have had the opportunity to accomplish all this if it had not been for the accident. In fact, I like to say I was able to attend medical school for half price; instead of costing an arm and a leg, it only cost me a leg. I have a great Halloween costume, a pirate outfit complete with a specially made peg leg. I even used the prosthesis as a workbench when my wife and I built our home.

#### Fear of Pain, Fear of Addiction, Fear of Depression

The experience with pain taught me some very valuable lessons and caused me to have an intense interest in pain management. I have a great deal of compassion for patients in pain and understand at least some of what they are going through. I hope I can relate some of what I have learned about being a patient in pain.

Nothing is probably more feared than pain. Unfortunately, pain has traditionally received limited attention from the medical community. The medical model taught in medical school focuses on treatment of disease, believing that the pain will go away when the cause is removed. There is precious little taught in medical school or residency about the management of pain.

For me, I first learned about pain management in my third-year surgical clerkship as a medical student. It consisted of learning how to write orders for intramuscular narcotics. I was taught to be careful that I did not overdose the patient or cause them to become addicted to the pain killers. Those that complained loudly of pain were either wimps or were drug-seeking. It seemed like the patients who complained the loudest were more likely to be ignored in regards to their pain complaints and were avoided by the residents. Undertreatment of pain appeared to be the rule rather than the exception.

"Cookbook" pain management is seldom effective. All patients undergoing an appendectomy do not experience the same amount of pain. Some patients may only need a mild analgesic for the postoperative pain, while another may require a great deal of medication as well as psychological support to adequately alleviate the pain. The pain management plan needs to be tailored to the needs of each individual patient.

I can tell you that the fear of addiction is strong, not only on the part of the health care provider, but also for patients and their families. Since we were children, we have all heard about the addictive potential of narcotics, and for the vast majority of us, the possibility of addiction is frightening. Doctors and nurses are afraid of creating a drug addict, and physicians worry about the legal ramifications of writing a great deal of prescriptions for narcotics. Sometimes patients and their families may look on the pain as a punishment from God for some previous misdeed.

At the time, I was very hesitant to admit I was depressed. After all, I was a police officer. I was never supposed to show weakness. Now my life had been permanently changed. I was no longer a "whole" person. I knew I could never go back to being the same person I was before the accident. Finances were a disaster. I thought I was addicted to narcotics, and I had lost almost all of my self-esteem. Of course, I was depressed. I just did not recognize it. Without the support and love of my dear wife and her endless patience with me during this trying time, I know I would not have been able to survive.

#### Interventions, Rehabilitation and Hope

Psychological interventions can be very helpful. I know a lot of people have doubts about the efficacy of psychological therapies. I would have been very resistant to psychological help if it had been offered in the beginning.

For me, biofeedback has been very helpful. I can now recognize factors that can lead to an exacerbation of the phantom limb pain and intervene early, using simple techniques.

Rehabilitation is also very important. I noticed a big change in my pain when I began wearing a prosthesis. It was far from normal looking, but being able to see a shoe at the end of my pant leg did wonders to boost my spirits. For the first time since the accident, I was able to look forward to the future. This was a major turning point for me. This marked the first time that the pain was no longer a major part of my life. It had finally moved into the back seat.

This experience with pain caused me to develop a strong interest in the management of pain and an appreciation for the importance of adequate pain relief to the patient. When I finally entered medical school, I looked hard for a medical specialty that focused on pain. My choice was anesthesiology. As an anesthesiologist, I not only can provide pain relief in the operating room, but as a member of a multidisciplinary pain clinic, I provide care for patients with acute pain, chronic pain and cancer pain.

I cannot think of anything as rewarding as alleviating pain, and I am proud to be a member of a specialty with so much to offer to the patient in pain.

## Alternative Pain Therapies: Bain or Blessing?

Jessie A. Leak, M.D.

o discussion on pain management alternative therapies would be complete without considering the ethics of condoning many of these treatments. As physicians, we are taught traditional Western medicine, which is concerned with the pathologies and treatments of the physiological and psychological functions of the person. Nonetheless, the World Health Organization seeks a more accurate definition of health: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Conceptually then, the social and creative well-being of the person (patient) is the driving force for repair of physiological and psychological dysfunction. Bill Moyers points out in *Healing and the Mind* that, ultimately, a marriage of Eastern and Western medicine may provide us with a framework for greater (patient) participation in the healing process. The author feels that we need to recognize that millions of Americans are using massage, meditation and acupuncture without seeking a doctor's directive. This strengthens the argument that patients no longer wish to be "passive recipients of medicine."

In retrospect, the Chinese recognized the mind-body connection more than 2,000 years ago. The responsibility of the Taoist doctor was that of teacher, part priest and part scientist whose mission was to guide one to greater spiritual, physical and psychological planes. This enabled one to become a better person, which was a determinant of one's health. The ultimate objective was to achieve immortality. Sogyal Rinpoche tells us in *The Tibetan Book of Living and Dying*: "Whatever we have done with our lives makes us what we are when we die. And everything, absolutely everything counts."

As physicians, we are first taught, do no harm. However, we often forget another basic ethical norm; we must also allow the patient to assume a personal responsibility for pursuing health so that the patient is not merely a pawn or extension of the doctor-patient relationship. We are reluctant as physicians to recommend techniques that we do not understand.

Conversely, we must ask ourselves whether accepting the practice means accepting the theory of how it works. Our tendency is to reject untested techniques when there is no clear-cut evidence that they are safe. However, many alternate therapies have been "tested" with outcomes research and are currently in wide, mainstream use today. Even though we may not be able to explain why they work

on a purely physiologic basis, outcomes analysis prepares us for their use as adjuncts in treating pain.

In the context of a multidisciplinary pain management center where there is direct involvement with a physician coordinator, psychological support and physical therapy, many alternative therapies can be incorporated into patient treatment plans. Increased comfort in utilizing alternative therapies may be an indirect result of their use in the context of such a model.

Physician-directed use of acupuncture, acupressure and cryoanalgesia may be indicated. In addition, physical therapy plans might include exercise therapy, strain-counterstrain techniques and myofascial release. Psychology-directed adjuncts might include interactive guided imagery and hypnotherapy. Utilization of one or more of these techniques may provide invaluable help for suffering patients to aggressively participate in their recovery.

#### Acupuncture

Acupuncture may be one of the oldest known treatments for pain, dating back at least 5,000 years. The inaccessibility of China, combined with skepticism in the West, prevented its acceptance until the 1970s in the United States. Traditional Eastern techniques are based on the principle of Ch´i, or life force. Specifically, an imbalance in the fluid but changing and complementary yin and yang forces causes a disease state.

Yin, which is felt to be dark, cold and passive, strikes a delicate balance in the universe as well as in the body with yang, which is light, warm and active. An imbalance is defined as a disruption of energy along one of the 14

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meridians, or channels, existing in the body through which yin and yang flow.

More than 700 actual acupuncture points exist over these meridians. The trained practitioner selects which meridians to use with pulse diagnosis, paying careful attention to specific energetic cycles. Point detectors may be used to select specific points at which skin resistance to electric current is decreased. Once specific points are selected, small needles, pressure, heat, electric current, vibration, ultrasound or laser may be applied.

#### Acupressure

Acupressure may be chosen as an alternative to acupuncture. This is a means of stimulating acupuncture points without using needles. In Japan, it is called shiatsu; shi means finger, and atsu means pressure. Both acupuncture and acupressure are used as adjunctive or primary therapies in the treatment of headache, migraine, trigeminal neuralgia, shoulder and elbow pain, herpes zoster, superficial abdominal pain, low back pain, sciatica and lower extremity pain as well as many other painful states.

It is clear that acupuncture and acupressure are quite effective in treating certain pain states in appropriate individuals. Nonetheless, research continues to elucidate the exact mechanisms by which pain relief occurs. Both techniques are currently accepted and in use in most countries of the world.

#### Cryoanalgesia

Cryoanalgesia may be a beneficial alternative in treating both acute and chronic pain. The first cryoprobes were introduced in 1961. Therapeutic cold has applications with both local cooling and nerve freezing. Local axonal destruction occurs with direct cold application. Selective preservation of the endoneurium allows a pain-free regeneration of the nerves at approximately -60° C. While controversial in treating post-thoracotomy and postherniorraphy pain, there has been renewed interest in cryoanalgesia for the treatment of many benign and malignant chronic pain syndromes.

#### **Exercise Therapy**

Physical therapy continues to be an important adjunct in the treatment of many painful states. Unloading<sup>®</sup> exercise therapy provides a means of allowing the strengthening of muscle and noncontractile structures by decreasing the

point of fatigue in tissues. By means of a harness with a specialized apparatus such as the Zuni<sup>TM</sup> system, a portion of the patient's body weight is offset to allow tissue healing while exercise is performed in such positions as walking or climbing stairs.

Patients actively participate in increasing their endurance while the load to the painful state is gradually returned to normal as healing occurs. Applications may include gait retraining, low back pain, degenerative joint disease and ACL reconstruction.

#### Strain-Counterstrain

Other techniques used by physical therapists might include strain-counterstrain and myofascial release. The concept of strain-counterstrain involves the treatment of somatic dysfunction brought on by overstretching of muscles, tendons, ligaments and fascia. This causes an alteration in neuromuscular reflexes causing overcontraction in those muscles that were shortened, not in the muscles that were stretched. The resulting spasm causes joint fixation and resistance to a return to normal.

By using the technique of strain-counterstrain, therapists find that by slowly returning the joint to as close a position as the original before insult occurred and holding it there for 90 seconds, the spasm will resolve. It will then be possible to restore the joint to its normal physiological resting position. Muscle soreness in the overstretched muscle may persist for a brief time, but the joint should be normal again.

#### **Myofascial Release**

The goal of myofascial release is to remove the fascial restrictions that cause the body to distort its three-dimensional alignment. When this occurs, the body contracts to protect itself from further trauma. However, this causes it to become biomechanically inefficient. Gentle traction forces produce heat with increased blood flow to the affected area with theoretic drainage of toxic metabolic wastes and ultimate resetting of soft-tissue proprioception. This technique presumes that fascia that has tightened distant from the injury is what prevents good results with appropriate localized therapies.

#### **Interactive Guided Imagery**

Psychological intervention is paramount in the treatment of many pain patients. In conjunction with more tra"As we form a bond of trust with our patients to further their need and their right to make decisions affecting their social and creative needs, it is sometimes difficult to prescribe regimens with which we are not comfortable or familiar."

ditional therapies, interactive guided imagery may be useful. Interactive guided imagery allows active participation by the patient in dealing with his or her particular issues. It teaches direct modulation of the autonomic nervous system and, thus, theoretically allows the power of imagery to promote specific physiologic changes that may aid in healing.

Most health care interactions carry unconscious imagery and suggestion to patients. Traditionally, we have been able to teach conscious imagery skills with the techniques of relaxation, biofeedback and receptive imagery. This modality teaches the patient to seek their unconscious awareness and utilize these images as resources at the cognitive affective as well as somatic levels. Indirectly, the imagery process allows the diagnostician access to the

often uncanny and accurate intuitions that patients have about their illness and pain.

#### Hypnotherapy

There has been a resurgence of interest in the use of hypnosis as an adjunctive therapy in treating many types of pain. In particular, it may be useful in the modulation of burn, cancer and headache pain. Hypnotherapy is defined as achieving a heightened state of awareness with a specially trained professional to achieve focused concentration and enhanced states of relaxation. This allows for modulation of pain perception. Although not proven consistently, there is some data suggesting that pain relief may be mediated, at least in part, by release of endogenous opioids from the central nervous system. This type of therapy may be quite helpful in a receptive patient.

It remains fundamentally clear that economics, education and availability play an essential role in determining the treatment of pain. As physicians, however, we must continually reassess the bioethics of suggesting so-called alternative therapies to patients. As we form a bond of trust with our patients to further their need and their right to make decisions affecting their social and creative needs, it is sometimes difficult to prescribe regimens with which we are not comfortable or familiar. It becomes incumbent upon all of us as practitioners to define the ethical norms by which we hope to achieve optimal physiological and psychological well-being for our patients.

#### PRACTICE MANAGEMENT

In the past few months, at least three more courts have been called upon to define the rights of medical staff members ousted from exercise of their privileges by the implementation of an exclusive contract with another party. In these cases, as in most cases to date, the physicians challenging impairment or termination of privileges did not fare well.

First, in Gonzalez v. San Jacinto Methodist Hospital, the Texas Court of Appeals has held that failure of the hospital to grant an anesthesiologist a hearing by the medical staff, before revocation of his opportunity to be scheduled for anesthesia cases by the exclusive

anesthesiology contractor, did not violate his contractual rights. Although the court agreed that the hospital bylaws were contractual in nature, it said that the protections of the bylaws applied only when a physician's privileges were impaired because of unethical behavior or professional incompetence. The due process procedures, the court said, were not intended to extend to an administrative decision not directly relating to the physician in question. [Texas Court of Appeals 1994, Tex. App. LEXIS 1076.]

The Gonzalez decision rather clearly follows the reasoning of Mateo-Woodburn v. Fresno Community Hospital, a 1990 California appellate decision in which a decision to close the anesthesiology department was held to be a legislative decision not directed at any specific physician, as distinct from an adjudicatory decision relating to a specific physician giving rise to the right to a due process hearing under the medical staff bylaws.

The terms of *Mateo-Woodburn* were very much in issue in the recent decision by a California trial court in *Major v. Memorial Hospitals Association*, in which the central issue was whether the hospital's decision to close the anesthesiology department was, in fact, a legislative decision as the court so held, or whether it was an adjudicatory decision specifically designed to terminate the privileges of three anesthesiologists. An appeal from the trial court's ruling, adverse to the physicians, is expected. [California Superior Court (Stanislaus County), Case Nos.

# Contractual Protection Against Summary Termination of Privileges

Michael Scott, Director, Governmental and Legal Affairs 283988 and 283986, 1994.]

A result similar to that in the Gonzalez and Major decisions was reached late last year in a Tennessee appellate case, Lister v. Methodist Medical Center of Oak Ridge, in which it was held that the right to a hearing was confined to situations in which the competency or conduct of the physician is at issue. The bylaws do not limit the hospital, the court said, from taking actions that affect a physician's clinical privileges solely due to business considerations. [Tennessee Court of Appeals, Case No. 03A01-9305-CH-186, 1993.]

From these decisions and those

of earlier cases, it appears that the only way in which an anesthesiologist can be certain of contractual protection against summary termination of privileges is to insist on inclusion (either in an individual contract with the institution or in the medical staff bylaws) of a provision guaranteeing a hearing no matter what the cause of termination. Then, no matter whether the termination is related to questions of competency or related to hospital business decisions as to departmental structure, the physician would receive a hearing.

The clear trend of the cases is toward noninvolvement by the courts in hospital business decisions. Only when the facts clearly demonstrate that the termination was specifically oriented toward ousting the plaintiff, in circumvention of stated rights under the medical staff bylaws, can courts be persuaded to afford protection to existing staff members.

#### PPO Brokers Sell Discounts to Other Plans

he American Medical Association (AMA) has recently drawn attention to the practice of some insurance companies that, through the use of brokers, improperly take advantage of discounts negotiated

between a hospital and a legitimate preferred provider organization (PPO), in payment of hospital charges incurred by a patient insured under the insurance company's indemnity plan.

Unless the hospital checks to find whether the patient was enrolled in the PPO, it will grant a discount that it is not contractually bound to give. AMA cautions hospitals and physicians to review the terms of their contracts to assure that their PPO is not permitted to sell its discounts to other plans and to audit their own files to make certain that discounts they have given are contractually appropriate.

#### Retaining a Lawyer — Competitive Business

he ASA Washington Office has received numerous recommendations from ASA members of attorneys and consultants who have demonstrated competence in assisting anesthesiologists on practice management issues. Additional recommendations are welcomed from the membership, particularly in the less populous states.

Those seeking the name of a qualified attorney in your area should call Cherie McNett at (202) 289-2222; if no recommendations have been received for your area, we will try to get a recommendation by some other means.

AMA members who wish to seek a referral through the AMA's "Doctors Resource Service" should call (800) AMA-1066, or call (800) 621-8335 to join or order the service. State medical associations also may be of assistance.

In my experience, many physicians are reluctant to raise the issue of payment for services with an attorney. They should not be. Under the ethical rules of many jurisdictions today, attorneys are expressly required to spell out the basis upon which a client will be charged, and these types of discussions have become commonplace in recent years. Most attorneys work on the basis of an hourly rate, but in some instances where the extent of the process is reasonably definable, many attorneys are willing to quote a flat price for the project or an hourly rate capped at a certain level.

Be sure to define what expenses you will be required to cover in addition to the professional charge. They can be significant: travel, secretarial overtime, LEXIS or WEST-LAW usage, telephone, postage, meals, etc. Be sure also to reach an agreement on how and how often you will be billed.

Most firms working on a time basis will provide a listing of diary entries, day-by-day, identified by attorney or paralegal; this gives you an excellent opportunity to verify the work being done on your behalf and to keep track of where matters stand. Monthly billing is normal.

Do not be afraid to explore the issue of possible conflict of interest: attorneys owe their complete loyalty to their clients, and if an attorney has represented or is representing some other party in the litigation or proposed transaction, there may be a conflict. Even if there is not an express conflict, you may find yourself uncomfortable being represented by certain attorneys, e.g., those who regularly represent hospital, managed care organization or insurance company interests. Indeed, they may be equally uncomfortable representing you.

Just as there is plenty of competition in the delivery of medical care these days, so also, competition is a hallmark of the "lawyering trade." Do not jump at the first opportunity, but rather, explore possible representation with two or three logical choices. You will learn a lot, and when individual lawyers or firms find that you are also talking with their competitors, they may well become more flexible in the basis upon which they are willing to act as your counsel.

#### HCFA Says Hospital Can Require Board Certification

In response to an inquiry from the ASA Washington Office, the director of the Health Care Financing Administration (HCFA) Office of Survey and Certification confirmed in early August that a Medicare participating hospital has the right to condition medical staff privileges on the fact of Board certification, provided that it also takes into account the individual's character, training, experience and judgment.

The question of reliance on Board certification had been raised by an ASA member, who had been advised by hospital counsel that the Medicare Conditions of Participation prohibited reliance solely on certification. The HCFA Office has advised ASA that a 1986 interpretation of the HCFA Conditions, requiring a "reasonable alternative to Board certification," had been superseded in 1993 by an

interpretation stating that a "hospital is not prohibited from requiring Board certification... [A] hospital may not rely *solely* on the fact that a physician *is or is not* Board certified... [A] hospital must also consider other criteria such as training, character, competence and judgment."

#### ASA Hires Practice Management Coordinator, Schedules Conference

arin Bierstein, an attorney with a master's degree in public health, has accepted a position as the Society's Practice Management Coordinator in the ASA Washington Office. She will begin working in mid-September.

Among Ms. Bierstein's early responsibilities will be the continuation of planning of the special ASA Conference on Practice Management, to be held February 4-5, 1995 in Phoenix, Arizona. Descriptive brochures and registration materials for the conference will be mailed to the membership before the ASA Annual Meeting in October.

Ms. Bierstein will generally be responsible for the development of practice management materials, seminars and other services to assist physicians and physician groups in managing their practices in the context of expanding managed care initiatives. She will also work with the Society's government relations personnel and legal staff as well as the various ASA committees concerned with practice management issues.

Ms. Bierstein is currently employed by the American Medical Association as Washington Counsel, Division of Issues Management. Before that, she was Director of Health Policy for the American Academy of Otolaryngology-Head and Neck Surgery for six years in Alexandria, Virginia. She received her J.D. degree from Cornell University in 1979 and her M.P.H. degree from Harvard in 1985. She was engaged in the private practice of law, principally in the employment relations area, from 1979 to 1984.

Initial planning for the February conference, as a follow-up to the production last spring of a managed care videotape and compensation monograph, has been under way for several weeks. Both ASA and anesthesia practice managers will be invited to attend. Speakers will address a wide variety of management issues, ranging from new structures for delivery of care to compensation techniques and group personnel issues.

#### **Washington Report**

Continued from page 5

for organized medicine as floor debate develops. The Gephardt bill would reduce the rate of growth in Medicare spending by two percentage points in 1996, and by one percentage point in each later year until the rate of growth paralleled the five-year average rate of growth per capita in the gross domestic product. The Mitchell bill contemplates savings in Medicare of about \$278 billion over 10 years, about half of which would be used to finance added drug and long-term care benefits for the elderly; these savings would include significant limitations on fee updates for physicians, eventual-

ly tying them to the gross domestic product.

Congress obviously has a long way to go on these and other issues, and it is now anyone's guess whether the votes are there to produce a bill, or at least produce a bill the President will sign. Any "doable" bill will rather clearly not guarantee universal coverage, no matter what political spin will be put on its ultimate terms, and the real question will be whether the President will sign what Congress can produce.

Stay tuned.

#### RESIDENTS' REVIEW

#### ASA Resident Component 1994 Preview and Review

Michael P. Smith, M.D., Chair Resident Component Governing Council

he Resident Component House of Delegates will convene on Saturday, October 15, 1994 in the San Francisco Marriott Hotel.

The Resident House will again include the changes in the format that were started last year. The seating of delegates will continue to rotate in alphabetical order yearly. The House will open with the Chair's call to order followed by the Pledge of Allegiance. The process of nomination and election of officers will require that candidates for office declare the office for which he or she is a candidate prior to the call to order.

This year, the Resident House will initiate two changes to the meeting format. They include:

- 1. Prior to the call to order of the House, candidates for ASA offices have been invited to present a campaign speech to the Resident House. The Resident House will then vote and the Resident Delegate to ASA will be charged to vote for the Resident House's choice. This will provide the opportunity for residents to see the candidates for ASA offices and to learn about the issues of their campaign platforms. We believe this will greatly enhance the process for residents to learn about the ASA structure and leadership.
- Representatives from the ASA Resident Component committees will present summaries of the findings of their committee or work group. This will provide a comprehensive description of the activities of the Resident Component and enhance the networking between those who would like to become involved and those who are involved.

The main goal of the Resident Component Governing Council this year is to create opportunities for interested residents to participate in ASA and Resident Component activities. We also want to improve residents' awareness of the many roles that ASA plays in a practicing anesthesiologist's life and to provide opportunities where residents can learn leadership and communications skills. We were grateful to have the May, 1994 ASA NEWSLETTER dedicated to resident issues.

Several other 1994 Resident Component programs and activities are designed to meet these goals:

• Resident Adjunct Committee Member Program provides an opportunity for residents to submit an application

to the Resident Component Governing Council. The Governing Council then provides a list of recommended individuals to the ASA President-Elect for consideration for appointments to ASA committees as adjunct members.

- Anesthesiology Resident Key Contact Program was initiated in April, 1994. This program consists of volunteers from anesthesiology residencies who work with the Governing Council by collecting and distributing information This also provides a means for residents from states without resident components to become active at the national level.
- The manual titled *How to Start a State Resident Component* was written by several very enthusiastic individuals and contains much of the information needed to start a state resident component, including how to write bylaws, coordinate and hold meetings and other helpful guidelines.

The Governing Council is very grateful to the many residents who have made the commitment to contribute to the ASA Resident Component and who have made this a very special and rewarding year. A special thanks goes to Richard J. Pollard, M.D., Chair-Elect; John R. Warren, M.D., Delegate; Sam L. Page, M.D., Alternate Delegate; Vic Mahendru, M.D., Secretary; and David R. Kassing, M.D., "Residents' Review" Editor.

This year, the Resident Component will be sharing space in the Committee on Communications booth at the ASA Annual Meeting in San Francisco, California. Please come by, meet the Governing Council officers and learn how you can become involved. We look forward to seeing you there!

Michael P. Smith, M.D. is a Fellow in neuroanesthesia and education at Cleveland Clinic Foundation, Cleveland, Ohio.





# Candidates Announce for Elected Office

ine ASA members have announced their candidacies for elected office. The anesthesiologists and the offices they seek are:

- President-Elect Norig Ellison, M.D.
- First Vice-President
  Phillip O. Bridenbaugh, M.D.
  Bertram W. Coffer, M.D.
- Vice-President for Scientific Affairs
   Robert K. Stoelting, M.D.

Assistant Secretary
 Joanne Jene, M.D.
 Richard G. Zepernick, M.D.

- Assistant Treasurer
  Neil Swissman, M.D.
- Speaker, House of Delegates Barry M. Glazer, M.D.
- Vice-Speaker, House of Delegates

Eugene P. Sinclair, M.D.

The ASA Board of Directors on March 6, 1982 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.

#### Orlando Workshop to Focus on Difficult Airway Management

he November 5-6, 1994 Workshop on Management of the Difficult Airway in Orlando, Florida has been designed as a primer for managing the difficult airway. This workshop, to be held at the Orlando Airport Marriott, will include handson sessions for actual practice with various devices.

Advances in the art and science of maintaining airway patency have emerged recently. Lectures are intended to provide basic theoretical and practical knowledge of new techniques and their use.

Allan P. Reed, M.D. is the program chair. He will speak on "Predicting the Subtle Difficult Airway" and "Preparation of the Patient for Awake Intubation." The other speakers and their topics are:

- Kenneth J. Abrams, M.D., "Retraction Blades and Lighted Stylets";
- Stephen F. Dierdorf, M.D., "ASA Practice Guidelines for Management of the Difficult Airway" and "Flexible Fiberoptic Intubation";

- Andranik Ovassapian, M.D., "Esophageal-Tracheal Combitubes" and "The Difficult Airway and Double Lumen Tubes":
- James T. Roberts, M.D., "Further Examples of the Difficult Airway";
- Tony Sanchez, M.D., "Retrograde Intubation";
- George D. Shorten, M.D., "Laryngeal Mask Airways";
- Richard M. Sommer, M.D., "Cricothyroidotomies and Transtracheal Jet Ventilation."

ASA is approved by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education programs for physicians. ASA designates this continuing medical education program for 12 credit hours in category 1 of the Physician's Recognition Award of the American Medical Association.

Registration fees are \$160 for Active members, \$85 for Resident members and \$185 for nonmembers. Registration is encouraged by October 14, 1994.

A block of rooms has been set aside at the Orlando Airport Marriott. Registrants will receive a room reservation card with confirmation of their meeting registration. The card should be completed and returned directly to the Marriott by October 21, 1994.

The hotel is five minutes away from the airport and approximately 25 minutes away from Walt Disney World. Arrangements can be made at the Marriott's guest services desk for shuttle bus service to area attractions such as Disney World, Universal Studios, Church Street Station and the Florida Mall. Attraction admission tickets can be purchased at a discount through the Marriott's guest services.

#### San Antonio Site of Regional Refresher Course in January

nesthetic management of sudden intrapartum distress, pharmacologic interactions with coagulation and awareness under anesthesia are some of the topics to be discussed at the first Regional Refresher Course of the new year. The program will be held on January 14-15, 1995 at the Plaza San Antonio Hotel.

Gregory K. Unruh, M.D. is the program chair. The faculty and their topics are:

- David J. Birnbach, M.D., "Combined Spinal/Epidural (CSE) Anesthesia for Obstetrics" and "Anesthesia for the Cocaine-Abusing Parturient";
- Douglas B. Coursin, M.D., "Anesthesia for the Patient with Multiple Organ Dysfunction (MODS)" and "Considerations in Neuromuscular Blocker (NMB) Use in the ICU";
- John C. Drummond, M.D., "Fluid Management of the Neurosurgical Patient" and "Anesthesia for the Head-Injured Patient";
- Leonard L. Firestone, M.D., "Anesthesia for the Transplant Patient Undergoing Nontransplant Surgery" and "Anesthesia for Lung Transplantation":
- Glenn P. Gravlee, M.D., "The Anesthesiologist and Management of Cardiopulmonary Bypass" and "Pharmacologic Interactions with Coagulation";
- James D. Kindscher, M.D., "Coagulation Tests What Do They Really Tell Us?" and "Red Blood Cell Scavenging in the Operating Room";
- Timothy B. McDonald, M.D., "Pediatric Pain Control with Emphasis on Regional Anesthesia" and

- "Management of the Difficult Pediatric Airway";
- Charles H. McLeskey, M.D., "Anesthetic Considerations for the Geriatric Patient" and "Awareness Under Anesthesia";
- James N. Rogers, M.D., "Acute Pain" and "Chronic Pain";
- Phyllis L. Steer, M.D., "Anesthetic Management of Sudden Intrapartum Distress" and "Ethical Issues for the Anesthesiologist."

Of the 20 lectures offered, registrants may choose 10. Admission will be by ticket only, similar to the Refresher Course Lectures at the ASA Annual Meeting. Tickets will be available in the registration packets which will be distributed on site.

ASA is approved by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education programs for physicians. ASA designates this continuing medical education program for 10 credit hours in category 1 of the Physician's Recognition Award of the American Medical Association.

Registration is suggested by December 14, 1994. Registration fees are \$185 for ASA Active members, \$110 for Resident members and \$210 for nonmembers.

A block of rooms has been reserved at the Plaza San Antonio Hotel. A room reservation card will be sent upon registration for the meeting. The completed card should be returned directly to the hotel by December 23, 1994.

The Plaza San Antonio Hotel is in the historic area called La Villita and is close to the Riverwalk. It is convenient to restaurants, shopping and other San Antonio attractions.

#### Annual Meeting Placement Service Cancelled

or the first time since 1973, the Placement Service will not be part of the ASA Annual Meeting. Because very little employer interest has been generated by the Annual Meeting Placement Service this year, the service has been cancelled for 1994.

Law Sone, Jr., M.D., Chair of the Committee on Placement, has noted that anesthesiologists finishing their training this year have "deluged" hospitals and medical centers with their curriculum vitaes (CVs). This is a nationwide trend. "This has never happened before," he said. "Because so many CVs are coming directly from candidates, the Annual Meeting Placement Service is not needed by employers."

The quarterly Placement Bulletin, available to ASA members upon request, will continue.

ASA is analyzing data on the number of training programs for anesthesiologists, nurse anesthetists and anesthesiologist assistants, and on the numbers of persons completing these programs. The ASA Board of Directors will review this information and recommendations to try to balance the supply of anesthesia providers and the demand for anesthesia services.

#### FAER REPORT



#### **Resident Scholars Program Enters Sixth Year**

In 1989, the Foundation for Anesthesia Education and Research (FAER) received an educational grant from Burroughs Wellcome Co. to support a Resident Scholars Program in anesthesiology.

This program has been remarkably successful in meeting its intended goals of encouraging resident participation in the educational, scientific and political affairs of ASA by active attendance at the ASA Annual Meetings.

As in the past, a grant in the amount of \$1,000 will be offered to each participating program to help defray the cost of sending one resident to the meeting. Up to 32 grants will be awarded each year so that over a five-year period, funding will be provided for one resident from each

Sunil Eappen, M.D. Brigham and Women's Hospital Boston, Massachusetts

Kode R. Ediale, M.D. New York Medical College Valhalla, New York

Neil E. Farber, M.D., Ph.D. Medical College of Wisconsin Milwaukee, Wisconsin

Michael T. Flanagan, M.D. Bowman Gray School of Medicine Winston-Salem, North Carolina

Cathryn A. Fogel, M.D. Hartford Hospital Hartford, Connecticut

Jeffrey W. Folk, M.D. Medical University of South Carolina Charleston, South Carolina

Jeffrey B. Fowler, M.D. Dartmouth-Hitchcock Medical Center Lebanon, New Hampshire

William C. Hallowes, Jr., M.D. Medical College of Georgia Augusta, Georgia accredited anesthesiology program in the United States.

Participating programs are selected each year on a random basis, except that an effort is made to provide broad geographic distribution. Strong positive feedback from former Resident Scholars and their program directors has resulted in the renewal of this annual activity on a year-to-year basis.

In addition to the broad variety of scheduled activities during the Annual Meeting, several special events are planned to permit interaction among resident scholars and between the residents and the ASA leadership. The Resident Scholars nominated by their program directors for 1994 are:

Gerald Hamrick, M.D. West Virginia University Morgantown, West Virginia

James D. Hannon, M.D. Mayo Graduate School of Medicine Rochester, Minnesota

Virginia A. Nelson, M.D. St. Joseph's Hospital Syracuse, New York

Alexander Omura, M.D. Albany Medical Center Hospital Albany, New York

Andrew J. Patterson, M.D. Massachusetts General Hospital Boston, Massachusetts

Bruce C. Puryear, M.D. University of Florida Gainesville, Florida

Sundar Rajendran, M.D. St. Luke's Hospital of Kansas City Kansas City, Missouri

Charles Raymond, M.D. Sinai Hospital of Detroit Detroit, Michigan Marc T. Reichel, M.D. Mercy Hospital of Pittsburgh Pittsburgh, Pennsylvania

Edwin R. Render, M.D. University of Louisville Louisville, Kentucky

John C. Shearer, M.D. University of Alabama Birmingham, Alabama

Terrance A. Shedden, M.D. University of Missouri Columbia, Missouri

Peter B. Shimm, M.D. George Washington University Washington, D.C.

Robert F. Spencer, M.D. Medical Center Hospital of Vermont Burlington, Vermont

Jeffrey M. Taekman, M.D. Milton S. Hershey Medical Center Hershey, Pennsylvania

Rafal J. Wyszkowski, M.D. Beth Israel Medical Center New York, New York

Richard D. Alessi, M.D. University of Chicago Chicago, Illinois

David A. Baucom, M.D. University of North Carolina Hospitals Chapel Hill, North Carolina

William A. Beck, M.D. University of Arkansas Little Rock, Arkansas

David R. Boner, D.O. University of Mississippi Jackson, Mississippi

Charles H. Bowen, M.D., Ph.D. St. Louis University Health Sciences Center St. Louis, Missouri

Michael A. Brody, M.D. University of Illinois Chicago, Illinois

Terrence R. Burns, M.D. SUNY Health Sciences Center Buffalo, New York

Keith A. Candiotti, M.D. University of Miami-Jackson Memorial Medical Center Miami, Florida



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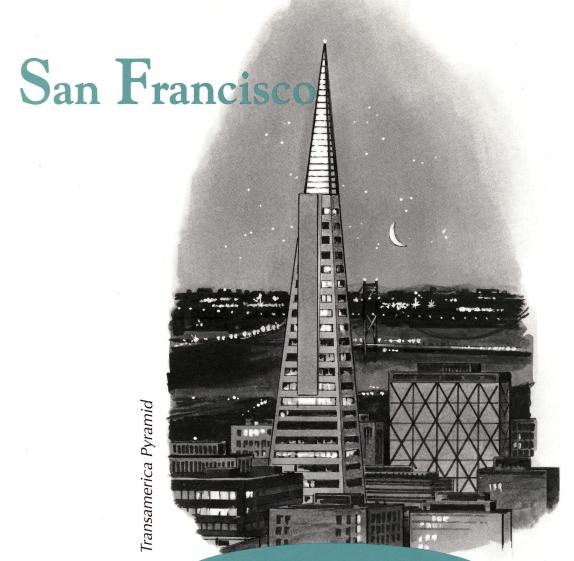
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1994 ASA Annual Meeting October 15-19

Registration opens at 3:00 p.m. Friday, October 14, 1994 in the Moscone Center, San Francisco.