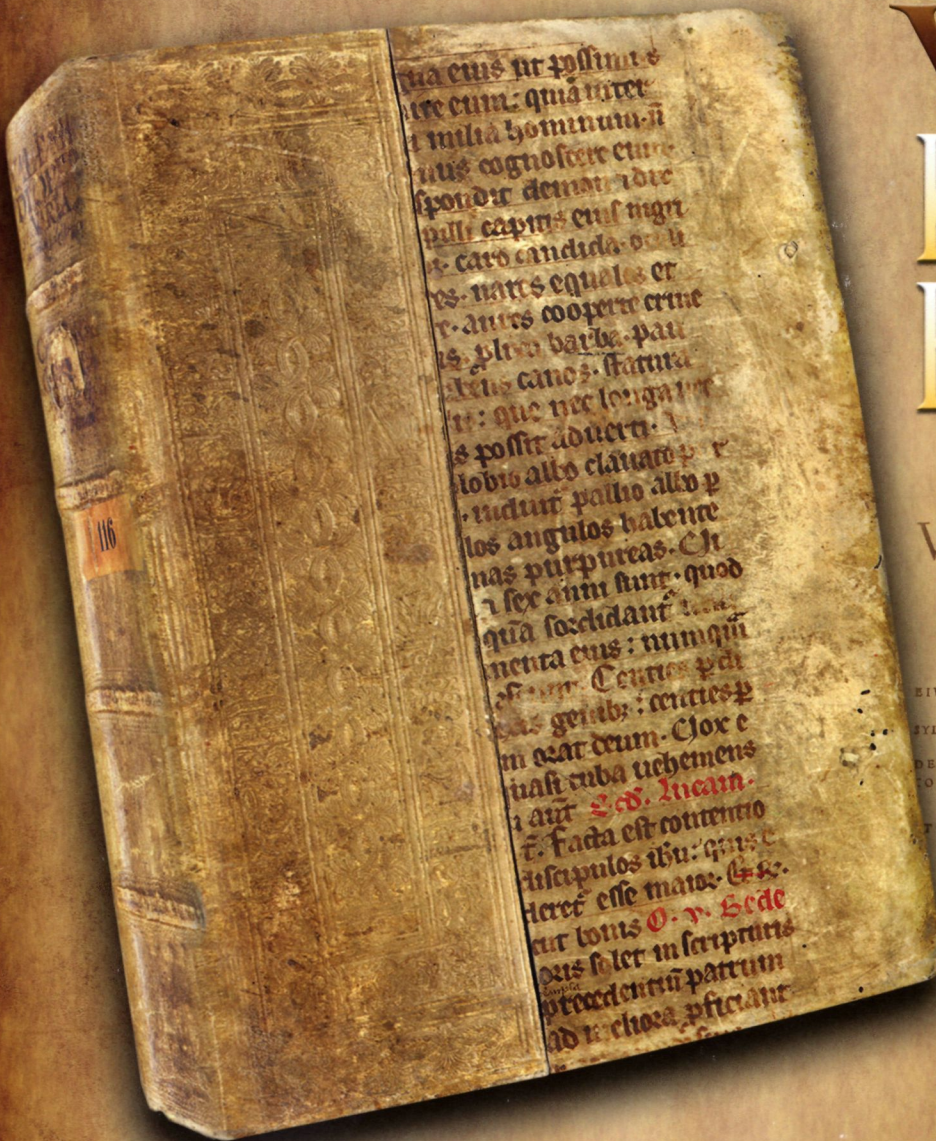




# NEWSLETTER

November 2009 ■ Volume 73 ■ Number 11

Anesthesiologists: Physicians providing the lifeline of modern medicine



## WLM: Keeping Our History Alive

IN HOC VOLUMINE CONTINENTVR

### VALERII CORDI SIMESVSII Annotationes in Pedacij

*Dioscoridis Anazarbei de Medica materia libros VII. longè alia quam ante hac sunt emulgate.*

EIVSDEM VAL. CORDI HISTORIAE STIRPIVM LIB. III. POST-  
humi, nunc primò in lucem editi, adiectis etiam Stirpium iconibus: & brevissimis Annotationibus.

SYLVA, qua rerum fossilium in Germania plurimarum, Metallorum, Lapidum & Stirpium aliquot rario-  
rum notitiam brevissimè persequitur, nunquam hactenus usq.

DE ARTIFICIOSIS extractionibus Liber.

COMPOSITIONES medicinales aliquot, non vulgares.

HIS ACCEDVNT

TOCC-HORNII ET NESSI IN BERNATIVM HELVETIORVM DI-  
tione montium, & nascentium in eis Stirpium, descriptio Benedicij Aretij, Graece & Hebraice linguarum  
in schola Bernensi professoris clarissimi.

ITEM

NRADI GESNERI DE HORTIS GERMANIAE LIBER RECENS,  
vix cum descriptione Tulipae Turcarum, Chamaceris montani, Chamemesij, Chameneris, & Contigoidis.

Omnia summo studio atque industria doctiss. atque excellentiss. viri CONR. GEOR-  
GERI medici Tigurini collecta, & praetationibus illustrata.



*Valerij Cordi Simesvii  
Annotationes in Pedacij  
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*Let. H. J.  
1705*



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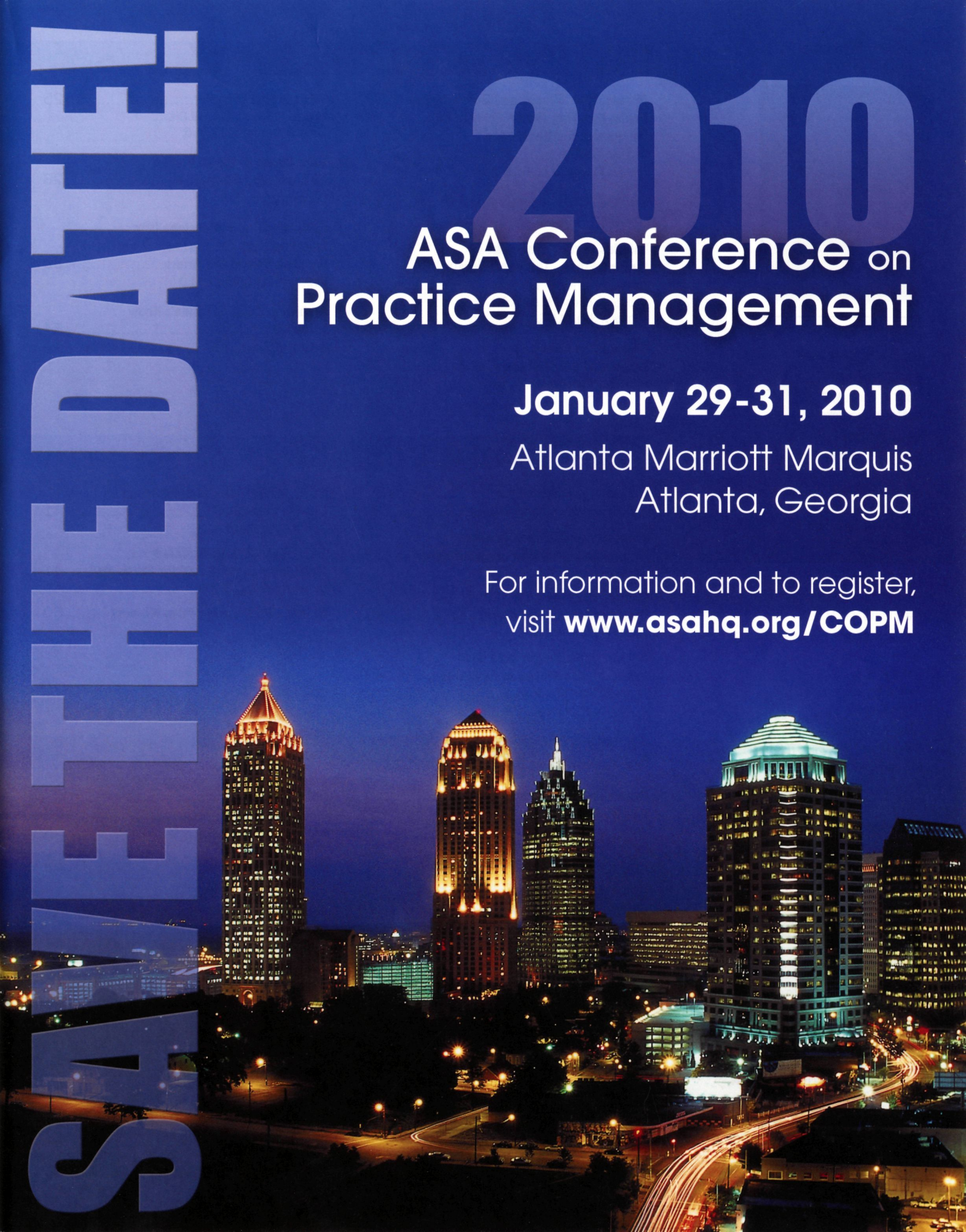
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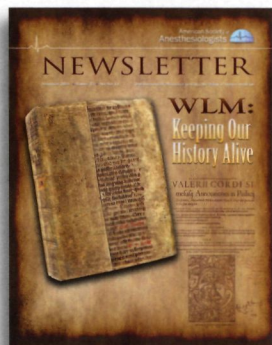
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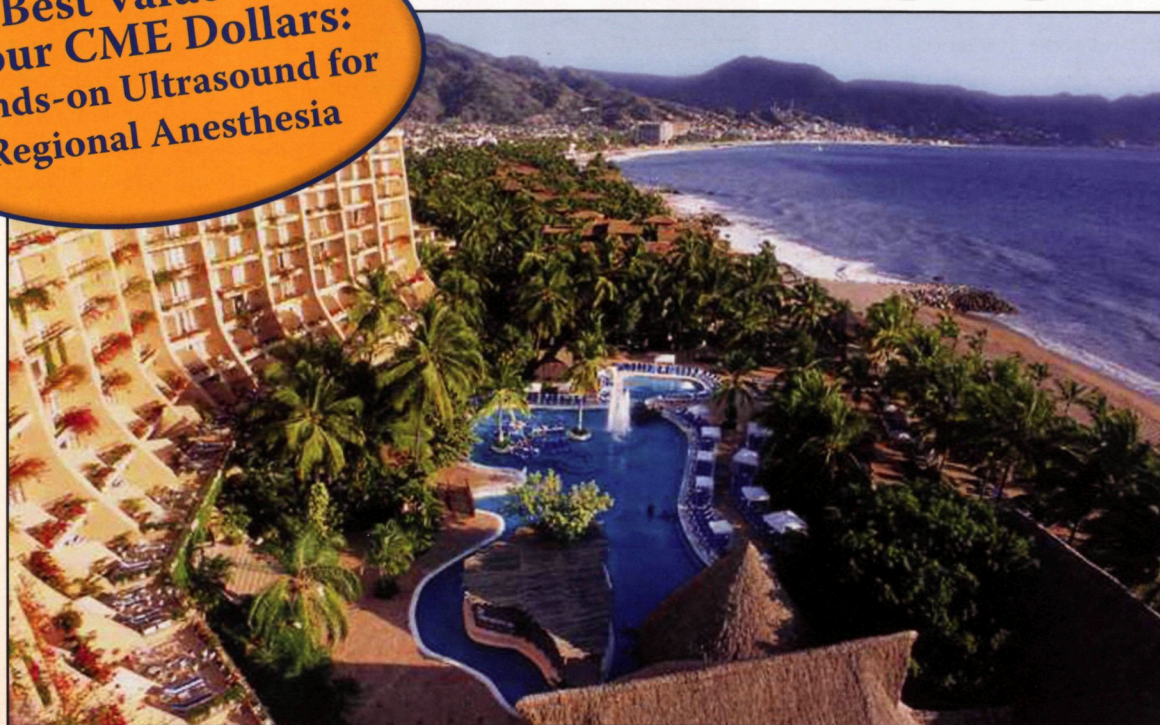
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## The Winds of November

### November can be a bleak month.

In Minnesota, the leaves have fallen, and yard clean up dominates the early part of the month. Done with some urgency, before the ice and snow begin to fall, it is never as pleasant as the spring clean up – for it lacks the promise of flowers yet to bloom and the warmth of the sun. Thoughts turn to a roaring fire, a good book, and some hot chocolate as the way to pass the day – even more so if a cold rain is falling. November lacks the promise of December's holiday cheer and the quiet stillness of a cold, crisp January day. Perhaps the ancient myths that the world “died” only to see the beginnings of rebirth with the winter solstice are true.

From a personal perspective, November is a very lonely yet hectic time. Hockey season is in full sway, and travel across southeastern Minnesota can be difficult, especially after a long day in the operating room. The anticipation of the early season notwithstanding, the dark days drag an element of work into what should be a fun experience. The newness of school has worn off, and the domestic routine has settled in. Even in church there is a certain amount of bleakness as Memorial Sunday is celebrated; remembering those members of the church who have gone home during the year.

On the fourth Thursday of the month, the uniquely American holiday of Thanksgiving is celebrated. It is a day to remember all that we have and share; how fortunate we citizens of the U.S. really are. Despite differences in political views, we rarely witness massive



Douglas R. Bacon, M.D.  
Editor, ASA NEWSLETTER

civil unrest. The government will not fail to act on anything the president says or does. Congress will not depose the President, nor will there be a military coup. There has been no civil war for almost 150 years. Although we may agree or disagree with what is happening in Washington, we are free to express our opinions and endlessly argue on what the right and proper course of the government ought to be. It is the great blessing of our government.

As the evening grows dark earlier, and sitting next to a warming fire, perhaps it is time to reflect on that for which we as anesthesiologists are thankful, and are celebrating, between football games on that fourth Thursday of the month. First and foremost, we are thankful for the opportunity to practice our specialty. For me personally, there is no greater joy than coming to work and being involved with the greatest specialty on the face of the Earth. Each day is a new challenge – sometimes to modify the anesthetic to the patient's physical condition, other times it is talking to patients, reassuring

them about their concerns with anesthesia, and other times spending time with colleagues discussing the anesthetic implications and preoperative or postoperative care of a patient. As an academic, I often get to teach residents about anesthesia and bring in practical applications and examples.

Anesthesiologists should give thanks for the strength of ASA. Over the past three years, the Society has undergone many changes. Our employees, the ASA staff, have grown tremendously. As a Society, we are on the verge of greatness. Our branding campaign is already showing tremendous results. During the Michael Jackson propofol media blitz, ASA members were relied upon as experts to help the lay public understand how important it is to have an anesthesiologist at the patient's side when propofol is administered and just how far from the norm the care Mr. Jackson received actually was. How did the media find these anesthesiologists? Through our Communications Department – and the contacts we are building therein will allow for the media to get in touch with us with questions and for us to get the message out about what we do to the world. Is there more work to be done? Of course! But there is a real, tangible sense that more will follow – perhaps on a grander scale.

ASA's education mission has been redefined, and with the additional staff members in place, new and exciting ways to learn are possible. Traditionally strong programs such as the Self-Education and Evaluation Program (SEE) have been further reinforced. New programs, tapping the endless possibilities of the Internet, are being discussed. Simulation is also coming to



the forefront, and ASA finds itself on the cutting edge of medical education. Our Annual Meeting continues to fine-tune its educational offerings, which make it the very best annual meeting in the specialty. Can we do better? Yes, and with the additional support from the staff, the Annual Meeting will only get better in the years to come.

Our Washington Office is another source for which we must be thankful. We are in the forefront of the health care reform debate – positioned there because of the hard work and connections of our Washington staff. But that is not all that the staff does. Each month in the *NEWSLETTER*, issues of importance to individual states are tracked and reported upon. The office serves as a resource for political action across states and helps coordinate strategy. Finally, our political action committee, ASAPAC, helps open doors that would otherwise be shut. It is comforting to know that the Washington staff is watching out for our specialty and, more importantly, is a strong advocate for us and, ultimately, our patients. Without the staff and ASA leadership in Washington, we may not have seen all that is possible.

ASA officers work incredibly hard for anesthesiology. Each gives up free time, personal obligations and strives to do what is best for the specialty. The ASA President travels extensively, often to component society meetings, to get the ASA message out to all members. Other times, the purpose is less academic, but more important, as meetings in Park

Ridge and Washington discuss matters of critical import to all of us. The phone never stops ringing, the e-mail inbox is always full, and it seems as if there is



always a crisis just around the corner. The need for team play and support among the senior officers cannot be underplayed. Yet each officer does so because he or she feels that they have something to give back to the specialty that has been so good to them.

Finally, we need to be thankful as a specialty for each and every anesthesiologist who not only carries the clinical load each day, cheerfully

and to the best of their ability, but for those souls who are not afraid to become involved. Hospital and departmental committee work is the bane of everyone.

But it is necessary, and leadership skills are important, especially in anesthesiology. To have an anesthesiologist as chief of staff in the hospital is important to the specialty, for it helps elevate us beyond the supporting nature of our clinical practice. Being involved is often thankless, yet this Thanksgiving is a time for all of us to remember the importance of the job we do and be thankful for those who lead.

As the warm aroma of turkey rises for the plate resting on the table set with Thanksgiving's finest, say thanks also for our troops. It matters not your political leanings or if you believe in their mission, but be thankful that there are men and women who are willing to put themselves in harm's way to protect all that we hold near and dear. As you travel the country during Thanksgiving, or any other time, thank these brave souls. A friend sent me an e-mail about the Gratitude Campaign. Take a few moments to watch this video: <http://gratitudecampaign.org>. This simple gesture is a way of saying thanks to our troops and to honor the "other" November holiday, Veterans Day. Somehow, the cold winds of November don't seem so bleak when giving thanks ...

— D.R.B.





## This Is Our ASA ... and Getting Better Every Day!

James D. Grant, M.D.  
Assistant Treasurer

**Three years ago this month**, the Organizational Improvement Initiative (OII) was officially launched, and the journey began. The OII was started as the result of the years of visionary leadership of ASA Presidents Eugene P. Sinclair, M.D., Orin F. Guidry, M.D., and Mark J. Lema, M.D., Ph.D. What led to the OII was a strategic, in-depth evaluation and review of the strengths and weaknesses of our specialty Society. Just 36 months later, we are on course toward our goal of having anesthesiologists represented by the world's premier medical Society... not just a good specialty Society, but the best, most proactive, most innovative and forward-thinking organization. A professional Society that represents its members and delivers services as no other. Now, with the entire health care industry looking at the potential for huge changes, it is even more important that our Society be well positioned for this new era.

Like so many things, the OII exemplifies the term "No Pain, No Gain." On the surface, some of the changes are so subtle and so much in their infancy that the question has been raised, "What has the OII done?" Effective positive change rarely comes quickly and should only come with serious strategic thought each step of the way.

Probably the most visible change, both to anesthesiologists and the general public, has been the launch of a full branding campaign. Comprehensive, thoughtful research was performed across the United States, and more than 500 people were interviewed on their experiences and knowledge of anesthesia and what anesthesiologists do. In addition to these 500

interviews, there were in-depth focus groups in Denver, New York, Columbus and Tampa with ASA members, non-member anesthesiologists, non-anesthesiologist physicians and the public. We now have a new logo, new tagline and messaging for ASA. We have a symbol that reflects what our specialty represents, "the lifeline to modern medicine." The final product reflects the hours of deliberation and alterations of close to 100 different variations until we got to today's new symbol. Now, by looking at our logo, it's clear ... anesthesiologists are ... physicians making modern medicine possible.

Now, as with other medical societies, we have a Web site for our patients to visit when they have questions about their medical care, about anesthesiologists, or about any other questions regarding our specialty. Take some time to visit [www.lifelinetomodernmedicine.com](http://www.lifelinetomodernmedicine.com). We already have had more than 20,000 hits in the first three months, with tremendously positive feedback from both our members and the public.

Another benefit that came from our focus groups was a strong desire for a Web site that is easier for our members to navigate ... and it is coming. The totally new ASA Web site has a projected launch of October 2010 at our Annual Meeting in San Diego. In addition to the enhanced Web site and a stronger logo, we are developing stronger relationships with the media. We now have trained more than 100 ASA members throughout the country to serve as our spokespeople, all delivering the important message about what we do and represent. But all of these great initiatives are a small part of a continuum. In order to ensure that we maintain this positive momentum, we have established the "ASA Advisory Council for the Lifeline Campaign." This group of members will work closely with staff, our Committee on Communications and our external consultants to ensure that our campaign reaches its goals and works together for future message development. We owe a debt of gratitude to ASA Committee on Communications Chair Michael H. Entrup, M.D., and ASA Director of Communications Dawn Glossa, for their perseverance, diligence and dedication to have brought all of these major projects to fruition in a relatively short time.

On a less flashy note, but also very important from my perspective and my responsibility as your Assistant Treasurer,

*Continued on page 37*



James D. Grant, M.D., is Chair,  
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## Celebrating Advocacy – Taking a Page From the Pros

Ronald Szabat, J.D., LL.M.

*Executive Vice President – Washington and General Counsel*

**In the aftermath of the death of veteran United States Senator Edward Kennedy** (D-MA) in late August, much has been said and written. Many writers and commentators surveyed his remarkable life and enduring legislative legacy. Others touched on the prominent role that he and his family have played in much of American politics for over 50 years. And some dwelled on his personal stories of triumph and grievous mistakes. These matters are best left to be judged by history and others.

Largely untold, however, has been the way a liberal warrior would reach across the aisle in private and form deep friendships with those of the “opposition” party, celebrating the remarkable American intersection of partisanship and democracy. Senator John McCain (R-AZ) spoke of this at Mr. Kennedy’s funeral in Boston. Other references have been constant to Senator Kennedy’s strong friendship with Senator Orrin Hatch (R-UT). But it is perhaps one other remarkable Kennedy friendship that has been little mentioned until recently and which should be instructive for us all: President Ronald Reagan.

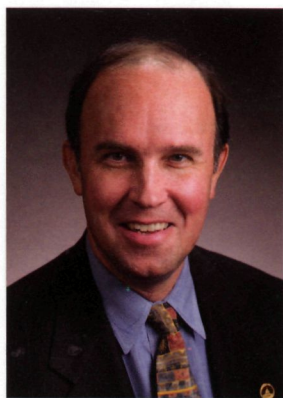
As a consummate Washingtonian, I had heard and noted quick passing references many years ago to former President Reagan’s dinner visit or visits to Senator Kennedy’s one-time McLean, Virginia, home. Never lucky enough to have actually been there myself, I did know, like many Potomac denizens, the supposed location of Kennedy’s driveway off of Chain Bridge Road – steep and then disappearing over a ridge to the privacy of a nice home overlooking the river. It was only a short

distance down the road from Hickory Hill, former home of the late Robert Kennedy and his family. The historical footnote of such Reagan-Kennedy meetings was more the stuff of a short item in the *Washington Post* Metro section, if at all, and not the material of substantive editorials.

But other insiders did know of this enduring friendship, and Senator Kennedy made reference to it himself during an unguarded remark many years ago, noting the “many kindnesses” of the Reagans to his family over the years. More telling, though, in the days after a life cut short by cancer, was the clear voice of former First Lady Nancy Reagan. Speaking one evening recently by telephone on Larry King Live, she openly and unhesitatingly remarked about the great fondness and friendship that each of the veteran politicians had for and with one another. She added somewhat wistfully that there does not seem to be that much of that anymore. How sad.

As ASA paused to celebrate advocacy in a new “opening session” last month at our highly successful Annual Meeting in New Orleans, Louisiana, the lessons of making and keeping friends across “the aisle” cannot be taught too often or overstated. To be sure, I have seen ASA members do this, and do it well. For instance, as I reported last year in the aftermath of the Democratic National Convention and the Republican National Convention, in Denver and Minneapolis respectively, ASA grassroots activists gladly showed up at special events to greet visiting U.S. House and Senate members. And we did so irrespective of our individual political leanings.

I also see such reaching out on a daily basis as generous members give to support our ASAPAC, knowing that it has no political litmus test, but instead only exists to educate, foster relationships and show support for those elected officials willing to listen to our messages on behalf of anesthesiology and the patients we serve. But I am also aware that some members use their own partisanship as a way to avoid supporting ASA efforts championed by members of the “opposite party,” as if no good could possibly come of such worthy endeavors. What would President Ronald Reagan and Senator Edward Kennedy say? I suspect that it would be to scold that people of good will can and should always talk with one another and find what common ground exists.



Ronald Szabat, J.D., LL.M., is ASA Executive Vice President and General Counsel, Washington, D.C. office.





This is a vitally important message for all ASA members. First and foremost, our system of government is built on open discourse between and among differing parties. Be not afraid; join the fray. Second, if you find yourself in the majority opinion, enjoy your day in the sun, for into every life a little rain must fall. Fortunately for ASA, our PAC and lobbying staff know this well, and we steadfastly maintain good friendships and enduring relationships with both Democrats and Republicans, be they in or out of power. Third, reflect on the wonderful example of our former President and the late Senator. They both loved our country dearly, had very different political biases, but somehow built an enduring friendship that undoubtedly helped each one learn better those individual principles that could not be compromised and the many things where compromise was possible and needed.

Please celebrate advocacy and the wonderful privilege of being an American by becoming part of the political dialogue on health and other issues. During a year in which the average

citizen has expressed strong and vocal opinions on everything from health care reform to the federal deficit to the festering wars in Iraq and Afghanistan, aren't you missing something if you are not a part of forging relationships with political decision-makers in your state or on the national scene? You bet you are. And you're also missing the chance to make real friends with those with whom you were convinced you had nothing in common.

I never had the opportunity to speak with President Reagan directly, but I can tell you that Senator Edward Kennedy was kind, extremely witty and extraordinarily knowledgeable. He was more interested in anesthesiology and larger medical issues than many partisan detractors will ever know, whether we agreed or disagreed. As with his many friends, colleagues and acquaintances on both sides of the aisle, I will miss our occasional interactions.

ASA's grassroots network can be joined by accessing [www.asahq.org/Washington/grassroots.htm](http://www.asahq.org/Washington/grassroots.htm).

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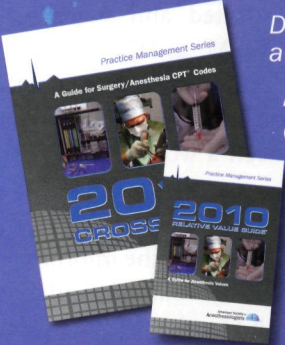
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# Misses, Near-Misses and Extraordinary Finds: How They Shape

Lydia A. Conlay, M.D., Ph.D., Trustee  
Wood Library-Museum of Anesthesiology

In the late 19th century, a proverb of French origin was used by the novelist Alphonse Karr (1808-90): "The more things change, the more they stay the same." On a contemporary level, the concept of incentivizing physicians to keep their patients healthy, order fewer tests, and do fewer procedures sounds remarkably like the "capitation" of the '80s and '90s, even without the label. Whether nature, the passage of time, or simply the human condition, it is often easy or at least tempting to draw parallels with that which came before. The scholarship of history is no different, including the scholarship of the history of anesthesiology.

I am delighted to be joined by Donald Caton, M.D., as the co-compiler of this issue of the *NEWSLETTER* on behalf of the Wood Library-Museum of Anesthesiology (WLM). In addition to having served two terms as president of the WLM, Don has graciously edited many of the publications of ASA. In this issue, he provides a flavor of the laborious task of preparing an annotated bibliography, and lends knowledge as to just what the annotated bibliography actually is. Hint: It's a list of the items such as those in our Rare Book Collection, with each placed in the context of other literature. The WLM is unrivaled as a repository of information regarding the development of anesthesiology and the science that



Lydia A. Conlay, M.D., Ph.D., is  
Professor of Anesthesiology, Baylor  
College of Medicine, Houston.



Picture 1: "Previously-"lost" picture of Lincoln's second inauguration.

led up to it. Having an annotated bibliography allows this information to be readily located and shared, and clearly marks ASA, through the WLM, as "the" beacon of scholarship for anesthesiology nationally and internationally. For Patrick Sim, our Paul M. Wood Distinguished Librarian, this annotated bibliography has been a work encompassing several decades.

The great thing about the scholarship of history is that anyone can participate if they have access to the information. A great example of scholarship resulting from the availability of information is the work of Rajesh Haridas, M.D., a former fellow of the WLM. Dr. Haridas is a private practitioner and international member of ASA from Mildura, Australia, who has published two papers and is currently writing his third regarding the history of anesthesiology.

Just last year, three negatives of photographs of Lincoln's second inauguration were re-discovered after having been misfiled in the Library of Congress for decades, if not a

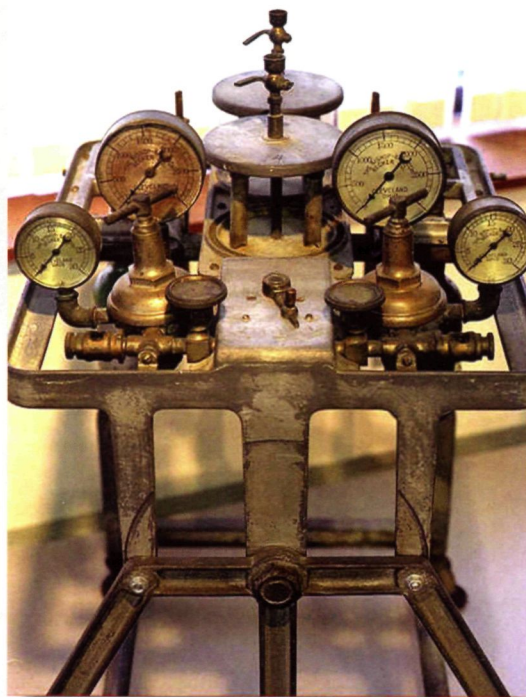


# Scholarship, Values and Our Knowledge of Who We Are

century.<sup>1</sup> These negatives were not just more pictures of Abraham Lincoln, rare in and of themselves, but a window into a very special time. Included was the speech where Lincoln proclaimed that the country would “care for the veteran, his widow and his orphan,” the motto of our VA hospitals today. It was also the first time that African-American troops had marched in an inauguration. Within months following this speech, the Civil War would be only a memory, and the same would be true for the president.<sup>2</sup> Remarkably, the Lincoln negatives were not discovered by an archivist or librarian, or anyone visiting the library. They were discovered by an amateur historian examining the library’s Civil War collection. He noted that the trees were leafless, suggesting winter (consistent with an inauguration), and not the spring season of Grant’s Review of the Army, as they had been filed. Before the “discovery” of these three negatives, only one was known to exist that could catalog this event.

Over the past several years, the WLM has undertaken a massive effort to catalog and identify each item in its collection, with the goal of making its information available for everyone. This work has been finished for the rare books and the museum, though not yet for the archives. Finding aids have been put online for much of the collection, although this laborious and time-consuming work continues. Many of our old photographs are unlabeled and unrecognizable. In past years, photos of unknown individuals were often circulated at meetings of the ASA Board of Directors and at meetings of the World Federation of Societies of Anaesthesiologists in an attempt to glean their identity. Nevertheless, some still remain anonymous, as seen in picture 2. Mary Ellen Warner, M.D., President of the WLM, describes these and other activities of the WLM, designed to encourage the scholarship of history within anesthesiology. (A list of WLM scholarly activities is appended to this article.)

In addition to the importance of knowledge in the development of scholarship, Kathryn E. McGoldrick, M.D., reviews the importance of history in the development of professional values. Bradley E. Smith, M.D., also shares lessons learned during the process of searching a subspecialty’s archives, a project completed while he was a fellow of the WLM. And last in mention, but certainly not least, Dr. George Bause, somewhat the “Indiana Jones of Anesthesia Antiquities,” describes an extraordinary find, worm holes and all. George also provides some humor in another “What Is This Thing?” entry.



Picture 2: The Cotton Boothby apparatus.

Back to historical misses, near-misses and extraordinary finds: How could NASA possibly have lost the recordings of the original transmissions from the first landing on the moon? And how could WLM—and the specialty of anesthesiology—possibly lose the only remaining example of the first device that attempted to measure gas flow? This story began as the specialty of anesthesiology and the ASA grew, so much so that ASA began to outgrow its early headquarters. Soon, a beautiful new building would be built, with ample room to house both the Wood Library and the museum. But for the time being, additional office space was sorely needed. The museum’s holdings were largely unlabeled, some resembling junk from an old auto, top and bottom largely indistinguishable and not a pretty

sight. First, this item was pushed into a corner. Then it was turned upside down, and later, crates were stacked on it. Then, it went to the dumpster. Fortunately, an employee recognized it, understood its significance, retrieved it from the dumpster, and put it under his desk. The Cotton Boothby apparatus, the first device to measure fresh gas flow, was saved!

Continued on page 12



As the specialty of anesthesiology has matured, so has the WLM. The museum's artifacts, older archives and the rare books are cataloged, the old deteriorating film converted to digital media, and the process to share this information online is under way. Items of great value will not be lost. They will remain for anesthesiologists and physicians of the future to learn just how our specialty was born, how our values were developed, and just who we, as a specialty, are. The more things change, the more they stay the same? Not this time.

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A picture in the WLM Archives. The photograph is unlabeled, and without the aid of our membership, the identity of the individuals will be lost.

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October 19, 2008:

- Shirley A. Graves, M.D. interviewed by Salvatore R. Goodwin, M.D. and Bradley E. Smith, M.D.
- Orin F. Guidry, M.D. interviewed by Mark A. Rockoff, M.D.
- Ronald L. Katz, M.D. interviewed by Bradley E. Smith, M.D. and Theodore Stanley, M.D.

August 19, 2009:

- Edward A. Brunner, M.D. interviewed by M. Christine Stock, M.D.
- Glenn Johnson interviewed by William D. Owens, M.D.



# In Managing Malignant Hyperthermia

## Save Time

### Dantrium® IV

(dantrolene sodium for injection)

Rapidly  
mixes in  
20 seconds

## when time matters most!

### Rapid Mix Product—now reconstitutes in 20 seconds!

#### Reconstitutes 4x faster than before

- Reconstitutes in approximately 20 seconds, with noticeably less vigorous shaking to complete reconstitution
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#### Easy to open, easy to use

- Easy-to-open flip-off vial cap
- Easy-to-identify RED vial cap and RED vial label

#### Be prepared

- MHAUS\* recommends keeping 36 vials of Dantrium® IV or dantrolene sodium in a designated cart available for emergency use
- Dantrium® IV has 36 months of shelf life

#### Emergency orders

If you have an MH episode and must have Dantrium® IV delivered quickly, call the JHP Dantrium® IV Emergency Orders at 1-877-547-4547 and select option 1.

#### To order Dantrium® IV (dantrolene sodium for injection)

Lyophilized Powder directly from JHP Pharmaceuticals, call 1.877.547.4547 or fax 1.866.923.4547. Dantrium® IV is also available through your local wholesalers and distributors.

\*Malignant Hyperthermia Association of the United States

NDC	Name	Strength	Vial Size	Unit of Sales
42023-123-06	Dantrium® IV (dantrolene sodium for injection)	20 mg	70 mL SDV	6

Please see Dantrium® IV Full Prescribing Information.

#### Safety information

Management of Malignant Hyperthermia (MH) crises requires various supportive measures individualized for the patient's condition. Administration of Dantrium® IV is one component of therapy and should not be considered a substitute for these measures. Even when properly treated, an MH crisis can result in death. Adverse events with Dantrium® IV include loss of grip strength, weakness in the legs, drowsiness, dizziness, thrombophlebitis, and tissue necrosis/injection site reactions secondary to extravasation. There have been rare reports of pulmonary edema, urticaria and erythema. Please see accompanying full prescribing information for Dantrium® IV.



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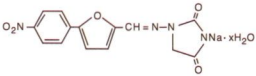


# Dantrium® Intravenous

(dantrolene sodium for injection)

**DESCRIPTION:** **Dantrium Intravenous** is a sterile, non-pyrogenic, lyophilized formulation of dantrolene sodium for injection. **Dantrium Intravenous** is supplied in 70 mL vials containing 20 mg dantrolene sodium, 3000 mg mannitol, and sufficient sodium hydroxide to yield a pH of approximately 9.5 when reconstituted with 60 mL sterile water for injection USP (without a bacteriostatic agent).

**Dantrium** is classified as a direct-acting skeletal muscle relaxant. Chemically, **Dantrium** is hydrated 1-[[[(5-(4-nitrophenyl)-2-furyl)[methyle]amino]-2,4-imidazolidinedione sodium salt. The structural formula for the hydrated salt is:



The hydrated salt contains approximately 15% water (3-1/2 moles) and has a molecular weight of 399. The anhydrous salt (dantrolene) has a molecular weight of 336.

**CLINICAL PHARMACOLOGY:** In isolated nerve-muscle preparation, **Dantrium** has been shown to produce relaxation by affecting the contractile response of the muscle at a site beyond the myoneural junction. In skeletal muscle, **Dantrium** dissociates the excitation-contraction coupling, probably by interfering with the release of Ca++ from the sarcoplasmic reticulum. The administration of intravenous **Dantrium** to human volunteers is associated with loss of grip strength and weakness in the legs, as well as subjective CNS complaints (see also PRECAUTIONS, Information for Patients). Information concerning the passage of **Dantrium** across the blood-brain barrier is not available.

In the anesthetic-induced malignant hyperthermia syndrome, evidence points to an intrinsic abnormality of skeletal muscle tissue. In affected humans, it has been postulated that "triggering agents" (e.g., general anesthetics and depolarizing neuromuscular blocking agents) produce a change within the cell which results in an elevated myoplasmic calcium. This elevated myoplasmic calcium activates acute cellular catabolic processes that cascade to the malignant hyperthermia crisis.

It is hypothesized that addition of **Dantrium** to the "triggered" malignant hyperthermic muscle cell reestablishes a normal level of ionized calcium in the myoplasm. Inhibition of calcium release from the sarcoplasmic reticulum by **Dantrium** reestablishes the myoplasmic calcium equilibrium, increasing the percentage of bound calcium. In this way, physiologic, metabolic, and biochemical changes associated with the malignant hyperthermia crisis may be reversed or attenuated. Experimental results in malignant hyperthermia susceptible swine show that prophylactic administration of intravenous or oral dantrolene prevents or attenuates the development of vital sign and blood gas changes characteristic of malignant hyperthermia in a dose related manner. The efficacy of intravenous dantrolene in the treatment of human and porcine malignant hyperthermia crisis, when considered along with prophylactic experiments in malignant hyperthermia susceptible swine, lends support to prophylactic use of oral or intravenous dantrolene in malignant hyperthermia susceptible humans. When prophylactic intravenous dantrolene is administered as directed, whole blood concentrations remain at a near steady state level for 3 or more hours after the infusion is completed. Clinical experience has shown that early vital sign and/or blood gas changes characteristic of malignant hyperthermia may appear during or after anesthesia and surgery despite the prophylactic use of dantrolene and adherence to currently accepted patient management practices. These signs are compatible with attenuated malignant hyperthermia and respond to the administration of additional i.v. dantrolene (see DOSAGE AND ADMINISTRATION). The administration of the recommended prophylactic dose of intravenous dantrolene to healthy volunteers was not associated with clinically significant cardiorespiratory changes.

Specific metabolic pathways for the degradation and elimination of **Dantrium** in humans have been established. Dantrolene is found in measurable amounts in blood and urine. Its major metabolites in body fluids are 5-hydroxy dantrolene and an acetylaminio metabolite of dantrolene. Another metabolite with an unknown structure appears related to the latter. **Dantrium** may also undergo hydrolysis and subsequent oxidation forming nitrophenylfuroic acid.

The mean biologic half-life of **Dantrium** after intravenous administration is variable, between 4 to 8 hours under most experimental conditions. Based on assays of whole blood and plasma, slightly greater amounts of dantrolene are associated with red blood cells than with the plasma fraction of blood. Significant amounts of dantrolene are bound to plasma proteins, mostly albumin, and this binding is readily reversible.

Cardiopulmonary depression has not been observed in malignant hyperthermia susceptible swine following the administration of up to 7.5 mg/kg i.v. dantrolene. This is twice the amount needed to maximally diminish twitch response to single supramaximal peripheral nerve stimulation (95% inhibition). A transient, inconsistent, depressant effect on gastrointestinal smooth muscles has been observed at high doses.

**INDICATIONS AND USAGE:** **Dantrium Intravenous** is indicated, along with appropriate supportive measures, for the management of the fulminant hypermetabolism of skeletal muscle characteristic of malignant hyperthermia crises in patients of all ages. **Dantrium Intravenous** should be administered by continuous rapid intravenous push as soon as the malignant hyperthermia reaction is recognized (i.e., tachycardia, tachypnea, central venous desaturation, hypercarbia, metabolic acidosis, skeletal muscle rigidity, increased utilization of anesthesia circuit carbon dioxide absorber, cyanosis and mottling of the skin, and, in many cases, fever).

**Dantrium Intravenous** is also indicated preoperatively, and sometimes postoperatively, to prevent or attenuate the development of clinical and laboratory signs of malignant hyperthermia in individuals judged to be malignant hyperthermia susceptible.

**CONTRAINDICATIONS:** None.

**WARNINGS:** The use of **Dantrium Intravenous** in the management of malignant hyperthermia crisis is not a substitute for previously known supportive measures. These measures must be individualized, but it will usually be necessary to discontinue the suspect triggering agents, attend to increased oxygen requirements, manage the metabolic acidosis, institute cooling when necessary, monitor urinary output, and monitor for electrolyte imbalance.

Since the effect of disease state and other drugs on **Dantrium** related skeletal muscle weakness, including possible respiratory depression, cannot be predicted, patients who receive i.v. **Dantrium** preoperatively should have vital signs monitored.

If patients judged malignant hyperthermia susceptible are administered intravenous or oral **Dantrium** preoperatively, anesthetic preparation must still follow a standard malignant hyperthermia susceptible regimen, including the avoidance of known triggering agents. Monitoring for early clinical and metabolic signs of malignant hyperthermia is indicated because attenuation of malignant hyperthermia, rather than prevention, is possible. These signs usually call for the administration of additional i.v. dantrolene.

**PRECAUTIONS:**

**General:** Care must be taken to prevent extravasation of **Dantrium** solution into the surrounding tissues due to the high pH of the intravenous formulation and potential for tissue necrosis.

When mannitol is used for prevention or treatment of late renal complications of malignant hyperthermia, the 3 g of mannitol needed to dissolve each 20 mg vial of i.v. **Dantrium** should be taken into consideration.

**Information for Patients:** Based upon data in human volunteers, perioperatively, it is appropriate to tell patients who receive **Dantrium Intravenous** that symptoms of muscle weakness should be expected postoperatively (i.e. decrease in grip strength and weakness of leg muscles, especially walking down stairs). In addition, symptoms such as "lightheadedness" may be noted. Since some of these symptoms may persist for up to 48 hours, patients must not operate an automobile or engage in other hazardous activity during this time. Caution is also indicated at meals on the day of administration because difficulty

swallowing and choking has been reported. Caution should be exercised in the concomitant administration of tranquilizing agents.

Hepatotoxicity seen with **Dantrium Capsules:** **Dantrium** (dantrolene sodium) has a potential for hepatotoxicity, and should not be used in conditions other than those recommended. Symptomatic hepatitis (fatal and non-fatal) has been reported at various dose levels of the drug. The incidence reported in patients taking up to 400 mg/day is much lower than in those taking doses of 800 mg or more per day. Even sporadic short courses of these higher dose levels within a treatment regimen markedly increased the risk of serious hepatic injury. Liver dysfunction as evidenced by blood chemical abnormalities alone (liver enzyme elevations) has been observed in patients exposed to **Dantrium** for varying periods of time. Overt hepatitis has occurred at varying intervals after initiation of therapy, but has been most frequently observed between the third and twelfth month of therapy. The risk of hepatic injury appears to be greater in females, in patients over 35 years of age, and in patients taking other medication(s) in addition to **Dantrium** (dantrolene sodium). **Dantrium** should be used only in conjunction with appropriate monitoring of hepatic function including frequent determination of SGOT or SGPT.

Fatal and non-fatal liver disorders of an idiosyncratic or hypersensitivity type may occur with **Dantrium** therapy.

**Drug Interactions:** **Dantrium** is metabolized by the liver, and it is theoretically possible that its metabolism may be enhanced by drugs known to induce hepatic microsomal enzymes. However, neither phenobarbital nor diazepam appears to affect **Dantrium** metabolism. Binding to plasma protein is not significantly altered by diazepam, diphenylhydantoin, or phenylbutazone. Binding to plasma proteins is reduced by warfarin and clofibrate and increased by tolbutamide.

Cardiovascular collapse in association with marked hyperkalemia has been reported in patients receiving dantrolene in combination with calcium channel blockers. It is recommended that the combination of intravenous dantrolene sodium and calcium channel blockers, such as verapamil, not be used together during the management of malignant hyperthermia crisis.

Administration of dantrolene may potentiate vecuronium-induced neuromuscular block.

**Carcinogenesis, Mutagenesis, and Impairment of Fertility:** Sprague-Dawley female rats fed **Dantrium** for 18 months at dosage levels of 15, 30, and 60 mg/kg/day showed an increased incidence of benign and malignant mammary tumors compared with concurrent controls. At the highest dose level (approximately the same as the maximum recommended daily dose on a mg/m<sup>2</sup> basis), there was an increase in the incidence of benign hepatic lymphatic neoplasms. In a 30-month study in Sprague-Dawley rats fed dantrolene sodium, the highest dose level (approximately the same as the maximum recommended daily dose on a mg/m<sup>2</sup> basis) produced a decrease in the time of onset of mammary neoplasms. Female rats at the highest dose level showed an increased incidence of hepatic lymphangiosarcomas and hepatic angiosarcomas.

The only drug-related effect seen in a 30-month study in Fischer-344 rats was a dose-related reduction in the time of onset of mammary and testicular tumors. A 24-month study in HaM/ICR mice revealed no evidence of carcinogenic activity.

The significance of carcinogenicity data relative to use of **Dantrium** in humans is unknown.

Dantrolene sodium has produced positive results in the Ames S. Typhimurium bacterial mutagenesis assay in the presence and absence of a liver activating system.

Dantrolene sodium administered to male and female rats at dose levels up to 45 mg/kg/day (approximately 1.4 times the maximum recommended daily dose on a mg/m<sup>2</sup> basis) showed no adverse effects on fertility or general reproductive performance.

**Pregnancy:** Pregnancy Category C: **Dantrium** has been shown to be embryocidal in the rabbit and has been shown to decrease pup survival in the rat when given at doses seven times the human oral dose. There are no adequate and well-controlled studies in pregnant women. **Dantrium Intravenous** should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Labor and Delivery:** In one uncontrolled study, 100 mg per day of prophylactic oral **Dantrium** was administered to term pregnant patients awaiting labor and delivery. Dantrolene readily crossed the placenta, with maternal and fetal whole blood levels approximately equal at delivery; neonatal levels then fell approximately 50% per day for 2 days before declining sharply. No neonatal respiratory and neuromuscular side effects were detected at low dose. More data, at higher doses, are needed before more definitive conclusions can be made.

**Nursing Mothers:** Dantrolene has been detected in human milk at low concentrations (less than 2 micrograms per mL) during repeat intravenous administration over 3 days. Because of the potential for serious adverse reactions in nursing infants from dantrolene, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Geriatric Use:** Clinical studies of **Dantrium Intravenous** did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between the elderly and younger patients. In general, dose selection for an elderly patient should be cautious reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

**ADVERSE REACTIONS:** There have been occasional reports of death following malignant hyperthermia crisis even when treated with intravenous dantrolene; incidence figures are not available (the pre-dantrolene mortality of malignant hyperthermia crisis was approximately 50%). Most of these deaths can be accounted for by late recognition, delayed treatment, inadequate dosage, lack of supportive therapy, intercurrent disease and/or the development of delayed complications such as renal failure or disseminated intravascular coagulopathy. In some cases there are insufficient data to completely rule out therapeutic failure of dantrolene.

There are reports of fatality in malignant hyperthermia crisis, despite initial satisfactory response to i.v. dantrolene, which involve patients who could not be weaned from dantrolene after initial treatment.

The administration of intravenous **Dantrium** to human volunteers is associated with loss of grip strength and weakness in the legs, as well as drowsiness and dizziness.

The following adverse reactions are in approximate order of severity:

There are rare reports of pulmonary edema developing during the treatment of malignant hyperthermia crisis in which the diluent volume and mannitol needed to deliver i.v. dantrolene possibly contributed.

There have been reports of thrombophlebitis following administration of intravenous dantrolene; actual incidence figures are not available. Tissue necrosis secondary to extravasation has been reported.

There have been rare reports of urticaria and erythema possibly associated with the administration of i.v. **Dantrium**. There has been one case of anaphylaxis.

Injection site reactions (pain, erythema, swelling), commonly due to extravasation, have been reported.

None of the serious reactions occasionally reported with long-term oral **Dantrium** use, such as hepatitis, seizures, and pleural effusion with pericarditis, have been reasonably associated with short-term **Dantrium Intravenous** therapy.

The following events have been reported in patients receiving oral dantrolene: aplastic anemia, leukopenia, lymphocytic lymphoma, and heart failure. (See package insert for **Dantrium** (dantrolene sodium) **Capsules** for a complete listing of adverse reactions.)

The published literature has included some reports of **Dantrium** use in patients with Neuroleptic Malignant Syndrome (NMS). **Dantrium Intravenous** is not indicated for the treatment of NMS and patients may expire despite treatment with **Dantrium Intravenous**.

For medical advice about adverse reactions contact your medical professional. To report SUSPECTED ADVERSE REACTIONS, contact JHP at 1-866-923-2547 or MEDWATCH at 1-800-FDA-1088 (1-800-332-1088) or <http://www.fda.gov/medwatch/>.

**OVERDOSAGE:** Because **Dantrium Intravenous** must be administered at a low concentration in a large volume of fluid, acute toxicity of **Dantrium** could not be assessed in animals. In 14-day (subacute) studies, the intravenous formulation of **Dantrium** was relatively non-toxic to rats at doses of 10 mg/kg/day and 20 mg/kg/day. While 10 mg/kg/day in dogs for 14 days evoked little toxicity, 20 mg/kg/day for 14 days caused hepatic changes of questionable biologic significance.

Symptoms which may occur in case of overdose include, but are not limited to, muscular weakness and alterations in the state of consciousness (e.g., lethargy, coma), vomiting, diarrhea, and crystalluria.

For acute overdosage, general supportive measures should be employed.

Intravenous fluids should be administered in fairly large quantities to avert the possibility of crystalluria. An adequate airway should be maintained and artificial resuscitation equipment should be at hand. Electrocardiographic monitoring should be instituted, and the patient carefully observed. The value of dialysis in **Dantrium** overdose is not known.

**DOSAGE AND ADMINISTRATION:** As soon as the malignant hyperthermia reaction is recognized, all anesthetic agents should be discontinued; the administration of 100% oxygen is recommended. **Dantrium Intravenous** should be administered by continuous rapid intravenous push beginning at a minimum dose of 1 mg/kg, and continuing until symptoms subside or the maximum cumulative dose of 10 mg/kg has been reached.

If the physiologic and metabolic abnormalities reappear, the regimen may be repeated. It is important to note that administration of **Dantrium Intravenous** should be continuous until symptoms subside. The effective dose to reverse the crisis is directly dependent upon the individual's degree of susceptibility to malignant hyperthermia, the amount and time of exposure to the triggering agent, and the time elapsed between onset of the crisis and initiation of treatment.

**Pediatric Dose:** Experience to date indicates that the dose of **Dantrium Intravenous** for pediatric patients is the same as for adults.

**Preoperatively:** **Dantrium Intravenous** and/or **Dantrium Capsules** may be administered preoperatively to patients judged malignant hyperthermia susceptible as part of the overall patient management to prevent or attenuate the development of clinical and laboratory signs of malignant hyperthermia.

**Dantrium Intravenous:** The recommended prophylactic dose of **Dantrium Intravenous** is 2.5 mg/kg, starting approximately 1-1/4 hours before anticipated anesthesia and infused over approximately 1 hour. This dose should prevent or attenuate the development of clinical and laboratory signs of malignant hyperthermia provided that the usual precautions, such as avoidance of established malignant hyperthermia triggering agents, are followed.

Additional **Dantrium Intravenous** may be indicated during anesthesia and surgery because of the appearance of early clinical and/or blood gas signs of malignant hyperthermia or because of prolonged surgery (see also CLINICAL PHARMACOLOGY, WARNINGS, and PRECAUTIONS). Additional doses must be individualized.

**Oral Administration of Dantrium Capsules:** Administer 4 to 8 mg/kg/day of oral **Dantrium** in three or four divided doses for 1 or 2 days prior to surgery, with the last dose being given with a minimum of water approximately 3 to 4 hours before scheduled surgery. Adjustment can usually be made within the recommended dosage range to avoid incapacitation (weakness, drowsiness, etc.) or excessive gastrointestinal irritation (nausea and/or vomiting). See also the package insert for **Dantrium Capsules**.

**Post Crisis Follow-Up:** **Dantrium Capsules**, 4 to 8 mg/kg/day, in four divided doses should be administered for 1 to 3 days following a malignant hyperthermia crisis to prevent recurrence of the manifestations of malignant hyperthermia.

Intravenous **Dantrium** may be used postoperatively to prevent or attenuate the recurrence of signs of malignant hyperthermia when oral **Dantrium** administration is not practical. The i.v. dose of **Dantrium** in the postoperative period must be individualized, starting with 1 mg/kg or more as the clinical situation dictates.

**PREPARATION:** Each vial of **Dantrium Intravenous** should be reconstituted by adding 60 mL of sterile water for injection USP (without a bacteriostatic agent), and the vial shaken until the solution is clear. 5% Dextrose Injection USP, 0.9% Sodium Chloride Injection USP, and other acidic solutions are not compatible with **Dantrium Intravenous** and should not be used. The contents of the vial must be protected from direct light and used within 6 hours after reconstitution. Store reconstituted solutions at controlled room temperature (59°F to 86°F or 15°C to 30°C).

Reconstituted **Dantrium Intravenous** should not be transferred to large glass bottles for prophylactic infusion due to precipitate formation observed with the use of some glass bottles as reservoirs.

For prophylactic infusion, the required number of individual vials of **Dantrium Intravenous** should be reconstituted as outlined above. The contents of individual vials are then transferred to a larger volume sterile intravenous plastic bag. Stability data on file at JHP Pharmaceuticals indicate commercially available sterile plastic bags are acceptable drug delivery devices. However, it is recommended that the prepared infusion be inspected carefully for cloudiness and/or precipitation prior to dispensing and administration. Such solutions should not be used. While stable for 6 hours, it is recommended that the infusion be prepared immediately prior to the anticipated dosage administration time.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration.

**HOW SUPPLIED:** **Dantrium Intravenous** (NDC 42023-123-06) is available in vials containing a sterile lyophilized mixture of 20 mg dantrolene sodium, 3000 mg mannitol, and sufficient sodium hydroxide to yield a pH of approximately 9.5 when reconstituted with 60 mL sterile water for injection USP (without a bacteriostatic agent).

Store unconstituted product at controlled room temperature (59°F to 86°F or 15°C to 30°C) and avoid prolonged exposure to light.

Rx only.

Prescribing Information as of November 2008



Distributed by:  
JHP Pharmaceuticals, LLC  
Rochester, MI 48307



# Why the WLM Is Important to ASA

Mary Ellen Warner, M.D., President  
*Wood Library-Museum of Anesthesiology*

**It is important to understand the roots of the Wood Library-Museum of Anesthesiology (WLM)** to appreciate our specialty's immense heritage and how the WLM has and continues to impact the field of anesthesiology. The WLM originated from a private collection of books, papers and artifacts assembled by the distinguished anesthesiologist Paul Meyer Wood, M.D. Dr. Wood wore many hats in his career, including assistant secretary and then secretary of the New York Society of Anesthetists (NYSA) from 1930 to 1944. NYSA became the American Society of Anesthetists in 1936 and then the American Society of Anesthesiologists (ASA) in 1945. Dr. Wood was also a founding member of the American Board of Anesthesiology (ABA). He became the first recipient of the ASA Distinguished Service Award in 1945. The legacy that Paul M. Wood left us is extraordinary, and a major part of this heritage is the WLM.

It is most fortunate for all of us that Paul M. Wood was a voracious collector of books, journals, papers and artifacts related to the development of the specialty of anesthesiology. Even more important was his realization of the significance of his collection to medicine in general and to the specialty of anesthesiology in particular. He guarded his priceless treasures fervently. With the help of colleagues, he moved his collection multiple times over several decades in order to ensure its preservation. Residences for this nucleus of today's WLM collection included, in chronological order, Dr. Wood's private home, the basement of a New York brownstone building, donated space in the New York headquarters of E.R. Squibb Corporation, offices of the New York State Society of Anesthesiologists (NYSSA), Dr. Wood's upstate garage, and the Long Island boathouse of Richard Foregger. In 1963, shortly after Dr. Wood's death, the collection was installed in a special two-story building attached to the newly built ASA headquarters in Park Ridge, Illinois, on

Busse Highway. The collection, greatly expanded, moved with ASA to its new headquarters on North Northwest Highway in Park Ridge in 1992. This is where the collection presently resides, with its library space and Rare Book Room occupying part of the third floor, an impressive museum gallery on the first floor, and additional space for storage in the basement. Off-site storage also is used for housing parts of the collection as deemed appropriate since our collection has outgrown the space at ASA headquarters.

The WLM remains committed to its mission as first defined in 1950: "To collect, preserve and make available to doctors of medicine and the lay public writings, publications, apparatus, and other materials pertaining to the special medical field of anesthesiology." WLM is committed to the concept that knowledge of the events and people that shaped our practice is one characteristic that has transformed anesthesiology

from a medical trade into a highly respected medical specialty and proud profession. Specifically, there are many programs that WLM provides to ensure our unique heritage is never lost. These will be briefly outlined in the following paragraphs.

*Continued on page 18*



*Paul M. Wood, M.D., in his office in the 1940s*



*Mary Ellen Warner, M.D., is Associate Professor of Anesthesiology, Mayo Clinic College of Medicine, Rochester, Minnesota.*



**Archive:** The WLM is the official repository of institutional, organizational and individual archives related to our specialty. As a service to ASA and related organizations, WLM stores and maintains these official documents. Some of the 48 organizations whose archives we maintain include not only ASA, but also the Academy of Anesthesia and the International Anesthesia Research Society (IARS). Many of our subspecialty societies' archives are maintained by WLM. These include the American Society of Critical Care Anesthesiologists (ASCCA), American Society of Regional Anesthesia and Pain Medicine (ASRA), and the Society for Pediatric Anesthesia (SPA). The Missouri Society of Anesthesiologists recently joined several other state societies (e.g., Minnesota, Ohio and New York) in transferring its archive to WLM. WLM also collects papers, records, letters and memorabilia of individuals who have made major contributions to our specialty. Examples of the many individual archives related to our specialty include such anesthesia giants as E.A. Rovenstine, Virginia Apgar, Ralph Waters and John Lundy. One recent personal historic donation, courtesy of the efforts of J. Antonio Aldrete, M.D, is documentation on the first human liver transplant.

Our archives are in many different media, including papers, books, photographs, paintings, videotapes, slides and films. Each new acquisition must be carefully examined, catalogued and stored. Special care and handling must be used as appropriate for the specific medium. An important part of preservation of these archives is ensuring their permanence with transfer to the most up-to-date storage mechanism available today. These mechanisms range from digitization of rare books and museum pieces to DVDs and hard drive back-up of films.

**Museum:** The WLM houses the premier collection of anesthesia-related artifacts in the world. These unique pieces are acquired with fiscal responsibility, prioritization and prudence. An impressive display of our artifacts, the George and Ramona Bause Collection, can be found in the main floor gallery at ASA headquarters. Priceless treasures include the 1881 Hayes Inhaler, the 1847 Hedley Inhaler, the 1848-1850 Murphy Chloroform Inhaler and the 1908 Ombredanne Inhaler. The WLM continues to explore ways for improving awareness of the public and practitioners of our specialty about the treasures that exist within the museum. One mechanism that we continue to explore for dissemination of information about WLM holdings



Past residences for the nucleus of today's WLM collection (clockwise from upper left): donated space in the New York headquarters of E.R. Squibb Corporation, the Long Island boathouse of Richard Foregger, the former ASA headquarters in Park Ridge, Illinois, on Busse Highway, and the Randolph building in downtown Chicago.



is virtual technology. In addition, beginning this year, images of unique museum artifacts and rare books from the WLM have been prominently featured in the journal *Anesthesiology*. We wish to publically thank the editorial board of the journal, and specifically James C. Eisenach, M.D., for allowing us to showcase a number of our museum's most important artifacts.

**Rare Book Collection:** The WLM has the largest rare book collection related to the development of our specialty in the world. We have over 1,000 titles in our collection, with an extensive selection related to the ether controversy, mesmerism and blood transfusion. Our newest purchase is also our earliest rare book in our collection. Published in 1561, Valerius Cordus' *De Artificiosis Extractionibus* contains the first published record of the synthesis of ether, "sweet oil of vitriol," from distilling ethanol with sulfuric acid. Digitization of the Rare Book Collection is progressing to ensure that this valuable collection will be available for all to use far into the future for scholarly and research activity. Examples of this rare book digitization project as well as the Living History Collection are available on the WLM Web site. We encourage you to view them at [www.woodlibrarymuseum.org](http://www.woodlibrarymuseum.org).

**Library:** In addition to our rare book collection, the WLM has the largest library in the world devoted to the specialty of anesthesiology and related medicine. We have more than 12,000 books presently in our collection and continue to pursue every new publication germane to our specialty. We are the only library where one can find all the known anesthesia journals currently published in the world. In addition, we produce and manage a library of videotapes, including classic films and our Living History series, which contains over 200 interviews of individuals who have made major contributions to our specialty.

**Publications:** The WLM publishes original books and reprints of classical papers that distinguish our specialty. Examples of these include *Genesis of Surgical Anesthesia* and the *Careers* series of autobiographical essays and themes important to the development of our specialty. Our first electronic book on the history of anesthesia, titled *The Ether Monument: A Story of Beauty and Controversy*, is now available courtesy of Rafael A. Ortega, M.D. The WLM also supports the publication of the *Bulletin of Anesthesia History* in association with the Anesthesia History Association.

**Fellowships:** We sponsor a fellowship program initiated in 1987 by the late Roderic Calvery, M.D., for the study of our historical material housed at the WLM. These fellowships are vital to support research and education related to the history of our specialty. Past recipients of this program include B. Raymond Fink, M.D., Lucien E. Morris, M.D., Jonathan C. Berman, M.D., Doris K. Cope, M.D. and Douglas R. Bacon, M.D. Many of these have become true advocates of our history, and one holds a joint appointment in both anesthesiology and history of medicine at an academic institution.



The collection, greatly expanded, moved with ASA to its new headquarters on Northwest Highway in Park Ridge, Illinois, in 1992.

**Lewis H. Wright Lectureship:** Every year, the WLM sponsors the Lewis H. Wright Memorial Lecture at the ASA Annual Meeting. This year's lecture, "Patient Safety: Are We Making Progress?" was given by Lucian Leape, M.D. Other 2009 ASA meeting activities included the annual Friends of the WLM Appreciation Tea and the WLM Forum on the History of Anesthesia, "Anesthesia in Strange and Wonderful Places."

**Support of ASA Membership:** In addition to the programs outlined above, WLM staff continues to support ASA membership with research reference requests for scholarly activity and lecture presentations, SEE and ACE program reference verification, support of ASA leadership and the Washington Office regarding current and past activities and policies and other miscellaneous requests, including recent research activity for the newly formed Anesthesia Quality Institute. Requests for library assistance come not only from ASA members, officers and executives, but also from professionals in other specialties,

*Continued on page 49*



# Valerius Cordus Synthesizes Sulfuric Ether —

George S. Bause, M.D., M.P.H., Honorary Curator  
Wood Library-Museum of Anesthesiology

Patrick P. Sim, M.L.S.  
Paul M. Wood Distinguished Librarian

A compilation of manuscripts penned by German botanist-pharmacist-physician Valerius Cordus (1515-1544) was published posthumously in 1561. The tome (see below) included his *De Artificiosis Extractionibus* ("On Artful Extractions"), which recorded his synthesis in 1540 of "sweet oil of vitriol"—more than three centuries before ether would be used as an anesthetic. This book passed successively through the hands of countless pharmacists and physicians, two auctioneers, and at least one antiquarian bookseller. The venerable volume has finally been rescued from its wanderings by the Wood Library-Museum of Anesthesiology.



Although Cordus recorded synthesizing ether as early as 1540, his admirer and editor, Swiss naturalist Conrad Gesner, would not publish that Cordic manuscript until 1561, seventeen years after Cordus' premature death. Fortunately, the leaves of the WLM's tome were not made of paper. Indeed, their lime-bath-defleshed, scraper-dehaired, pumice-treated, and chalk-whitened calfskin is vellum (think "veal"), which can last 1,000 years. Rather than by wooden boards, the tome is covered by vellum over pasteboard and then partially bound by pigskin embossed colorlessly ("blind stamping"). Leaves are numbered successively on the right (recto) faces only. Minor dampstains and wormholes punctuate this antiquarian treasure.



Valerius Cordus

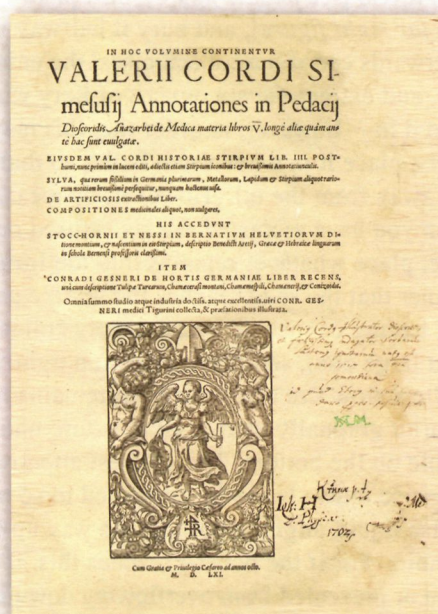
"Sweet Oil of Vitriol"



# The Wood Library - Museum's "New" Tome from 1561



In early 1544 Cordus released his 5-volume herbal *Historia Plantarum* and received his doctorate from Wittenberg. After collecting botanical specimens that summer in the malaria-infested swamps of Italy, the 29-year-old Cordus was kicked by a horse before succumbing to fever in Rome. His corpse barely spared a watery grave in the River Tiber, Cordus was buried in Santa Maria dell' Anima, a church in Rome.



Valerius Cordus of Siemerhausen began formal botanical studies at age 12 years with his own father, a physician hailed as Germany's Father of Botany. After earning a baccalaureate from the University of Marburg in 1531, Valerius spent the next eight years working as an apothecary with his uncle while enrolled at the nearby University of Leipzig. There Cordus penned Germany's first pharmacopoeia (1535) and synthesized sulfuric ether (1540). Although Middle Easterners and even other Westerners likely preceded Cordus in generating sulfuric ether, his *De Artificiosis Extractionibus* is the first publication of ether's synthesis from ethanol and sulfuric acid. Cordus continued medical studies at the University of Wittenberg and then botanical studies at several Italian universities in 1542.

Posthumous publication of his many manuscripts established Cordus as the "Father of Descriptive Botany," the author of the first legally sanctioned pharmacopoeia, and the first scientist to record synthesizing ether. The next two pages illustrate and translate, from medieval Latin, the Cordic synthesis of "sweet oil of vitriol."

George S. Bause, M.D., M.P.H., is a Clinical Associate Professor, Case Western Reserve University, Cleveland, Ohio



Patrick P. Sim, M.L.S., is the Paul M. Wood Distinguished Librarian for the Wood Library-Museum of Anesthesiology, Park Ridge, Illinois

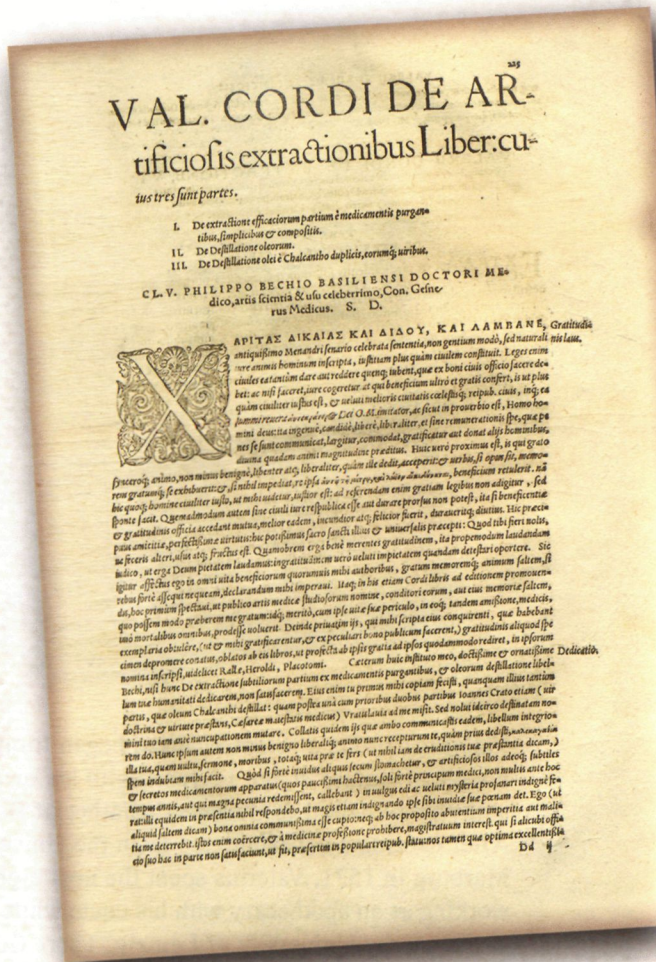




## Chapter Eleven: The Method of Separation.

Take six ounces of the most biting, fiery and triply-distilled wine<sup>1</sup> in a Venetian glass and combine with the same volume of sour<sup>2</sup> oil of Vitriol; place [the mixture] inside a petite, small-mouthed cucurbit<sup>3</sup>, and seal the opening tightly with clay for an entire month or two. Then pour [the mixture] out into a cucurbit for which there is prepared an immediately connecting alembic<sup>4</sup>, the shape of which we shall reveal [*see middle figure*]; next place in a small furnace [*see far right figure*], and bury it halfway with embers. Afterwards connect a collector, seal the union securely with clay, and extract the six ounces of fiery wine which you poured in— however, in order that this may happen more safely, place it in a hot-water bath<sup>5</sup>, so that only wine can rise away from the oil. However, by means of the bath, when you have extracted the six infused ounces of fiery wine, place whatever remains into the furnace in such a manner that the sand reaches the middle part of the cucurbit and, having connected a new, empty collector (and therefore not a large one), seal the connection tightly with clay. Next, kindle a slow fire and from what remains in the cucurbit gradually extract all moisture until nothing is visible on the bottom. The greatest attentiveness and diligence must always be employed to so moderate the fire, or else liquid might bubble all the way up to the pipe of the alembic. For if the boiling reaches this, it cannot be settled down or prevented from overflowing down into the collector and contaminating all the oil. Indeed, it tends to boil most easily. However, as soon as you have cautiously extracted it, remove the collector immediately with its liquid, and you will see that two things are contained in it: an obviously watery liquid and an oily, greasy one. However, you should immediately separate one from the other so as nothing watery is left behind in the oil. For that water can ruin the oil. Moreover, for the most part, this same oil customarily floats on water, especially if the previously infused wine is entirely removed by the bath, but you will also immediately be able to distinguish the oil from the water by touch. Indeed, the oil is greasy; the water, not at all so. Then set aside the separated oil<sup>6</sup> for use.

– **Valerius Cordus** (1540)  
(translated from medieval Latin by  
George S. Bause, M.D., M.P.H.)



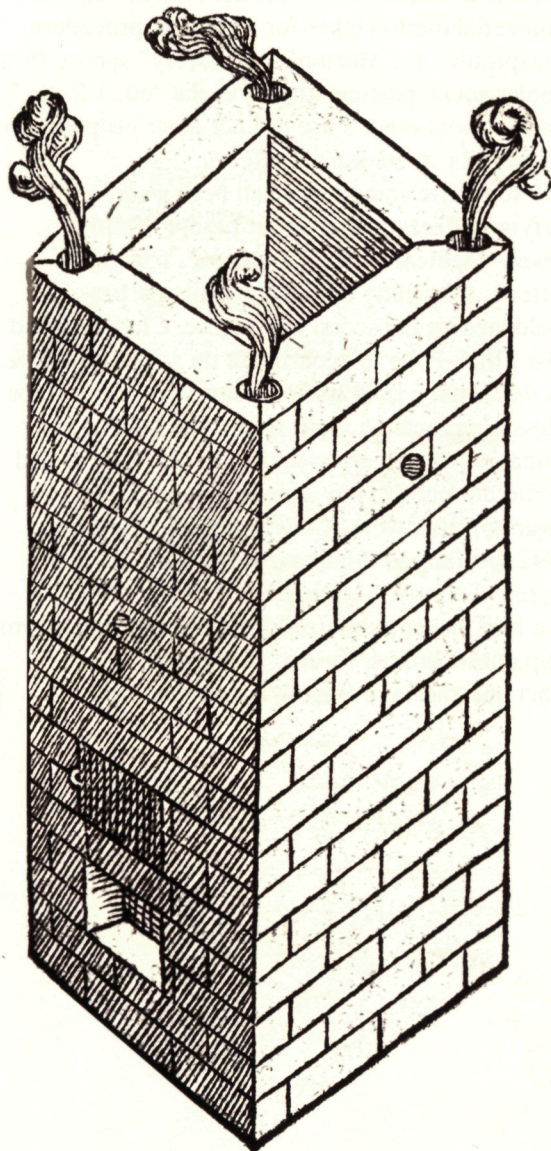
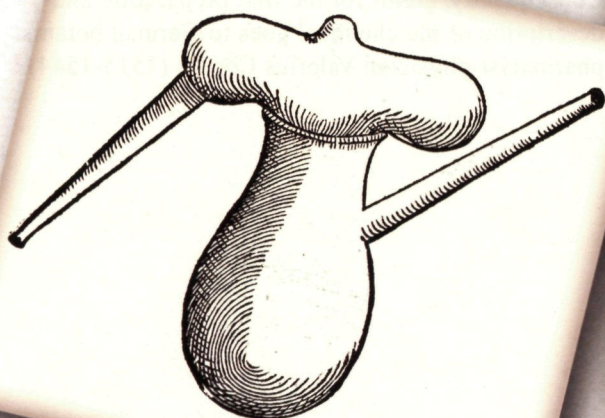
### Footnotes:

1. ethanol
2. sulfuric acid
3. a gourd-like flask
4. the cap of an alchemist's distilling apparatus
5. a double-saucepan equivalent known as a "bath of Maria"
6. diethyl ether and diethyl sulfate mixed together as Cordus' "sweet oil of vitriol"

*"Ex Austero quomodo Dulce fiat."*



To the left, from the Gesner-edited tome, is the opening page of Cordus' *De Artificiosis Extractionibus*. Below, Cordus illustrates his alchemist's still for generating ether. The base of the still, a gourd-like flask or cucurbit (from *cucurbita* or "gourd" in Latin – think of "cucumber" in English) is surmounted by the condensing cap of an alembic (from *al anbiq* or "the still" in Arabic). The pipe leads down to a collector or receiving vessel (not shown here). On the right is the "squared-off" brick furnace that Cordus prescribes for heating his distilling apparatus. Note how smoke exits the furnace via four corner tubes, each thicker in diameter than the "largest thumb."



"How the Sweet is created from the Sour."

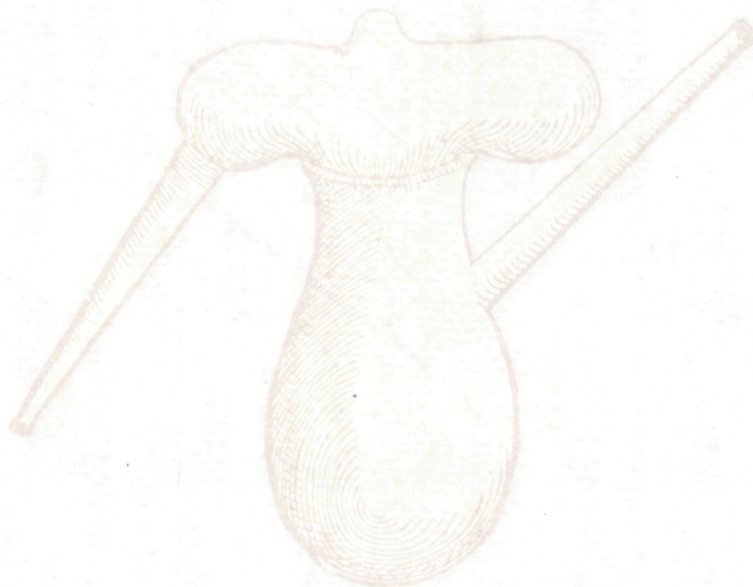


# Sweet Oil of Vitriol: Genesis of the First Anesthetic

Modern anesthesia was introduced to the world in the mid-19th century when dentist W.T.G. Morton administered diethyl ether for a surgical procedure. The inspiration for Morton's "discovery" sprang from a popular social pastime known as the "ether frolic." Warnings about ether's use did not deter people from inhaling it for its intoxicant effects.

The scientific community had been aware of the stupefying effect of ether vapor before Morton, however. Medical student William E. Clarke, an American, frequently held ether frolic parties. Emboldened by his social experience, Clark enlisted dentist Elijah Pope to experiment on a "Miss Hobbie." Thus, in January 1842 in Rochester, New York, Pope painlessly extracted a tooth from Miss Hobbie after she inhaled from an ether-soaked towel. Clarke and Pope did not publish any account of their case.<sup>1</sup> Unaware of their work, Crawford Long, in March of 1842, performed minor surgery under ether in Jefferson, Georgia. Long, like Clark and Pope before him, never publicized his work, leaving Morton to reap public honors for his "discovery" of ether anesthesia in Boston in October 1846.<sup>2</sup>

The synthesis of diethyl ether, however, antedated any clinical anesthetic application by three centuries. In fact, indisputable discovery of the chemical may be attributed to the medieval practice of alchemy. Alchemists believed that all metals were compounds of sulfur and mercury simply combined in different amounts. Through experimentation, they hoped to find the particular ratio of the two elements that would produce gold. Arab alchemist Jabir ibn Hayyan (721-ca. 815), popularly known as Jabir (or *Geber* in Latin), mentioned the "oil of vitriol" and "sweet oil of vitriol," terms known to later chemical scholars as sulfur and ether. Similarly, alchemist Raymond Lully received credit for discovering a white fluid that he named *oleum vitrioli dulce*, the "sweet oil of vitriol." Scientists of later eras would identify Lully's "sweet oil of vitriol" as ether (or, specifically, diethyl ether mixed with ethyl sulfate). Although circulated widely, medieval stories attributing the discovery of ether to Jabir and Lully have not been verified. Consequently, credit for the first preparation and description of the chemical goes to German botanist-pharmacist-physician Valerius Cordus (1515-1544).<sup>3</sup>



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*Oleum Vitrioli Dulce*



# WHAT IS THIS THING?

George S. Bause, M.D., M.P.H.

Lydia A. Conlay, M.D., Ph.D.

Many visitors to the gallery of the Wood Library-Museum of Anesthesiology pause in front of the octopus-like device below, which lurks behind the glass of one of the WLM's display cabinets. So, just what is this thing?

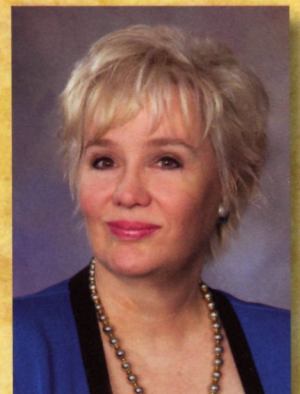


*For the answer, please see page 51*

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# Rare Books of the WLM and an Annotated Bibliography

Donald Caton, M.D.  
WLM Publications Committee

**Nestled in a corner of the third floor** of the ASA Headquarters building in Park Ridge is the room that contains the Rare Book Collection of the Wood Library-Museum of Anesthesiology (WLM). The value of its contents necessitates special security measures, controls to maintain the temperature and humidity within rigid standards, and a recently installed fluoroketone fire suppression system. Along with his other duties as the Paul M. Wood Distinguished Librarian, Patrick Sim has overseen this collection since 1971.

The collection began with Paul M. Wood, M.D., for whom the library museum is named. An avid bibliophile even from childhood, Dr. Wood donated the books and artifacts that later became the library-museum. Before Wood's collection reached its present location, it moved from the basement of his New York brownstone, to the headquarters of E.R. Squibb (courtesy of his friend Lewis A. Wright, medical director of Squibb Pharmaceutical and first president of ASA), to offices of the New York State Society



Patrick Sim, the Paul M. Wood Distinguished Librarian of the WLM, is shown holding the library's latest rare book acquisition, a copy of the 16th century tract in which the German physician Valerius Cordus first described the synthesis of the "sweet oil of vitriol," diethyl ether.

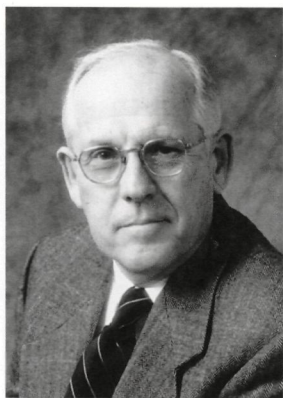
of Anesthesiologists, to Wood's upstate New York garage, and finally to the Long Island boathouse of Richard Foregger. Within months of Wood's death in 1963, the collection was installed at ASA Headquarters in Park Ridge, Illinois. Since then, the collection has grown through purchases, but also through generous donations of many individuals and organizations.

The holdings of the rare book collection document the transition of anesthesia from a technical service, as it began

in 1846, into a medical specialty and a profession; "profession" in the sense that the word denotes an occupation that requires a special knowledge base and training, one that is devoted to public service, and one whose professional practices grow out of and contribute to science. For example, it contains material by anesthesia's earliest practitioners, such as Morton, Warren, Piragoff, Snow and Simpson. However, its holdings also include material by

some of the towering figures of medical science: Harvey, Lower, Bichat and Hooke.

Shortly after he came to the WLM, Sim began to prepare an "annotated bibliography" describing the rare book holdings. As he describes his project: "The idea of an Annotated Bibliography for our rare book collection was conceived during the presidency (1980-1985) of the late Dr. Garth Huston, Sr. ... Cataloguing rare books requires a lot of reading on the background of each subject .... Bibliographically I was inspired by the Fulton/Stanton Catalogue of the Yale Anesthesia Collection, compiled on the centenary of surgical anesthesia in 1946. Through ... acquisition(s) of Dr. Tandy and Dr. Huston, especially on the subject of the Ether Controversy,



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I was able to gauge the depth of the WLM collection on this topic based upon the Fulton/Stanton Catalogue.... I began to conceive an idea of documenting the history of anesthesia according to the WLM collection, a compilation I deemed a service to my fellow librarians.... From Dr. Wood through his fellow bibliophile colleagues like Charles Tandy, K. Garth Huston and Elliott Miller, the collection has substantially grown with pride. I tested my plan by writing a bibliographical essay on the subject of blood transfusion ... submitted to the Bulletin of Anesthesia History for publication. Dr. Ron Stephen loved it and, with some editing, published it as "Blood Transfusion, a History According to the WLM Rare Book Collection."

To date, Sim has annotated more than 900 of the WLM's rare book holdings. He will soon publish his material as a book written for historians, librarians and physicians interested in the history of our specialty. The entries are organized into sections, each with a short historical introduction. Subjects of sections range from "Acupuncture" to "Refrigeration Anesthesia." Individual entries consist of a description of that particular holding, its provenance, when applicable, and its historical significance. Three entries from the "Cardiovascular" section illustrate the nature of Mr. Sim's work:

#### MALPIGHI, Marcello, 1628-1694

De Pulmonibus epistola I.[&] II Praclarissimo, & eruditissimo viro Jo. Alphonso Borellio Pisis Matheseos Professori Celeberrimo, [n.d.] [In:] BARTHOLIN, Thomas. De pulmonum substantia & motu diatribae. Copenhagen: printed by H. Godiani for P. Haubold, 1663. pp 103-127 (misprinted as 107), [128], 15cm., 2 engraved plates of the lungs following p.[viii]. WG104 M480 [1663] RB; RB8834.

Marcello Malpighi was born in Crevalcuore, near Bologna, in 1628, and received his medical and philosophy degrees in 1653. He wrote two letters to Giovanni Borelli in 1660 on the structure of the lung and his observations on the capillaries. In the first letter, he offered proof that the windpipe terminates in many small dilated air vessels, thereby giving a correct anatomical basis of respiratory exchange in the lungs. In the second letter, he described small channels connecting arteries with veins, structures now known as capillaries. This was the first observation that blood circulated within a closed hydraulic system. The two letters were published in 1661. Thomas Bartholin included them in his work, *De pulmonum substantia & motu diatribae*, Hafnie, 1663, as appendices. (See entry under Bartholin in this subject section.) This is the second edition published in 1663. Nigel Phillips claimed that no copies of the 1661 edition had been sold in the 20th century, and none had been located outside Italy. (Phillips, Nigel, CATALOGUE

FIVE, #94, 1988; John L. Thornton: MEDICAL BOOKS, LIBRARIES AND COLLECTORS, 2d rev. ed., 1966, pp 100-101.)

Malpighi's first published work, *Anatomical Observations on the Lungs* (Bologna, 1661), elaborated on William Harvey's discovery of the circulation of blood. Observing anatomical movement of the lungs of the frog, he saw the actual passage of blood from arteries to veins, possible because the transparent organ of the frog enabled him to see the network of capillary vessels and blood moving. His observations were considered a supplement to the missing element in William Harvey's investigation. (Singer, Charles, *The Discovery of the Circulation of the Blood*. London, Wm. Dawson & Sons, 1956, pp 70-72.)

Two folded plates of engravings of the lungs follow page [viii] of this volume. Description of these two plates found on pp. 127-[128].

*Continued on page 28*



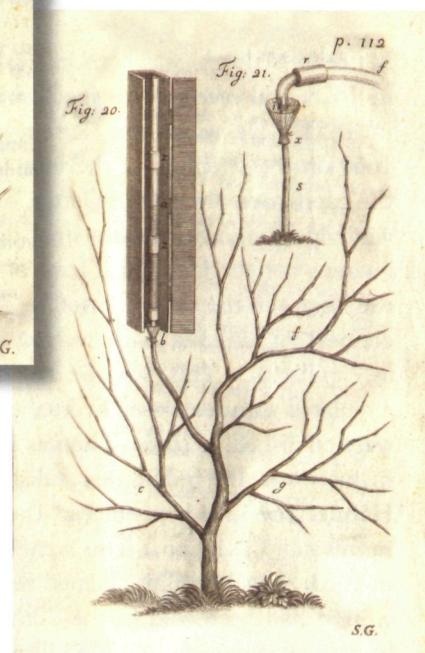
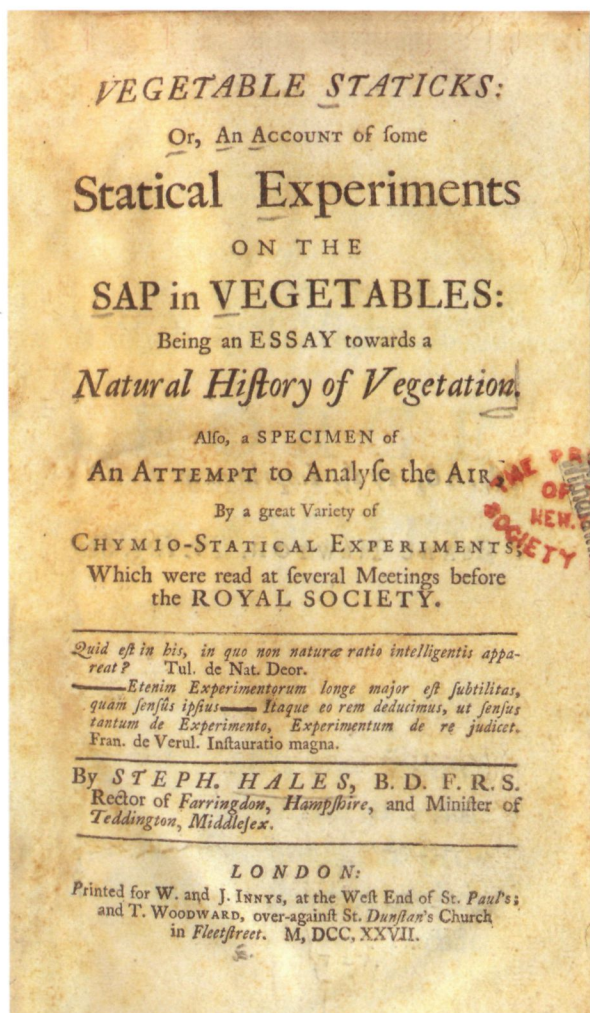


# HALES, Stephen, 1677-1761

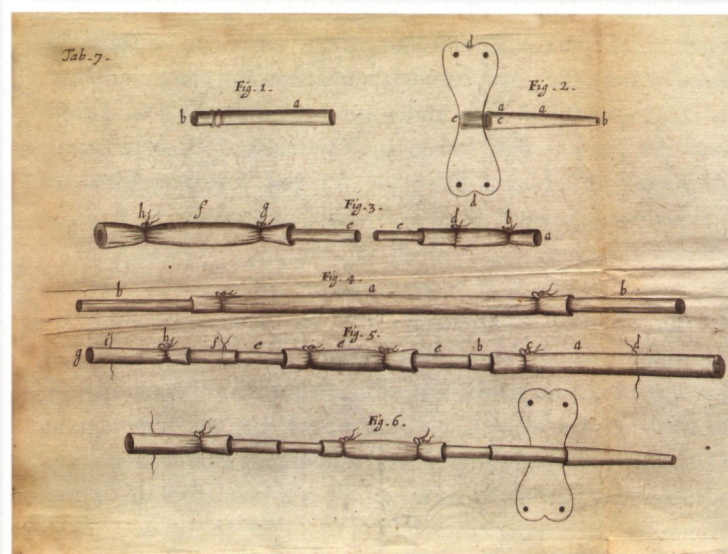
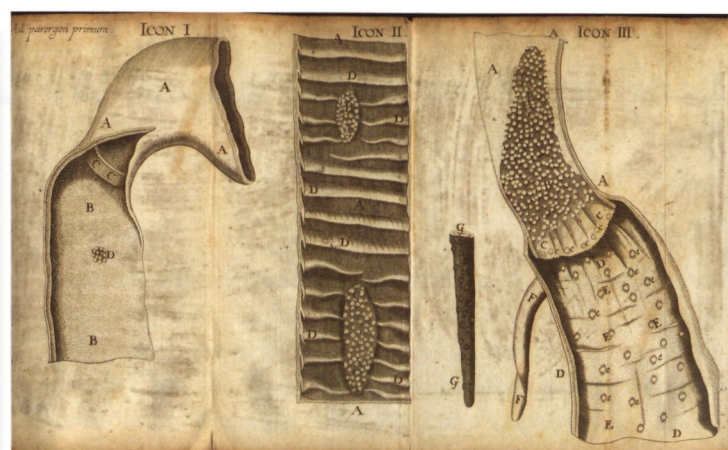
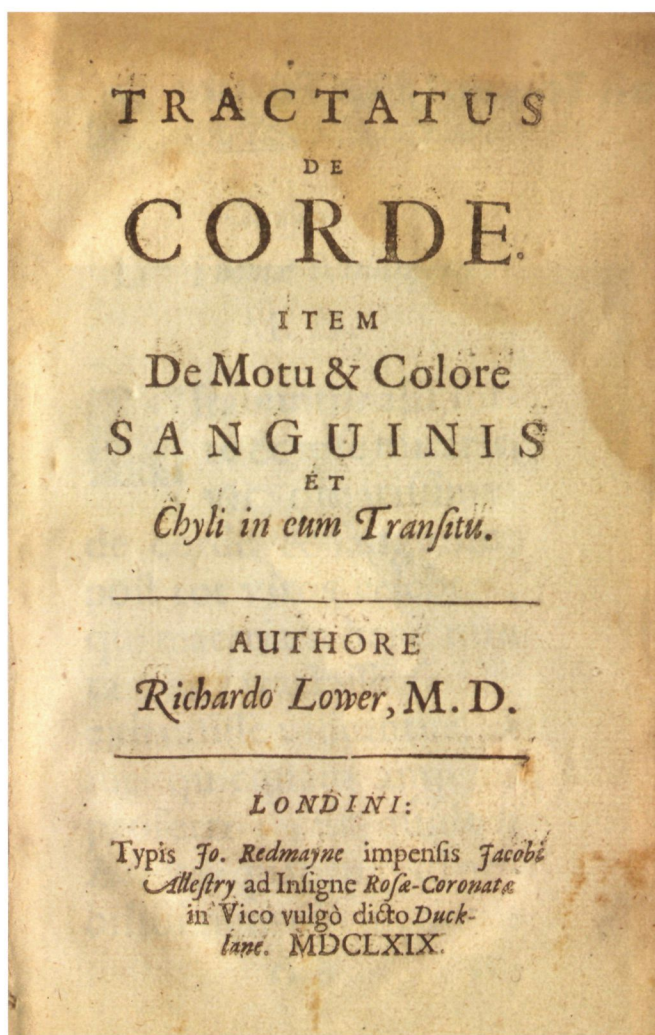
Statical essays: containing vegetable staticks; or, an account of some statical experiments on the sap in vegetables. Being an essay towards a natural history of vegetation: of use to those who are curious in the culture and improvement of gardening, etc. Also a specimen of an attempt to analyse the air, by a great variety of chymio-statical experiments, which were read at several meetings before the Royal Society. Vol. I. The third edition, with amendments. London, W. Innys and R. Manby, 1738. x-[xi-xiv], 376 pp, 20 cm, bookplate of Col. Geo. Callander of Craigforth, 19 plates by S. Gibelin. WG106 H11v 1738RB; RB804.

Stephen Hales was a clergyman with no medical training. His scientific and medical endeavor, however, was in keeping with the spirit of the Age of Reason – the 18th century Enlightenment movement that encouraged religious

figures to study science as a means to reinforce one's faith. Among his contributions to medicine and comparative physiology were concepts of blood pressure, flow and velocity. His were considered the greatest contributions to the understanding of cardiovascular physiology since William Harvey and Marcello Malpighi. His invention of a manometer to measure blood pressure was universally used. His two-volume book was based primarily upon his papers on the subject read before the Royal Society. Volume one, dealing with plant physiology, bearing a separate title of Vegetable Staticks, was first published in 1727. When the second volume on hemodynamics became available in 1733, it was published as volume two, with the 1727 edition as volume one. (Evan Bedford Library of Cardiology Catalogue, 1977, p 52; Dictionary of National Bibliography, VIII, 1917, pp 916-920; Fishman AP, Richards DW, Circulation of the Blood, 1964, pp 81-84; Garrison-Morton Medical Bibliography, 1970, p 102.)







# **LOWER, Richard, 1631-1691**

Tractatus de corde item de motu & colore sanguinis et chyli in eum transitu. London, Jacobi Allestry, 1669. 220 pp, [table of contents, 20 pp,] [7 folded plates,] 18 cm. WB356 L953 1669 RB; RB8012. [Also Under **BLOOD TRANSFUSION.**]

Lower was an outstanding physiologist from Oxford. He was the first to demonstrate the scroll-like structure of the cardiac muscle and describe functions of the heart. His contributions were considered the most important in cardiovascular physiology since William Harvey. The book begins by describing the form and functions of the heart. It is followed by the discussion of the change of color in the venous and arterial blood, suggesting that blood absorbed some chemical substance necessary for life, and that pulmonary circulation was vital to the body. Concluding are experiments on blood transfusion. (JAMA 199(13):1000-1001, March 27, 1967; Garrison-Morton, 3d ed., 1971, p 101.)

How exciting it is to walk along the shelves of the rare book room and read titles: At arms' length sits material that forged the intellectual tradition that our specialty shares with all of modern medicine. For those who cannot visit the collection, however, Sim's bibliographic annotations offer a rewarding alternative.



# Reflections on Professionalism: Learning From the Past as We Look Toward the Future

Kathryn E. McGoldrick, M.D., Past President  
Wood Library-Museum of Anesthesiology

**Professionalism is a complex concept** that encompasses and incorporates certain attitudes, values and behaviors. Although professionalism is a way of comporting oneself that embodies actions required of physicians, it also has a deeply ethical and moral core that is grounded in excellence, altruism, respect for others, integrity, collaboration and celebration of diversity. Humanism is a way of thinking and being that emphasizes one's obligations to others, especially to those in need. Surely, the nexus between humanism and professionalism is incontrovertible, with humanism providing the foundation and the passion that fosters professionalism. Commitment to social justice and advocacy for the disenfranchised is fundamental. Indeed, who – or what – is a physician if not a patient advocate?

The core values of professionalism are not only integral to our identity as physicians but are what distinguish us from, for example, business executives and politicians. In his excellent book on the history of medicine, *The Greatest Benefit to Mankind*, Professor Roy Porter noted that the Hippocratic Oath foreshadowed the western paradigm of a profession (one who professes an oath) as a morally self-regulating discipline committed to serving others.<sup>1</sup>

Indeed, since the Middle Ages, the term “profession” has referred to an occupation that is granted many privileges by society in exchange for the obligation to serve society. In recent years, however, it has become palpably obvious that medical professionalism is being threatened by forces both external and internal. Extrinsic factors include the addition of layers of bureaucracy and restrictions imposed by third-party payers

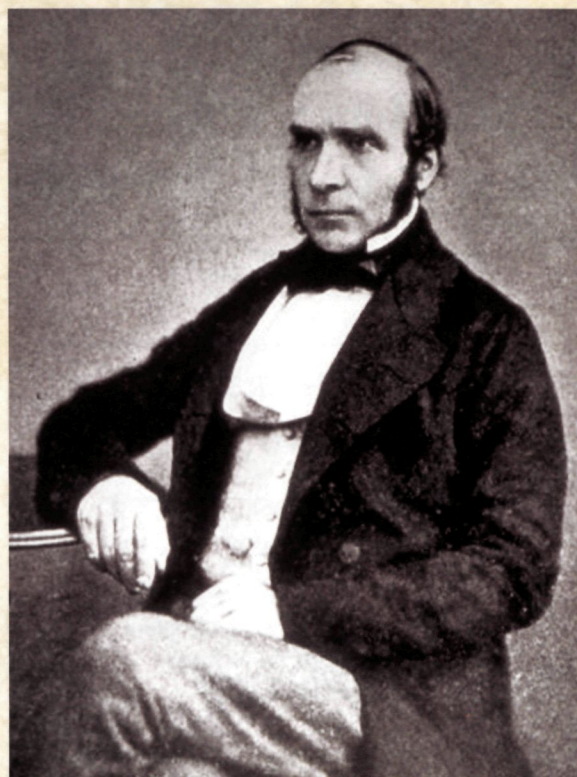


Figure 1. John Snow (1813-1858), a historical giant in epidemiology for his work linking cholera to water-borne microorganisms from the Broad Street pump, was a pioneer anesthesiologist who designed his own inhaler. He also was famous for administering chloroform to Queen Victoria when she gave birth to Prince Leopold in 1853 and to Princess Beatrice in 1857.



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that have changed the traditional physician-patient covenant. Increasingly burdened by educational debt, physicians face rapacious market competition, perverse financial incentives, and the erosion of patients' trust. Unhealthy misalignments have emerged from our highly individualistic, entitled and competitive contemporary culture. With these forces operative in the background, how can we ensure that today's medical students and residents will emerge as physicians committed to excellence and to compassionately serving as advocates for their patients' interests, especially those of the financially and socially marginalized? Educators have long known that the best

*Continued on page 32*





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way to teach professionalism is by highlighting excellent role models whose actions speak louder than words.<sup>2,4</sup> Reflecting on our history as a specialty may be instructive as we forge a strategy to enhance professionalism in our daily interactions with both colleagues and patients. The Wood Library-Museum of Anesthesiology (WLM) believes that its mission is to build a sense of professionalism and community by preserving and publicizing the rich heritage of our past. The WLM is passionately dedicated to fulfilling the mandate articulated so powerfully by Goethe: "Make the future better by making the most out of the past."

Certainly, no American physician deserves greater commendation than Ralph Milton Waters for elevating anesthesiology from a technical exercise to a medical specialty and its practice into a true profession. When Waters commenced his career at the University of Wisconsin in 1927, the state of anesthesiology was crude at best. No cascade of negatives would suffice to describe the intellectually bare and barren framework of practice then extant. The typical scenario involved surgeons hiring nurses to administer ether in the morning at hospitals and then to function as office nurses in the afternoon. For most of the preceding century, the majority of the substantive advances in the science of anesthesiology came from physiologists and pharmacologists.<sup>5</sup> Among physiologists, Pierre Jean Marie Flourens, François Magendie, and Claude Bernard are remembered for their studies on the effects and site of action of anesthetic gases. Pharmacologists and chemists, including Joseph Friedrich von Mering, Hans Meyer, and Charles Overton, synthesized new drugs and explored the properties that made a chemical an anesthetic. Most of the important clinical advances in the field had emanated from surgeons, such as August Bier and William Stewart Halstead, dentists, or obstetricians, such as John G. P. Cleland. A meager few of those who practiced anesthesia made technical improvements that involved innovations in technique



Figure 2. Ralph M. Waters, M.D. (1883-1979) started the first university-based residency training program in anesthesiology in the United States. He was respected internationally as a superb educator and active clinical investigator who was an icon of professionalism.

or equipment, but most functioned predominantly as technicians who contributed little to advancing our understanding of the principles of physiology, pharmacology, physics and chemistry that underlie the practice of anesthesiology. One notable exception, of course, was John Snow [Figure 1, page 30], the London physician who relinquished his practice of general medicine to become the first full-time anesthesiologist. Before his death at age 45, Snow published three textbooks and several papers elucidating not only the clinical aspects of anesthesia but also many of the scientific principles governing its safe administration. Committed to meticulous patient care, Snow was a pioneer whose personal administration of chloroform to Queen Victoria for the birth of the last two of her nine children led to wider public acceptance of effective analgesia for childbirth.

Dr. Waters [Figure 2] was both a bold pioneer and an astute visionary.<sup>6</sup> When he arrived at Madison, Wisconsin, there were virtually no anesthesia textbooks, journals, or professional societies to establish standards, disseminate pivotal information, and stimulate research. By realizing how vital these elements are to professional identity, Ralph Waters was to transmogrify these pathetic predicaments. Although some will know of Dr. Waters because of his canister for the "to and fro" carbon dioxide system and the introduction of cyclopropane as an anesthetic, probably his most important contribution was the development of professionalism in anesthesia and his insistence on proper anesthetic training programs for medical students and medical graduates. Integral to his vision to transform anesthesiology from its abysmal state in the early 1900s into a medical specialty and its practice into a true profession were criteria that included:

- A systematic body of knowledge to be taught to students;
- Organizations to define and oversee standards of education and practice;
- Research programs with close ties to basic science as well as clinical care;
- Regular meetings to promote the dissemination of new information and to foster discussion of patient care issues; and
- *Dedication to the service of the public and to improvements in the practice of the specialty*

As he undertook to accomplish these vital goals, Dr. Waters displayed an enviable talent for extracting the wheat from the chaff and for networking with like-minded individuals to accomplish his objectives. He had the political genius to network with Francis McMechan, M.D., founder of the first American anesthesia journal, the equipment expert Elmer "Ira" McKesson, the basic scientist Chauncey Leake, M.D., and the educators Arthur Guedel, M.D., and Emery Rovenstine, M.D., to more effectively accomplish his mission of elevating anesthesiology to the status of a medical specialty and





its practitioners to the rank of esteemed professionals.

Another luminary whose vision, perseverance and rigorous thinking left an indelible mark is Henry Knowles Beecher, M.D. [Figure 3]. Born Harry Unangst in 1904, he changed his name to Beecher in his 20s with the purported intent to associate himself with the great 19th century American abolitionist and preacher, Lyman Beecher, his preacher son Henry Ward Beecher, and his daughter, the noted author Harriet Beecher Stowe. By all accounts, the complex but prescient Dr. Beecher was the consummate contrarian<sup>7</sup> who thrived on controversy. At Harvard in 1941, Beecher was named the Henry Isaiah Dorr Professor of Anesthesia Research, the first occupant of an endowed chair in anesthesiology in America, without ever receiving formal training in anesthesiology! Yet, he shaped not only anesthesiology but the milieu in which every specialty in medicine is practiced. His observations on the battlefield in World War II and his work in clinical pharmacology led to his advocating the use of placebo in all drug trials, thus becoming the father of the prospective, double-blind, placebo-controlled clinical trial. His commitment to patient safety was evidenced in his seminal study of factors contributing to perioperative mortality; indeed, the "Beecher and Todd study" was one of the earliest multi-center investigations conducted in the United States.<sup>8</sup> He more than any other individual deserves credit for initiating peer review of experimental protocols and ensuring that informed consent is obtained in clinical research.<sup>9</sup> These measures helped foster eventual widespread acceptance of the importance of patient autonomy to the ethical practice of medicine. Additionally, Beecher was largely responsible for transforming our thinking about death by redefining the endpoint from cardiovascular to neurologic,<sup>10</sup> eventually enabling organ transplantation to develop and thrive.

If history is the account of things said and done in the past, then history can serve us in many ways. It can inspire us with stories of exemplary lives or caution us with tales of human folly.



Figure 3. Henry K. Beecher, M.D. (1904-1978) was a brilliant contrarian who focused on patient safety as well as the necessity for informed consent and placebo-controlled trials in clinical research. Further, he redefined the meaning of death, a contribution that ultimately facilitated organ transplantation throughout the world.

History can inform and educate us by providing the context and the perspective that enable us to make intelligent and reflective decisions about the future. And history can delight and enrich us by giving depth and breadth to our profession and illustrating the remarkable accomplishments that can be attained with insight, dedication, persistence, and a willingness to always value patients' needs above all other considerations. Surely, the hauntingly evocative words of F. Scott Fitzgerald ring true, "So we beat on, boats against the current, borne back ceaselessly into the past."<sup>11</sup>

Vigilance in preserving what is best in our profession is essential, lest abiding cynicism replace our passion for medicine and its ability to serve others. While the foundations of our professionalism are being seriously tested by changes in the health care marketplace, the challenge to function professionally is a personal, daily, incremental task. We must be steadfast in our determination that the vital social contract between and among individual physicians, the medical profession, and the communities they serve continues not only to exist, but also to thrive. The new millennium may have signified the end of an era. Let us ensure that it does not mark the end of an ethos.

**Acknowledgment:** The author would like to express her gratitude to Karen R. Bieterman, MLIS, Librarian at the WLM, and Margaret M. Jenkins, Library Assistant, for providing photographs from the WLM treasure chest.

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# Archiving: Lessons I Didn't Know I Needed

Bradley E. Smith, M.D., Trustee  
Wood Library-Museum of Anesthesiology

**Lesson Number 1:** Until it is accurately recorded, safely preserved and retrieved, "history" is only "legend," "saga" or too frequently "mythology." I recently spent a surprisingly difficult two years in learning that this lesson applies even to past events in our professional lives in which we have personally participated and in which we take great personal pride. My own experience involves a group effort to reconstruct and preserve the history of the Society for Obstetric Anesthesia and Perinatology (SOAP). Without proof, my intuition leads me to believe that there are probably 20 or more special interest societies related to anesthesiology (and many more if we consider state component societies) which may unknowingly be facing similar problems. I hope sharing my experiences may be helpful to the other amateur historians who may embark on the task of preserving the history of these societies.

On October 13, 2007, Gurinder (aka "Gary") Vasdev, M.D., then President of SOAP, telephoned me in the O.R. (I have since fully retired) with "an offer I could not refuse." (I recall that I said "it would take me 30 seconds to think it over.") He asked that I, along with Alex F. Pue, M.D., form a "task force" to aid in the "Celebration of the 40th Anniversary of the Founding of SOAP," and secondarily, to attempt to reconstitute a "paper trail" of the history of SOAP to augment the "SOAP Archives," which he had just established at the Wood Library-Museum of Anesthesiology (WLM) in Park Ridge, Illinois. After 18 months of effort, the assignments were completed, and a permanent "Committee on the History of SOAP" under M. Joanne Douglas, M.D., was established by SOAP to continue and expand the original charge to the task force.

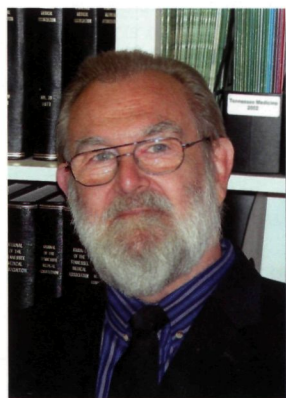
After much work in recovering information, the first milestone for the task force was the utilization of much of the newly found material to create a 64-page brochure, which was

distributed to SOAP members who attended the 40th annual meeting. This brochure included complete lists of major events in SOAP history, a roster of previous SOAP officers, biographies of 18 prominent historic personalities, the history of the related periodical *Obstetric Anesthesia Digest*, and the history of the related "Obstetric Anesthesia Foundation." The first phase of the second goal of the task force, to augment and organize the SOAP archive, was completed in November 2008, as part of a Paul M. Wood Fellowship generously awarded to me by the trustees of WLM. A more detailed description of the process of accomplishing both of these goals is the subject of the balance of this communication.

**Lesson Number 2:** In retrieving the history of your organization, no one will be more helpful than the former top officers. Most of the living former top officers of SOAP became key contributors to our task force. Remember: Don't be intimidated! Although these personalities will probably include the most famous and honored names in your special interest area, be assured, they became officers because of their talent and their love for your organization. Neither the talent nor the love will have faded with their advancing age, and they will be EAGER to help you preserve the history of your organization.

**Lesson Number 3:** "Pack rats" can be your best friends. The first survey of SOAP's archives by the task force revealed almost nothing from the first 25 years of SOAP's existence. Lists of officers, locations and venues of the early meetings, names of honorees and presenters of named lectureships, minutes of business meetings, and even early versions of the bylaws were incomplete. (The gem of the collection, however, was the original hand-written minutes of the very first meeting of the "Founders" of SOAP, which had recently been donated to the archive by one of our most useful pack rats, Richard B. Clark, M.D.) Alex Pue and several other prominent members contributed valuable collections of pictures, early "newsletters" and program syllabi. Another important source of archive material was personal letters and solicitations in newsletters. Ultimately, we were able to reconstruct almost all of the missing names, dates and lecture information from these sources.

**Lesson Number 4:** Too little and too much are both enemies! Despite the best of intentions among the early officers, your organization may have practically no retrievable archive from its earliest years. Officers change rapidly, the records are sometimes not passed along during "handoffs," or later "professional management" may have viewed them



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as meaningless to the contemporary business of the society. Both occurred in the case of SOAP. Alternately, “professional management” may be excruciatingly, but indiscriminately, thorough. One management group threw away everything, but a later group preserved each individual anonymous ballot slip and every hand-written registration application form. The problem with the former is obvious, but the latter is a problem because the “wheat” becomes irretrievable when hidden among truckloads of “chaff.”

**Lesson Number 5:** The easiest and most reliable way to honor history is to preserve its evidence in a planned, prospective program for that purpose. The work product of our task force was a significant mass of unorganized and largely unexamined material. I spent my entire fellowship time reading, sorting and prioritizing the work product of the task force. Although the WLM Archivists, such as Felicia Reilly, MLS, are superbly trained and experienced, they may need assistance to identify and prioritize professional issues. A volunteer with as much first-person experience with the issues as possible is very helpful to them. Our collaboration resulted in the creation of a recommended protocol or template for the organization of the archival information. This led us to realize that a similar template, if followed by future leadership and management, could be utilized as criteria for saving and indexing or simply discarding future materials. Subsequently, the Board of Directors of SOAP formally adopted this protocol for preservation of contemporary records and artifacts into the SOAP Archives.

**Lesson Number 6:** The highest priority items for preservation of the history of organizations analogous to SOAP include minutes of all business and committee meetings; all versions of past bylaws; lists of officers, annual meeting locations and venues; and records of scientific presentations. Most of these items are self-explanatory. However, in retrospect, I believe that one of SOAP’s greatest lost opportunities was the failure to preserve

the information connected to our honored speakers. Although no names of Hehre lecturers were lost, none of the manuscripts resulting from the lectureship started in 1980 to honor Dr. Frederick Hehre were preserved. What a lost opportunity to record milestones in the development of obstetric anesthesia as evaluated by its most renowned experts!

SOAP abstracts and scientific reviews were not intentionally saved. However, in 2005, over 2,200 abstracts of all previous SOAP presentations at annual SOAP meetings were laboriously gathered from old program syllabi, scanned into computer format, and published by SOAP as a CD titled “SOAP Research, The First 30 Years.”



*The Archives staff at the WLM (minus Judith Robins) Felicia Reilly, Archivist; the author; Margie Jenkins, Library Assistant; Teresa Jimenez, Assistant Librarian; Karen Bieterman, Librarian; Patrick Sim, Paul M. Wood Distinguished Librarian. Judith Robins, Collections Supervisor (and trained Archivist) ever helpful, gets credit for the photograph.*

**Lesson Number 1 for the Reader:** If you have pride in your organization, volunteer immediately to save, preserve and organize for future retrieval the paper trail of its foundation and history. If you can’t personally do it, “volunteer” a capable friend to get it done. Consider saving everything you can in a digitalized format for ease in retrieval and storage. Preserve scientific abstracts and manuscripts of principal presentations and auto-

matically obtain prior permission to limited rights for limited publication of their material. Establish a continuing protocol for preserving contemporary documents to add to the archive and make some officer or manager responsible for continuing the process.

Contact the Paul M. Wood Distinguished Librarian, Patrick Sim, at WLM ([p.sim@asahq.org](mailto:p.sim@asahq.org)) to discuss engaging the WLM archiving services to maintain, protect and organize your archive, as did SOAP. There is a very reasonable fee for the service. By all means, feel free to modify and utilize the template that we created for SOAP. Although it is too extensive to reproduce here, a copy can be obtained from Felicia Reilly, Archivist at WLM ([f.reilly@asahq.org](mailto:f.reilly@asahq.org)).

If you follow this advice, I cannot promise great worldly reward, but I can promise the satisfaction that you will have created some of Longfellow’s “footprints in the sand,” which may give guidance to some future seeker of the lessons of history.



# Young Physicians: The Future Leaders of Anesthesiology

Basem B. Abdelmalak, M.D., Chair  
Committee on Young Physicians

**Though we all like to be and feel young**, at least at heart, the definition for "young physicians" is limited to those who are below the age of 40 and/or within eight years of completing their training. The Committee on Young Physicians has been serving and continues to serve the following major functions:

- 1) To sense the pulse of young anesthesiologists and communicate that to ASA leadership.
- 2) To represent the collective opinions and voice of young anesthesiologists to the American Medical Association (AMA) Young Physicians Section (YPS).
- 3) To provide a means of continued involvement for the young anesthesiologists who served on the ASA medical student and resident components after they graduate.
- 4) To discuss and address issues that are most important to early-career anesthesiologists.
- 5) To serve as a means for leadership development for young anesthesiologists.

The committee meets annually in conjunction with the ASA Annual Meeting in October, and members communicate electronically year round. The committee chair files a biannual report to the ASA Board of Directors, reporting on the committee's activities, concerns and future plans.

Two members of the committee represent young anesthesiologists at the AMA YPS assembly that meets biannually in conjunction with the AMA annual and interim meetings, where they discuss and vote on the issues facing the house of medicine in general, with special emphasis on matters related to young physicians. This year's representatives, Basem B. Abdelmalak, M.D., and Jerome M. Adams, M.D., M.P.H., dealt with health reform-related issues. They were very effective in conveying ASA's views on the topic and helping to shape AMA's stand on it. They were also successful in conveying

young anesthesiologists' views on other issues of concern to the young physician, such as condemning the actions of the NBME in utilizing some of the USMLE step 3 questions for nursing boards and asking them to maintain the integrity of physicians' licensing exams.

Many actively involved medical students and anesthesiology residents have found the committee and its related responsibilities/activities to be a new home for continued involvement within ASA following graduation from residency/fellowships; and this has served the Society and the specialty well in terms of retaining and continuing to attract those dedicated physicians. The committee also helps in recognizing interested and qualified individuals among young anesthesiologists and makes recommendations for appointment on various ASA committees.

The committee addresses issues that are significant to anesthesiologists beginning their careers. Some of the topics include:

- Issues of starting career and job contracts and negotiations.
- Involvement at the state level and how to break barriers and start climbing the leadership ladder at those state societies.
- How to deal with the issues of ever-changing regulation in compliance and billing.
- The balance between career building and personal life as many young physicians are starting their families.
- Exploring careers and leadership outside the operating rooms.

The last three items were addressed recently at the ASA 2009 Annual Meeting in a panel format sponsored by the Committee on Young Physicians and presented by three prominent speakers: Brenda S. Lewis, D.O., James F. Arens, M.D., and Leonardo J. Lozada, M.D., respectively.

Currently the committee is working on developing a Webpage off the ASA Web site dedicated to young anesthesiologists that will address their needs and concerns and provide resources for members. The Web site will provide information on billing, compliance, mentorship, liability insurance and career opportunities, with a link to the ASA Career Center, etc.

ASA leadership understands the potential of young anesthesiologists and believes that they are not only the present and the future of our specialty, but also the future leaders as well. Below is a list of just a few former Young Physician committee members and leaders who have continued to serve and have attained leadership positions within our organization and AMA. Many of them are serving as ASA delegates to the AMA House



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of Delegates: Candace E. Keller, M.D., M.P.H., former Speaker of the ASA House of Delegates; Ronald L. Harter, M.D., former president of the Ohio Society of Anesthesiologists, who currently serves as his state's ASA Director and chair of his department; Rebecca J. Patchin, M.D., current chair of the AMA Board of trustees; Tripti C. Kataria, M.D., member of the Relative Value Update Committee (RUC) of the AMA; C. Alvin Head, M.D., chair of the AMA Council on Science and Public Health and chair of his department; Gary D. Thal, M.D., member of the Specialty Service Society (SSS) governing council of

AMA; Steven J. Hattamer, M.D., chair of his department; Roy G. Soto, M.D., residency program director; and Stephen Kimatian, M.D., vice chair for education in his department. It has been my distinct honor and privilege to serve as a member of this committee for the last five years and as its chair for the past year. It has been a remarkable journey of learning, growth and networking. I would like to express my gratitude for all those who have given me the opportunity to lead, mentored me in conducting my assigned duties, have served along side of me, and for those who will carry the torch thereafter.

## **This Is Our ASA ... and Getting Better Every Day!**

*Continued from page 6*

the OII should be given the credit for the significant improvements that we are making in the entire fiscal arena. We have successfully recruited a top-notch Chief Financial Officer, Thomas Conway, C.P.A., M.B.A., who subsequently brought a highly skilled Controller, Steve Lothary, C.P.A., and other key staff to refine, modernize and bring ASA's financial programs up to appropriate standards. Our new department has created a budgeting system that allows us to more accurately account for our dollars and appropriately project what our short- and long-term financial resources will be and prepare us for our future needs. In addition, our new team was able to help us better sustain the downward turn in the economy and ensure that ASA continued its fiscal strength. While we are on the subject on money, notice the new look of this ASA NEWSLETTER. This new, improved newsletter is bigger, brighter and arrives much earlier every month ... with significantly lower bottom-line cost. The introduction of advertising into the newsletter has allowed our supporters to share their messages with ASA members while allowing us to bring you a stronger, more in-depth and timelier publication. In addition, the launch of our online version takes the entire production to a whole new level.

The OII was the impetus for the change in how we seek out what it is our members want and need from our professional

Society. Under the direction of ASA Secretary Gregory K. Unruh, M.D., and our new Director of Membership, Celeste Kirschner, we have completed our first member-wide survey in more than a decade. This information is critical in guiding us to develop the products and services that ASA members want. Upon listening to our members, we have directed additional resources toward the development of an enhanced Department of Education. This new area is committed to developing robust and clinically relevant educational programs for our members. All of this could not have happened without important feedback from you.

Effective advocacy is crucial for the future of our specialty. Realizing this, we have added significant talent and infrastructure to our Washington Office. This increased focus on advocacy has already yielded significant results, as ASA has undoubtedly become one of the most respected voices in health care in Washington.

Our recent accomplishments and goals are too numerous for the length of this article. These changes are setting the foundation for a strong and vibrant future. We are well on our way to being the "world's premier medical society" ... and we are here ... for you.

You are encouraged to write me with feedback at [jdgrant@mac.com](mailto:jdgrant@mac.com).



# Call for Nominations for ASA Committees and Chairs

**ASA is now accepting nominations for 2011 committee membership and committee chair positions.** For a complete list of ASA committees and their current members and chairs, see [www.asahq.org/aboutAsa/asaCommitteeListing.htm](http://www.asahq.org/aboutAsa/asaCommitteeListing.htm). Sitting members of committees whose term is complete or adjunct members with one-year appointments must reapply in order to be considered for reappointment.

ASA members may recommend others for appointments or may complete a "Self-Application for Committee Appointment" if they wish to nominate themselves. Nomination forms will be available on the ASA Web site under the "Members Only" section on November 15. To standardize the nomination process and better facilitate appointments, ASA requires the use of these electronic forms. If you are nominating someone for a committee

position, the individual will only be considered if he or she has personally completed a 2011 Committee Self-Nomination Form. This protocol is intended to ensure that individuals nominated are willing to serve.

ASA is fortunate to have many able volunteers seeking nomination, but not all nominees will be appointed, as there are a limited number of positions and because ASA seeks a proper balance of continuity, experience, diversity and new talent on each committee. Because ASA's foremost goal is effective and productive committees, please limit recommendations to individuals who have the interest, time and commitment serve. A secondary consideration in a committee nominee is whether he/she has the potential to someday serve as a committee chair.

Please respond with your nominations for committee membership by the **January 15, 2010** deadline.



Be sure to visit the Wood Library-Museum Web site at [woodlibrarymuseum.org](http://woodlibrarymuseum.org)



# What Do Our Patients Deserve Prior to the Induction of Anesthesia?

Lee A. Fleisher, M.D., Chair  
*Committee on Performance and Outcomes Measurement*

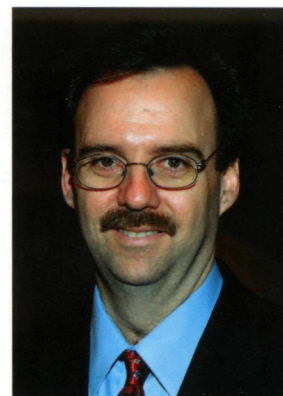
**In this modern era of cost-containment**, with the incessant focus on speed (i.e., efficiency), the time we (anesthesiologists) have with an awake patient is brief. Performance pressure may help us forget how important this brief period can be to the patient, who likely views the most minor of procedures as a major life event. Before the development of same-day admission and outpatient surgery, patients were typically admitted to the hospital the evening before surgery, and at that time they had a complete preoperative discussion and often would be prescribed an anxiolytic or sedative that would be given on-call to the O.R. It is well known that this preoperative period is associated with stress, and patients with cardiac disease may even develop myocardial ischemia and infarction.<sup>1</sup> Yet one of the best ways to decrease the stress of surgery has been shown to be the preoperative discussion.<sup>2</sup> Ideally, these patients are seen in a preoperative clinic where much of this education can occur. However, there is an increasing percentage of the time that patients are not seen in a preoperative clinic. Some of these patients may be contacted by phone preoperatively, but there are still many situations in which an anesthesiologist is unable to see or even speak to patients until immediately prior to surgery. Once in the O.R., our masks hide our facial expressions from patients. Despite all of the controversy regarding the data behind the efficacy of preemptive analgesia, high preoperative anxiety levels will likely lead to increased medication requirements and potentially worse patient-oriented outcomes.<sup>3</sup>

Given these facts, what do we owe our patients? I believe all patients deserve the following: We need to focus on creating an environment that provides a patient with the greatest possibility of “going to sleep” in a stress-free manner. We need to consider developing new methods to educate patients about what to expect, and mailings and Web sites relating educational materials may be one alternative. We need to use the brief period in the preoperative area to fully assess a patient’s current condition, explain any procedure, including their attendant risks, and do so in a manner that achieves the same effect as did the longer preoperative discussion that took place half a century ago. Once in the O.R., we need to be cognizant of the fact that the patient must remain the center of attention. Frequently, other members of the team, and sometimes we, ourselves, have extraneous discussions or make noise that only heightens a patient’s anxiety. At the University of Pennsylvania, the nursing staff and anesthesia department developed an induction time-out. Essentially, the attending anesthesiologist signifies

the onset of induction, and all noise ceases in the operating room; both nurses and anesthesiologists focus exclusively on the patient. It is my belief that such practices help remind us of the importance of the patient and this critical period in his or her life. Within the framework of the preoperative evaluation and discussion, we cannot forget about those patients with special needs for whom we must find alternative means to impart critical information and to answer questions. For those practices that utilize an anesthesia consent, it may be as simple as allowing patients who need them to keep his or her glasses on until the point of anesthesia induction. For blind patients, detailing the actions occurring in the O.R. becomes critical. For those with hearing impairment or deafness, the O.R. environment can be even scarier since everyone is wearing masks, and patients may feel a sense of isolation if unable to read lips. Most people who are hard of hearing will not self-identify or ask for services, and only 23 percent of people who need hearing aids have them. Asking “Do you have trouble hearing?” is the fastest and easiest way to elicit information from a patient about a possible hearing loss. For these patients, a complete discussion prior to entering the O.R. is even more important, and it most likely will be of value to allow the patient to keep his or her hearing device until induction. The anesthesiologist or nursing staff should consider finding someone who utilizes sign language if the patient uses it, or keep one’s mask off until after anesthesia is induced for those who read lips. Similar issues can occur with patients who do not speak English. There are likely resources available within your hospital to help address the concerns of such patients, and it may be worth developing methods for O.R. personnel to access them. One of the key factors in success with both the visually and

*Continued on page 45*

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## Call for Candidates for 2010 Presidential Scholar Award

James C. Eisenach, M.D., Chair  
*Committee on Excellence in Research*

**The ASA Presidential Scholar Award** recognizes colleagues who dedicate their formative careers to research.

The recipient of the 2009 Presidential Scholar Award was Mihai V. Podgoreanu, M.D., F.A.S.E., who received his award at the ASA Annual Meeting in New Orleans on Monday, October 19, 2009. Dr. Podgoreanu is an Assistant Professor of Anesthesiology in the Department of Anesthesia, Duke University Medical Center, Durham, North Carolina.

The deadline for nominations for the 2010 Presidential Scholar Award is **March 31, 2010**. Anesthesiologists who are within seven years of their first appointment to a department of anesthesiology, who are Board-certified, ASA members, and who spend at least two days per week in clinical practice are eligible for the award. Nominees must be academically accomplished with peer-reviewed publications and funded research. Candidates should be nominated by their department chair or by the Committee on Research after review of the current year's FAER grant applicants. The nominee's department chair should submit a letter of support and the nominee's current curriculum vitae as well as one seconding letter from a senior faculty member. Only one nominee per department will be accepted.

Please submit nominations or any questions regarding this award to George H. Kendall, Managing Editor, Anesthesiology, Department of Anesthesiology, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC

## Nominations Sought for 2010 Award for Excellence in Research

James C. Eisenach, M.D., Chair  
*Committee on Excellence in Research*

**The annual ASA Award for Excellence in Research** recognizes an individual for outstanding achievement in research who has or is likely to have an important impact on the practice of anesthesiology.

The individual's work must represent a body of original, mature and sustained contribution to the advancement of the science of anesthesiology. The nominee need not be a physician, an anesthesiologist or a member of ASA, but must be presently engaged in research related to anesthesiology, academically accomplished with peer-reviewed publications and funded research, and nominated in response to a call for nominations. The completed application must include the nominee's current curriculum vitae, a letter of nomination, and a seconding letter from two individuals with an understanding of the research contributions of the individual.

The 2009 Award for Excellence in Research was presented to William L. Young, M.D., at the ASA Annual Meeting in New Orleans on Monday, October 19, 2009. Dr. Young is the James P. Livingston Professor and Vice Chair, Department of Anesthesia and Perioperative Care and Professor of Neurological Surgery and Neurology at the University of California, San Francisco.

The deadline for nominations for the 2010 Excellence in Research Award is **March 31, 2010**. Please submit nominations or any questions regarding this award to George H. Kendall, Managing Editor, Anesthesiology, Department of Anesthesiology, Wake Forest University School of Medicine, Medical Center Boulevard, Winston-Salem, NC 27157; e-mail: [managing-editor@anesthesiology.org](mailto:managing-editor@anesthesiology.org).



James C. Eisenach, M.D., is F.M.  
James III Professor of Anesthesiology  
and Physiology & Pharmacology, Wake  
Forest University School of Medicine,  
Winston-Salem, North Carolina.



# 2010 Annual Journal Symposium Call for Abstracts

James C. Eisenach, M.D.  
*Editor-in-Chief, Anesthesiology*

**ASA and its journal *Anesthesiology*** announce the 19th annual Journal Symposium to be held at the ASA Annual Meeting on October 19, 2010, in San Diego, California. The 2010 Journal Symposium will highlight up-and-coming and noteworthy concepts in anesthesia research and clinical practice.

The 2010 Journal Symposium is titled "Outcomes Beyond the Operating Room."

Anesthesiologists have generally considered their work complete and successful if patients were well a day or two after surgery. However, there is increasing evidence that perioperative management has the potential to influence patient outcomes weeks, months and perhaps even years after surgery. This symposium will explore aspects of anesthetic care most likely to be associated with alterations in long-term outcome.

Three invited speakers will lead the session. Daniel I. Sessler, M.D., Professor and Chair, Department of Outcomes Research, Cleveland Clinic, will discuss long-term consequences of intraoperative management; Philip J. Devereaux, M.D., Ph.D., Associate Professor, McMaster University Departments of Medicine (Division of Cardiology) and Clinical Epidemiology and Biostatistics, will describe how we can substantially cut the risk of major vascular complications among patients undergoing non-cardiac surgery in the coming decade; and Simon C. Body, M.B., Ch.B., M.P.H., Assistant Professor of Anesthesiology, Brigham and Women's Hospital, Harvard Medical School, will discuss the team role of intraoperative transfusion management upon long-term outcomes.

Investigators from around the world with an interest in this subject are requested to submit their work to ASA for the Annual Meeting. Abstracts from both basic and clinical sciences are welcome. Studies examining or evaluating key biomarkers in perioperative and critical care medicine are encouraged. Abstracts should be submitted via the usual online process (which can be accessed through the Web sites [www.asahq.org](http://www.asahq.org) and [www.anesthesiology.org](http://www.anesthesiology.org)). Interested individuals should be sure to check the "Journal Symposium" box on the abstract submission form to be considered for inclusion in this special session. The deadline for abstract submission is **March 31, 2010**. Abstract selections will be made by the symposium organizers in conjunction with members of the *Anesthesiology* Editorial Board.

The authors of abstracts selected for the symposium will be offered an opportunity to submit their work to *Anesthesiology* for inclusion in a special issue to be published in the spring of 2011.

# 2010 Annual Anesthesiology/FAER Joint Session Call for Abstracts

James C. Eisenach, M.D.  
*Editor-in-Chief, Anesthesiology*

**Anesthesiology, in conjunction with the Foundation for Anesthesia Education and Research (FAER)**, is pleased to announce the 3rd annual Joint Conference to be held at the ASA Annual Meeting on October 19, 2010, in San Diego. The 3rd annual conference is titled "Debunking Myths of Transfusion."

A beneficial effect on outcome has never been demonstrated for blood product transfusion. In contrast, hundreds of publications have found an association between blood product transfusion and adverse outcomes. However, recent literature indicates that transfusion of "fresh" red cells may have fewer adverse consequences. Furthermore, recent literature also states that focusing on coagulation is essential early after major trauma, and the avoidance of fresh frozen plasma transfusion may be misguided. This session will explore these issues and provide a forum for presentation of recent findings in transfusion and resuscitation.

Three invited speakers will lead the session. John Holcomb, M.D., Director of the Center for Translational Injury Research at the University of Texas Health Science Center, Houston, will describe the role of FFP in improving outcomes after trauma; Elliott Bennett-Guerrero, M.D., Duke Clinical Research Institute, Duke University, will discuss new blood on postoperative outcomes; and Donat R. Spahn, M.D., F.R.C.A., University Hospital Zürich, will describe outcomes after transfusion.

These lectures will be accompanied by the presentation of posters selected for their relevance to the symposium topic. The joint conference date, time and location will be announced later.

Abstracts should be submitted via the usual online process (which can be accomplished via the Web sites [www.asahq.org](http://www.asahq.org) and [www.anesthesiology.org](http://www.anesthesiology.org)). Interested individuals should be sure to check the "Anesthesiology/FAER Joint Conference" box on the abstract submission form to be considered for inclusion in this special session. The deadline for abstract submission is **March 31, 2010**.

The authors of abstracts selected for the session will be offered an opportunity to submit their work to *Anesthesiology* for inclusion in a special issue to be published in spring 2011.



# Cornucopia of Practice Management Issues

Jason Byrd, J.D.

**The swirling winds of change do not just occur on Capitol Hill** with all of the hot air over health reform. Other agencies and organizations continue to move forward with initiatives that impact or will impact your practice. Given the recent abundance of such issues, this article is meant to direct your attention to some of the more notable issues for which we all can be thankful (and not so thankful) this season.

## CMS Delays Recoupment of Overpayments if Appealed

CMS issued a Final Rule on September 16, 2009, implementing Section 935 of the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (MMA), which restricts its ability to recoup overpayments when a provider or supplier seeks a reconsideration from a Qualified Independent Contractor (QIC).

Prior to passage of the MMA, CMS was able to recoup overpayments regardless of whether a provider (or supplier) appealed the decision. With enactment of the MMA, CMS is now prohibited from recouping Medicare overpayments during a provider appeal to a QIC, as well as, during the redetermination, or first level of appeal, if a timely request for appeal is submitted (120 days from an initial determination).

The Final Rule provides that recoupment can begin on the 41st day from the date of the first overpayment demand letter if a valid redetermination request is not received within 30 days of the date of the demand letter. Recoupment stops once a timely redetermination request is received. The same holds true for the second round of appeals, the reconsideration, except the timing is different: a provider has 180 days to file a reconsideration request after receipt of a redetermination and recoupment can begin no earlier than the 61st day (and no later than the 76th day) from the date of a redetermination notice.

The reason CMS does not wait for the appeals filing period to expire before allowing for recoupment is that this “would adversely impact providers and suppliers who do not wish to appeal, because they would be subject to several months of interest” and requiring “some affirmative action to indicate that they do not want to appeal...unfairly places a burden on these providers ... who want to pay their overpayments.” Commence snickering.

## Update Practice Expense Values for Swan-Ganz Catheters

CMS recently issued its October Update to the 2009 Medicare Physician Fee Schedule Database, which includes an increase in the Practice Expense Relative Value Units (PE RVUs) assigned to CPT® code 93503 – Insertion and placement of flow directed catheter (e.g., Swan-Ganz) for monitoring purposes – when performed in a facility setting. CMS determines payment for this and other non-anesthesia services using the Resource Based Relative Value System (RBRVS) under which RVUs are assigned for work, practice expense and professional liability. These values are geographically adjusted and the resulting sum is multiplied by a conversion factor that remains constant.

The PE RVUs for code 93503 will increase from 0.00 to 0.75 RVUs. Before geographic adjustments, these additional PERVUs will result in an increase in payment of approximately \$27.05 (0.75\*\$36.07). The change was implemented on October 5, 2009, and is effective for services provided on or after January 1, 2009. Per CMS, contractors will not be required to review their files and retroactively pay past claims but are instructed to adjust claims brought to their attention. Thus, review your 2009 claims and determine whether you should pursue this additional payment!

## The Joint Commission says that Safety Begins with Leadership

On August 27, 2009, The Joint Commission (TJC) released a Sentinel Event Alert providing guidance related to its Leadership standards and the requirement of a culture of safety. The standards require that an organization’s governing body, the chief executive and senior managers and medical and clinical staff leaders create a culture of safety by creating an atmosphere of trust and fairness that encourages the reporting of safety issues and adverse events. A contributing factor to an adverse event is often inadequate or ineffective leadership.

According to TJC, a culture of safety is “characterized by a continual drive toward the goal of maximum attainable safety” and is a “wary culture, one that has a ‘collective mindfulness’



Jason Byrd, J.D., is Director of Practice Management, Quality and Regulatory Affairs for ASA in its Washington, D.C. office.



of the things that can go wrong.” Further, TJC emphasizes that leaders must make safety a top priority in organizations. Ideal leaders are described as open, careful listeners who ask difficult questions and discuss issues from a patient-centered perspective.

In the Alert, TJC provides 14 “suggested actions,” which is a warning sign of what you can expect to see in your hospital now or in the near future. Some of the highlights include:

- Institute a policy of transparency that illuminates adverse events and patient safety issues and eliminates fear of reprisals for staff reporting.
- Make overall safety performance a key, measurable part of the CEO’s and all of leadership’s evaluations.
- Regularly monitor adverse events and conduct root cause analyses on such events.
- Regularly hold open discussions with a wide variety of stakeholders to further create a culture of safety.
- Solicit patients to communicate experiences and perceptions to board members, leadership and medical staff and obtain patient input in system design.
- Incorporate safety issues and their proper management into annual performance reviews of managers.

### Value-Based Purchasing has its “Premier”

On August 17, CMS released results from the fourth year of the Premier Hospital Quality Incentive Demonstration (HQID), in which it claims strong improvements in the quality of care given to patients at participating hospitals. In fact, acting administrator, Charlene Frizzera, stated, “The HQID project is the only large-scale hospital value-based purchasing project showing that financial incentives can increase quality of care.”

HQID, sponsored by Medicare in partnership with Premier, Inc., evaluates hospital performance on more than 30 national care measures in five clinical areas, heart attack, coronary bypass graft, heart failure, pneumonia, and hip and knee replacements. Hospitals participating in HQID increased their overall quality by an average of 17 percent over four years. The increase in quality, according to Premier, resulted in 4,700 lives of heart attack patients saved over the four years. Finally, CMS has awarded over \$36.5 million in incentive payments to top performers based on the project criteria.

HQID is relevant because CMS is required to submit a proposal to Congress on value-based purchasing by May 1, 2010. Obviously, this project will serve as the basis for such a proposal and provides some expectation of what may be coming for all or more of medicine.

### ASA Webinar on Understanding Pain Services to Accurately Code

Thank you to all of the participants who joined ASA’s latest webinar offering, “Understanding Pain Services to Accurately Code, Report and Obtain Payment,” held on September 22, 2009. Our speakers, Peter Goldzweig, D.O., and Sharon Merrick, CCS-P, presented anatomical information related to certain interventional pain services in order to help coders understand why and how physicians perform these services, typical patient scenarios and information on how to code and submit compliant claims for these services. ASA awarded continuing education credits for coding staff. If you missed the webinar and would like to view the archived material, please visit the following Web site, <http://webinars.asahq.org/index.php>.

ASA and the Committee on Economics are committed to bringing you the very best and most current information to help meet your practice’s coding needs. Watch the ASA Web site for information on our next webinar that will focus on chronic pain management and coding.

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# Missouri Nurse Anesthetists File Legal Challenge Against the State Board of Registration for the Healing Arts

Lisa Percy Albany, J.D.

**The Missouri Association of Nurse Anesthetists (MoANA)** has filed a lawsuit against the Board of Registration for the Healing Arts ("Board") concerning the injection, under fluoroscopic control, of therapeutic agents around the spinal cord by advance practice nurses.

In response to an inquiry made by the Missouri State Medical Association (MSMA) and based on research conducted by the Board, the Board issued a letter to MSMA dated February 2008 stating:

*"During its most recent meeting the Missouri State Board of Registration for the Healing Arts again discussed your letter of September 19, 2007 asking if Missouri allows the injection, under fluoroscopic control, of therapeutic agents around the spinal cord by advanced practice nurses."*

*After researching the current statute, rules, and regulations governing the practice of medicine and the practice of nursing it was the Board's decision to advise you that Chapter 334 RSMo. authorizes a physician to delegate professional responsibilities to a person who is qualified by training, skill, competency, age, experience, or licensure to perform such responsibilities. Based on the information provided to the Board, it was their opinion that advance practice nurses currently do not have the appropriate training, skill or experience to perform these injections."*

MoANA seeks an injunction (preliminary and permanent) and declaratory judgment. MoANA contends that the letter is a "rule" that was not properly promulgated. State law requires a proposed rule to be filed and published in the Missouri Register. However, MoANA argues that the "rule" was neither filed nor published. Therefore, the petitioner seeks a declaration that the Board's actions, "specifically the issuance and declaration of a

rule by letter, are void and of no effect because the rulemaking procedures were not followed."

Additionally, MoANA contends that the Board's letter has exceeded its statutory authority; such action "usurps the authority of the State Board of Nursing" because only the nursing board is authorized to regulate the practice of nursing. Lastly, MoANA has asked the court to order the Board to publish a retraction of the "letter rule" and to disseminate the retraction to MSMA. Conversely, the Board asserts that MoANA lacks standing to file this lawsuit and denies the allegations that the letter is a rule; therefore, the letter was not filed or published.

## State Truth and Transparency Legislation

Oregon and Oklahoma enacted legislation that would safeguard patients from false health care advertising and marketing.

Legislation signed into law by Governor Ted Kulongoski of Oregon prohibits an individual practicing a health care profession from using the title "doctor" in connection with the profession unless the individual has earned a doctoral degree in the individual's field of practice. Such individual must be licensed by a health professional regulatory board to practice the particular health care profession in which the doctoral degree was earned or work under a board-approved residency contract and practice under the license of a supervisor who is licensed by a health professional regulatory board to practice the particular health care profession in which the individual's doctoral degree was earned. H.B. 2610 does not prohibit the use of the terms chiropractic physician, naturopathic physician, doctor of optometry, optometric physician or podiatric physician.

When an individual uses the title "doctor" on written or printed matter or in connection with advertising, billboards, signs or professional notices, the individual shall designate the health care profession in which the individual's doctoral degree was earned. The designation must be in letters or print at least one-fourth the size of the largest letters used in the title 'doctor' and in material, color, type or illumination to give display and legibility of at least one-fourth that of the title 'doctor.'

In Oklahoma, H.B. 1569 lists nine classes of persons who may use the word "Doctor," or an abbreviation thereof, and shall have the right to use the following designations: 1) "D.P.M." or the words podiatrist, doctor of podiatry, podiatric surgeon, or doctor of podiatric medicine by a person licensed to practice podiatry; 2) "D.C." or the words chiropractor or



Lisa Percy Albany, J.D., is State Legislative and Regulatory Issues Manager for ASA in its Washington, D.C. office.



doctor of chiropractic by a person licensed to practice podiatry; 3) "D.D.S." or "D.M.D.," or the words dentist, doctor of dental surgery, or doctor of dental medicine by a person licensed to practice dentistry; 4) "M.D." or the words surgeon, medical doctor or doctor of medicine by a person licensed to practice medicine and surgery; 5) "O.D." or the words optometrist or doctor of optometry by a person licensed to practice optometry; 6) "D.O." or the words surgeon, osteopathic surgeon, osteopath, doctor of osteopathy, or doctor of osteopathic medicine by a person licensed to practice osteopathy; 7) "Ph.D.," "Ed.D." or "Psy.D." or the words psychologist, therapist, or counselor by a person licensed as a health service psychologist; 8) "Ph.D.," "Ed.D." or other letters representing a doctoral degree or the words language pathologist, speech pathologist or speech and language pathologist by a person licensed as a speech and language pathologist; 9) the letters "Ph.D.," "Ed.D." or other letters representing a doctoral degree or the word audiologist by a person licensed as an audiologist.

Further, H.B. 1569 lists those health care providers that are required to identify themselves through written notice, which may include wearing a name tag, the type of license under which the doctor is practicing. Each applicable licensing board is authorized to determine how its license holders may comply with the disclosure requirement. Any advertisement for health care services naming a provider must identify the type of license of the doctor utilizing the letters or words set forth in the legislation or utilize appropriate, accepted, and easily understood words or letters, which clearly indicate the branch of the healing art in which the person is licensed to practice and is engaged in, if the person is not one of groups listed in the legislation. Lastly, it is unlawful for a medical doctor, doctor of osteopathic medicine, doctor of dental surgery, doctor of dental medicine, doctor of optometry, doctor of podiatry, or doctor of chiropractic to make any deceptive or misleading statement or engage in any deceptive or misleading act that deceives or misleads the public or prospective or current patient, regarding the training and license under which the person is authorized to practice.

## What Do Our Patients Deserve Prior to the Induction of Anesthesia?

*Continued from page 39*

hearing impaired is extra time for preoperative preparation. Scheduling the patient for the anesthesia preop clinic or the anesthesia consult service who can see the patient and take the time to review the issues may greatly facilitate the patient's movement to the O.R. and greatly increase their emotional comfort. Those with mental impairment (congenital, injury or age-related), those who cannot read, and those with significant physical limitations may also benefit from extra time and consideration.

Anesthesiologists have always been advocates for the patient. With the ever-present rush to maximize O.R. utilization, we should always remember that an individualized preoperative discussion and a quiet and peaceful environment prior to anesthesia induction may

greatly contribute to providing optimal perioperative care and may even lead to improved clinical and patient-oriented outcomes.

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# Universal Protocol: Implications for Regional Anesthetic and Pain Medicine Procedures

Terese T. Horlocker, M.D., Chair  
Task Force on Infectious Complications Associated with Neuraxial Techniques

**A patient has the wrong leg amputated.** Another undergoes surgery to the wrong knee. Events such as these have devastating effects on patients, their families and providers. In 2004, the Joint Commission initiated the Universal Protocol to prevent wrong-person, wrong-site, and wrong-procedure events. However, a Wrong Site Surgery Summit was held in 2007 to address concerns raised about the continued increase in wrong-site surgery cases. At a rate of eight to 10 new cases per month, wrong-site, wrong-procedure, wrong-patient surgeries remain the most frequently reported sentinel event in the Joint Commission database.

Importantly, the number (and percentage of total) wrong-site events among non-operating room procedure is also growing. For example, in Minnesota in 2008, nearly 40 percent of wrong-site events occurred *outside* the operating room and involved radiation therapy, regional blocks or other injections, and dermatologic or orthopedic procedures. The Universal Protocol is not limited to operating rooms or surgical procedures; rather, it is relevant to all settings where surgical and non-surgical invasive procedures are performed. It is imperative that anesthesiologists performing regional blockade and invasive pain therapies correctly apply the components of the Universal Protocol to enhance patient safety.

The Universal Protocol involves three components: 1) a pre-procedure verification process, 2) marking the intended site for the procedure and 3) a standardized procedure for final assessment ("time out") immediately before starting the procedure. An updated Universal Protocol, effective in 2009, added clarifying language and the need to implement a checklist to the pre-procedure verification process [Figure 1].



Terese T. Horlocker, M.D., is Professor of Anesthesiology and Orthopedics, Mayo Clinic College of Medicine, Rochester, Minnesota.

## Universal Protocol Checklist

This paper form is not part of the medical record.  
Discard after electronic entry.

The Universal Protocol is a process for decreasing the potential of wrong patient, procedure or site events. This includes utilizing two patient identifiers, ensuring all equipment is available and marking the procedural site. The use of a paper or electronic checklist ensures attention to the elements of the Universal Protocol, and increases the safety of our patients.

- This checklist does not replace documentation in the medical record.
- This checklist should be retained for short term use if needed by unit management.
- This checklist can be used for quality auditing purposes or other managerial use.

**To Avoid: • Wrong Patient • Wrong Procedure • Wrong Site**

Procedure		Procedure Date (Month DD, YYYY)	
Location (e.g. Building/Floor)	Care Provider Name	2nd Care Provider Name	

	Check when completed
<b>Pre Procedure</b>	
<b>Two patient identifiers</b> (e.g. name, birth date)	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Procedure verified with patient</b>	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Site verified</b> Site verbally verified with patient or others	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Confirmation of signed consent form</b>	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Special equipment available</b> Availability of appropriate equipment, monitoring devices, specimen containers, implants and skill sets.	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Verified supporting documents</b> Availability of all pertinent documents (e.g. imaging studies, pathology reports, clinical notes, etc.)	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Procedure site marked by Surgeon/Proceduralist</b> Surgeon/Proceduralist marks near the operative site with their initials using indelible marker. Marking required in all cases with potential for error due to laterality (left/right, anterior/posterior), levels (spine) or multiples (digits/lesions).	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Final Pause</b>	
<b>Final pause</b> Performed just before incision or procedure sedation or start, with the entire team actively participating.	Yes <input type="checkbox"/> NA <input type="checkbox"/>
<b>Final pause should address the following:</b>	
• Correct patient identity (using two patient identifiers)	
• Confirmation that the correct side and site are marked	
• An accurate procedure consent form signed	
• Agreement on the procedure to be done	
• Correct patient position	
• Relevant images and results are properly labeled and appropriately displayed	
• All patient identifiers in room are consistent and correct	
• Safety precautions based on patient history or medication use	
<b>Document final pause in medical record</b>	Yes <input type="checkbox"/> NA <input type="checkbox"/>

Figure 1: Universal Protocol Checklist.

It is important that these processes be as consistent as possible throughout the institution.

The three components of the Universal Protocol are not necessarily presented in chronological order (although the pre-procedure verification and site marking must precede the final verification and time out). Institutions should identify the timing and location of the pre-procedure verification and site marking based on what works best for their unique circumstances and practices.



### Pre-Regional Anesthetic/Pain Procedure Verification

- Verify the patient's identity, the procedure to be performed, and site. Whenever possible, the patient should be involved in these verification processes. For patients unable to answer, a family member, health care provider or an interpreter may verify. For patients less than 18 years old, a parent/guardian may verify.
- Verify that all relevant and supporting medical documents (e.g., history and physical, informed consent) and studies have been reviewed and are consistent with each other and with the patient's expectations and with the procedural team's understanding of the correct patient, procedure, and site.
- Verify availability of required equipment.
- Address and resolve any discrepancies in the verification process before starting the procedure.

### Marking the Regional Anesthetic/Pain Procedure Site

- Site marking for regional procedures only needs to occur for blocks that have laterality. Therefore, site marking is *not* needed for spinal or epidural techniques.
- Site marking for bilateral procedures (identical procedure, proceduralist and equipment) is recommended, though not required.
- The *needle insertion site* is marked by a licensed independent practitioner who will be present and directly involved in the regional anesthetic procedure. The presence of the surgeon's initials at the site of the surgical incision does *not* represent compliance with this component. A resident is permitted to perform the site marking provided he/she is accredited by the residency program and the hospital to perform the procedure *and* the resident will be present during the procedure and actively involved.
- The site is marked before the patient is moved to the location where the block/procedure will be performed. The mark is made preferably using the proceduralist's initials; the type of mark should be consistent throughout the institution.
- The intended needle insertion site must be marked/initialed such that the mark is visible after the patient is prepped and draped for the regional/pain procedure.
- Marking will take place with the patient involved, awake and aware, if possible. The presence of residual sedation does not preclude the performance of site marking by the surgeon *after* a regional technique. However, the patient would be unable to give informed consent under these circumstances.
- For cases in which permission for site marking is denied, an alternate process should be developed.

### "Time Out" Prior to Starting the Regional Anesthetic/Pain Procedure

- A "time out" must occur with all regional anesthetic or pain procedures to ensure the proper patient has been identified and the proper procedure performed. This includes spinal and epidural anesthetics.
- Patients undergoing multiple techniques (such as a combined spinal anesthetic-continuous lumbar plexus technique) require multiple procedural pauses. Clinicians should also consider that repositioning between techniques, as is often required for patients undergoing lower-extremity orthopedic procedures, increases the likelihood of blocking the wrong side.
- The "time out" is initiated by a designated member of the procedural team, and all team members must actively participate in the pause.
- The procedural team reconfirms correct patient identity, correct procedure side, if applicable, and site. Ideally, the time-out is conducted immediately prior to the introduction of anesthesia (including administration of sedation) to allow involvement of the patient.
- The time-out may not be conducted in the absence of the proceduralist.
- One individual should be designated to document the final verification pause in the medical record. The organization determines the amount and type of documentation.

In summary, despite introduction of the Universal Protocol in 2007, wrong-site, wrong-procedure, wrong-patient events continue to occur at an *increasing frequency*. Active involvement of the patient and empowerment of the team to "speak up" for patient safety have been demonstrated to reduce these errors without introducing procedural delays. A recent publication reported that the introduction of a surgical checklist (as required by the Universal Protocol) significantly decreased mortality and complications.<sup>1</sup> Clinicians and institutions are urged to utilize the resources provided by the Joint Commission at [www.jointcommission.org/PatientSafety/UniversalProtocol](http://www.jointcommission.org/PatientSafety/UniversalProtocol). For additional information, you may contact the Standards Interpretation Group at (630) 792-5900 or submit your questions to the Joint Commission using its online question form (available on the Web site).

### Reference:

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# Do History: Win a Free AHA Membership

David B. Waisel, M.D., Vice President  
Anesthesia History Association

*Funding: This work has been supported by salary from the Department of Anesthesiology, Perioperative and Pain Medicine, Children's Hospital Boston.*

**In a 1975 letter to the United States Senate Finance Committee**, the executive director of the American Association of Nurse Anesthetists (AANA) equated nurse anesthetists with anesthesiologists and implied that AANA certification was equivalent to ABA certification. AANA advocated regulatory changes to create financial incentives for hospitals to use nurse anesthetists.

In the 1980s, government intruded on medical practice. One state tried to regulate the number of anesthesiologists. Another state proposed requiring that hospital-based physicians be salaried.

In the 1990s, residency applications decreased because there was "no future in anesthesiology." Fewer trainees meant that the promising research careers of time-starved academic anesthesiologists withered. Private practice jobs dwindled, in part because anesthesiologists delayed retirements and in part because groups shunned hiring due to financial uncertainty.

As we again confront these smoldering, cleverly mutating, opportunistic infections, knowing previous strategies, successes and failures is as necessary as knowing a complex patient's previous anesthetic management. This is the purpose of unraveling, understanding and imparting history. This is the purpose of the Anesthesia History Association (AHA).

## What We Do

The best way to learn about the AHA is to go the AHA Web site [www.anesthesia.wisc.edu/AHA/](http://www.anesthesia.wisc.edu/AHA/), which is graciously hosted by the University of Wisconsin Department of Anesthesiology. Here are a few of the opportunities for professional development and education in history.



David B. Waisel, M.D., is Associate Professor of Anesthesia, Harvard Medical School, Boston.

**Bulletin of Anesthesia History:** The *Bulletin* offers original articles, book reviews, listings of recent articles (often in unfamiliar journals), and announcements of meetings, fellowships and contests. AHA and the Wood Library-Museum of Anesthesiology (WLM) co-publish the peer-reviewed *Bulletin*. The *Bulletin* originated as the *Anesthesia History Association Newsletter* in 1982 until it was renamed in 1995. Issues of the *Bulletin* from 2002 to the present are available on the AHA Web site. Issues from 1982-2001 are available in the book *Anesthesia History Association Newsletters* (1982-1995) or from WLM.

**Council of Mentors:** Mentors are available to help aspiring researchers.

**C. Ronald Stephen Resident Essay Contest:** This annual contest solicits trainee essays on the history of anesthesia. Authors have the opportunity to win cash awards, to present at a national meeting and to publish the paper in the *Bulletin*. (Who was C. Ronald Stephen? See the January 2007 *Bulletin*.)

**This Month in Anesthesia History:** A.J. Wright, M.L.S., has compiled events related to anesthesia. November's list, for example, includes criminal uses of chloroform and the nauseating attempt to patent ether, the conqueror of pain.

**Anesthesia History Association Annual Spring Meeting:** Next year's meeting is from April 8-10, 2010, in Winston-Salem, North Carolina. Featured speaker Pat Ober, M.D., will discuss his book, *Mark Twain and Medicine: Any Mummery Will Cure*. AHA meetings include visits to local historical sites, guest lectures and free papers.

## AN OPEN-BOOK ANESTHESIA HISTORY ASSOCIATION CONTEST

The first 20 trainees e-mailing the correct answers to me ([david.waisel@childrens.harvard.edu](mailto:david.waisel@childrens.harvard.edu)) will be awarded a one-year membership to the AHA. A randomly chosen entrant will receive the *Anesthesia History Association Newsletters* (1982-1995).

All answers can be found in the issues of the *Bulletin of Anesthesia History* on the AHA Web site.





1. *See One, Do One ( ... on oneself)*: Sir James Young Simpson inhaled chloroform before using it on patients. Dr. August Bier had spinal anesthesia with cocaine to better understand complications from the novel technique.

Dr. Burnell Brown was the founding chair of the University of Arizona Department of Anesthesiology. His notable achievements included deciphering the pathophysiology of halothane hepatitis and promoting the use of alpha-blockers in pheochromocytoma. Following Simpson, Bier and others, Dr. Brown served as a research subject to test which anesthetic agent?

2. *Be Leary*: It is highly likely that the unparalleled Dr. Henry K. Beecher performed drug research for the Central Intelligence Agency. What drug was it? Why was the CIA interested in this drug?

3. *The Left Brain*: The Lewis H. Wright Memorial Lecture is given at the ASA Annual Meeting. An anesthesiologist, Dr. Wright spent much of his career at E.R. Squibb and Sons, Inc., as an ambassador promoting clinical acceptance of curare. (Why did curare need an ambassador? See the October 1993 *Anesthesia History Newsletter*.) He was awarded the 1955 ASA Distinguished Service Award for his contributions to anesthesiology and the WLM.

In the 2003 Lewis H. Wright Memorial Lecture, former ASA President and Professor of History Peter L. McDermott, M.D., Ph.D., presented "Fallacies and Useful Truths: An Overview of History and Science for the Anesthesiologist ... or Lust, Torture and Depravity: The Anatomy of Derangement." In the published lecture,

Dr. McDermott presented six numbered fallacies (and, interestingly, a number of unnumbered fallacies) that "infect scientific thought processes." What are the numbered fallacies?

4. *Just Do It!* Selma H. Calmes, M.D., was the co-founder of the AHA, the first editor of the AHA newsletter and former president of AHA. She is the authority on the history of women anesthesiologists, such as Dr. Isabella Herb, President of the Association Anesthetists of the U.S. and Canada in 1922. In Dr. Calmes' article "The Founding of the Anesthesia History Association and, What Next?," she described what AHA does in a short sentence under the heading "There are some basics to think about." What is that sentence?

5. *Breathe Right*: The ASA's Wellness Initiative intends to "[H]elp all of us stay healthier and safer through increased awareness and simple-to-use knowledge." Concern for the wellness of anesthesiologists is not new. Dr. Frederick J. Spielman's "The Smell of Sleep" in the April 2004 *Bulletin* reviewed 40 years of studies that detail the obstructive task of studying the effects of operating room pollution. At one point, for example, Russian anesthesiologists received "hazard" pay for working in the operating room.

A lithograph of a sleeping anesthesiologist supplements the article. What disease likely contributes to the pictured anesthesiologist's sleepiness?

I look forward to your e-mails!

[david.waisel@childrens.harvard.edu](mailto:david.waisel@childrens.harvard.edu)

## Why the WLM Is Important to ASA

*Continued from page 19*

hospital administrators and newspaper reporters. This reference library service, although labor-intensive and time-consuming for our staff, represents both a service and a public relations function for ASA. We are a critical face to the public in our ASA branding campaign.

The WLM is proud of all its programs that are so vital in portraying the development of our specialty of anesthesiology. We are grateful for the hard work and

dedication of our staff who serve the ASA membership and the public so well. Our programs and services are critical to preserving the heritage of our past to promote our future. In appreciating our past, we gain a great sense of pride of our accomplishments in medicine, safety, and quality and can use this knowledge to increase public awareness about our great specialty.



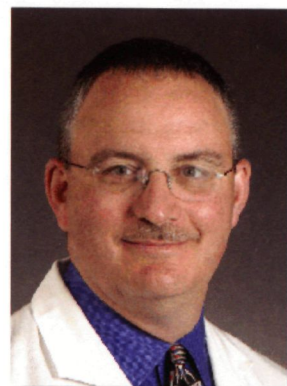
# ASCCA: Healthy and Ready for the Future

Todd Dorman, M.D., F.C.C.M., President  
American Society of Critical Care Anesthesiologists

**These are exciting times in health care**, and change is clearly the theme of the day. ASCCA sees change as opportunity, and we are working hard to improve and expand our Society with a focus on member value. This is the 23rd year of the ASCCA, and we are proud of what we have accomplished to date, but we are not willing to rest on past laurels. There are many reasons to be a member of the ASCCA, and here is just a sampling of some of the exciting things happening in our Society.

## ASCCA Annual Meeting

The last two annual meetings have been our largest and most successful to date. The meeting includes interactive audience response sessions and the always stimulating pro-con debates. The evaluations of the meeting design, content and presentations have been stellar. This year's event in New Orleans boasted an exciting program that included presentations on liver failure, stroke, statins, acute lung injury, sepsis and the future of regulatory control. All anesthesiologists benefit from being current on these topics. Add in the Luncheon session, in which a Louisiana colleague recounted his personal experiences during Hurricane Katrina, a Young Investigator Award, a presentation by ASA President-Elect Alexander A. Hannenberg, M.D., and the presentation of a Lifetime Achievement Award to Robert N. Sladen, M.D., and you will agree that this was a meeting not to be missed!



Todd Dorman, M.D., F.C.C.M., is Associate Dean and Director, Office of Continuing Medical Education; Professor and Vice Chair for Critical Care, Department of Anesthesiology and Critical Care Medicine; Joint Appointments in Medicine, Surgery and School of Nursing, Johns Hopkins University School of Medicine, Baltimore.

## ASCCA Breakfast Panel

Every year, ASCCA is proud to present a Breakfast Panel during the ASA Annual Meeting. This year's panel, which was scheduled for the morning of Monday, October 19, was on genomic implications for perioperative management. This session described the basic science of genomics as it relates to the perioperative period, and explored the implications and helped define opportunities for improved patient care.

## Resident Guide to Education in ICU

The third edition of our "Resident's Guide to Learning in the Intensive Care Unit" has been released in electronic format and is available for download from the front page of our Web site [ascca.org](http://ascca.org). This guide has been a valuable tool for anesthesiology residents in preparing for their rotations in the ICU and for board examinations. Every topic begins with a case and ends with suggested readings. The booklet is also useful as a self-study guide for those in the Maintenance of Certification in Anesthesiology, or MOCA, process.

## Resident Mentor Program

ASCCA participates in the Foundation for Anesthesia Education and Research (FAER) resident mentor program (see FAER article on page 57). We invite residents to not only attend the annual meeting but to actually experience it. Residents are paired with attendings who they shadow and interact with from breakfast through the reception at the end of the day. They have the opportunity to review posters together, discuss careers in critical care anesthesiology and participate in a specific mentoring session. Residents from all training programs are eligible to attend.

## Fellowship Director's Breakfast

Support for training fellows in critical care medicine is always appreciated. Throughout the year, we highlight programs in our newsletter, *Interchange*, include fellows in our annual meeting program, and host a Fellowship Director's Breakfast. At the breakfast, training program directors receive updates from the ABA and Resident Review Committee, discuss topics that are important to meeting the regulatory burdens of running a program, network and share experiences to help advance training and specialty practice.



### ASCCA and Research

ASCCA is dedicated to helping create future leaders in academic anesthesiology and critical care medicine. Every year, we provide financial support to both APSF and FAER. Through a grant from Hospira, we fund a research award in partnership with FAER. This year, we are excited to fund two researchers: Michael L. James, M.D., from Duke University, and Jennifer K. Lee, M.D., from Johns Hopkins. Their findings will be presented at a future ASCCA Annual Meeting.

### ASCCA and ASA

The ASCCA is collaborating with the ASA Committee on Critical Care Medicine and representatives of the American Heart Association to create and subsequently implement an ACLS module dedicated to the resuscitation of patients in the perioperative period. This project will likely take a few years to complete, but in the end, there will be an anesthesiology-focused ACLS program that will be pertinent and useful for anesthesiology care providers.

### ASCCA and SCCM

Every two years, ASCCA teams up with the Society of Critical Care Medicine (SCCM) Anesthesiology Section to identify and present a leadership award to an individual who has made significant contributions to furthering the specialty across boundaries. The 2010 Burchardi Award will be presented at the SCCM Congress in January.

### ASCCA Membership

Our membership is the highest it has ever been – clearly a marker of the progressive growth in critical care anesthesiology and the strength of this field. It also means we as a society must work even harder to provide value for our membership.

## WHAT IS THIS THING?

### *Answer from page 25:*

In 1939, the *Journal of the American Medical Association* reported the findings of a professional trio of experts about a deadly explosion that occurred in a Boston operating room. Lahey Clinic anesthesiologist Philip D. Woodbridge, M.D. (who would later become chair at Temple University), surgeon-manufacturer Karl Connell, and engineering professor J. Warren Horton (of the Massachusetts Institute of Technology) described how a Connell DeLuxe anesthesia machine delivering cyclopropane had exploded with such violence that the patient died from complications about 15 hours later.

To prevent such future explosions, the "Horton Intercoupler" (pictured) was designed as a high-resistance coupling "device to minimize risk of ignition of anesthetic gases by static spark." Woven metallic bracelets connected the patient and the anesthesiologist to the gas machine. The intercoupler casing could be hung from the machine or the O.R. table. Two intercoupled spring clamps could be attached to the O.R. table and/or another person/thing and/or the floor. The last floor connection or a drag chain from the machine or table would link everything to the conductive flooring. The introduction of nonexplosive anesthetics reduced the risk of O.R. explosions and the need for such elaborate intercoupling.



# From Residency to Private Practice

Todd R. Gleaves, M.D., Co-Editor  
"Residents' Review"

**Residency training is a great time of learning the art of medicine and anesthesiology** as well as preparation for the eventual transition to private practice or academic anesthesiology. As residents, it often seems as though residency training may never come to an end. Those long nights on OB and trauma call seem to weigh down the soul as the years pass by. But, rest assured, there is always a light at the end of the tunnel.

While most of us, at one time or another, have felt that we were absolutely ready for the move on from residency, I will admit that it is not always the "walk in the park" we expect. There are often new and different brands of anesthesia machines to learn, new procedural policies to learn and so on. I hope to discuss a few of my observations from my personal transition from residency to private practice and welcome any of your stories that you would like to share.

Personally, the first two differences I noticed were the faster pace at which our operating rooms run and the new isolation of being alone with no attending looking over your shoulder or to discuss patients with. I cannot speak for you, but not once in residency did I have 12 ENT cases in four hours or do 60 cases in the period of 10 straight days. The pace of private practice has been astounding, all the way from super-fast turnovers to super-fast surgeons. The transition from the slower pace of residency to private practice has required the modification of my practice

*As residents, it often seems as though residency training may never come to an end. Those long nights on OB and trauma call seem to weigh down the soul as the years pass by. But, rest assured, there is always a light at the end of the tunnel.*

to not be so heavy-handed with the narcotics, to wait and see if the surgeon really needs more muscle relaxant, and a few others. In regard to being on my own, having senior partners around during the day helped the transition, especially with the sick ICU patients, but that first overnight call brought a sobering feeling being in the operating room with no one looking over my shoulder. You just have to rely on the training and knowledge you have gained to do the right thing for the patient at that moment. As one of our senior partners in the group said, "Keep it simple and don't do anything extravagant that you don't have to do."

A comprehensive, positive team attitude between the physicians, nurses and surgical technicians helps to make the day go by nicely. I do not mean to insinuate that there was not a team approach while a resident; just that it has been different, and different in a good way. I am not sure if everyone is inherently happier, but it seems that everyone is able to get along a little easier. This congeniality seems to keep everyone on task and focused on quality patient care.

Through all the differences, changes and adaptations from residency to private practice, I can probably say that what has remained on the forefront of my mind at all times is to stay vigilant. Regardless of the pace of the O.R. and regardless of how nervous you are for that first overnight call, you must hold true to the motto of anesthesiology and maintain your utmost vigilance in the care of your patients. Just as in residency, always check the machine and monitors, always check the drug labels and concentrations and always give the patient evaluation the time and attention that it deserves. When necessary, do as I have done and lean on your senior partners for advice and help. They too have made the same transition and are often able to help you learn from theirs and others' mistakes instead of having you make them on your own. I can say that my partners have been immensely helpful and have made this transition easier than expected.



Todd R. Gleaves, M.D., is a staff anesthesiologist, St. Anthony Hospital, Oklahoma City.





## CBA Program

**ASA is pleased to announce the 2010 Certificate in Business Administration (CBA) program.** The program is designed to provide physicians with the business skills needed to successfully manage the operations and functions of their health care organization or medical practice. The first on-site session will be held the weekend of **March 20-21, 2010**, at the Woodlands Resort and Conference Center in Houston. Three additional on-site sessions at the Woodlands will be held throughout the year. Please see the other dates below:

**August 14-15, 2010**

**November 13-14, 2010**

**February 12-13, 2011**

The program will consist of a total of 10 modules. Five of the modules will be presented at the on-site sessions, and five will be completed through distance learning via DVD/ROMs. Space remains available for the course, so sign up today. [The brochure is now available on the ASA Web site at [www.asahq.org/conted/cba.htm](http://www.asahq.org/conted/cba.htm).] Also, please feel free to call Mary Teister in the ASA headquarters office at (847) 268-9139 for additional information.

## ABA Examinations in Subspecialty Certification

### Critical Care Medicine and Pain Medicine

**The American Board of Anesthesiology (ABA)** will administer examinations for certification in the subspecialties of critical care medicine and pain medicine on Saturday, October 23, 2010, via computer at more than 300 Prometric®, a part of the Thomson Corporation, Testing Centers located throughout the United States, Canada and the U.S. Territories. ABA will mail scheduling permits to candidates approximately three months prior to the exam.

All applicants for subspecialty certification must satisfactorily complete twelve months of training in an ACGME-accredited critical care medicine or pain medicine program by September 30, 2010. They also must be certified in anesthesiology by ABA or scheduled for ABA oral examination in 2010. After February 1, 2010, applicants may use the ABA Web site ([www.theABA.org](http://www.theABA.org)) to submit their application for a subspecialty certification examination electronically. The standard application deadline is **March 31, 2010**. ABA will consider late applications received by **April 15, 2010**. Applications received after the late deadline will not be considered. ABA will make a decision about an applicant's qualifications for subspecialty examination by May 15, 2010.

### Hospice and Palliative Medicine

The examination for certification in hospice and palliative medicine is offered biennially. The 2010 examination will take place on November 16, 2010, and will be administered via computer at more than 200 Pearson VUE test centers (please note this exam date is subject to change). ABA will inform candidates when they may schedule their examination with Pearson VUE.

Applicants for subspecialty certification who have satisfactorily completed twelve months of training in an ACGME-accredited hospice and palliative medicine fellowship program may be admitted to the examination via temporary criteria. The temporary criteria include a Training Pathway and a Practice Pathway. For additional information please refer to Section 3 of the ABA Booklet of Information available on the ABA Web site at [www.theABA.org](http://www.theABA.org) under the publications link.

Applicants also must be certified in anesthesiology by ABA or scheduled for ABA oral examination in 2010. After February 1, 2010, applicants may use the ABA Web site ([www.theABA.org](http://www.theABA.org)) to submit their application for a subspecialty certification examination electronically. The standard application deadline is **March 31, 2010**. ABA will consider late applications received by **April 15, 2010**. Applications received after the late deadline will not be considered. ABA will make a decision about an applicant's qualifications for subspecialty examination by May 15, 2010.



# ABA Examinations in Subspecialty Recertification

## Critical Care Medicine and Pain Medicine

**The American Board of Anesthesiology (ABA)** will administer examinations for recertification in the subspecialties of critical care medicine and pain medicine from October 30 – November 13, 2010 (except Sundays). The examinations will be administered via computer at more than 300 Prometric®, a part of the Thomson Corporation, Testing Centers located throughout the United States, Canada and the U.S. Territories. ABA will mail scheduling permits to candidates approximately three months prior to the exam.

Physicians previously certified in critical care medicine or pain medicine by ABA may apply to recertify in the subspecialty. After February 1, 2010, applicants may use the ABA Web site ([www.theABA.org](http://www.theABA.org)) to submit their application for a subspecialty recertification examination electronically. The standard application deadline is **March 31, 2010**. ABA will consider late applications received by **April 15, 2010**. Applications received after the late deadline will not be considered. ABA will make a decision about an applicant's qualifications for subspecialty examination by May 15, 2010.

## IN MEMORIAM

Elvin M. Amen, M.D.  
Bartlesville, Oklahoma  
September 1, 2006

Waverly M. Cole, M.D.  
Richmond, Virginia  
August 28, 2009

Andre N. Hanna, M.D.  
Lancaster, Pennsylvania  
October 17, 2008

John A. Jenicek, M.D.  
Galveston, Texas  
June 26, 2009

Stephen Lester, M.D.  
Tulsa, Oklahoma  
August 30, 2009

George T. Miller, Jr., M.D.  
Greenwood, South Carolina  
August 13, 2009

Joseph V. Mirenda, M.D.  
Virginia Beach, Virginia  
August 25, 2009

Saul Rubin, M.D.  
Panama City Beach, Florida  
September 4, 2009

Harry L. Truly, M.D.  
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August 22, 2009

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## ASA Staff Helping to Reshape Our Image

I would like to share my agreement with Dr. Bacon's prophetic remarks in regards to the ASA Lifeline to Modern Medicine Campaign, as well as his mention of Ms. Jennifer Gremmels, ASA Public Relations Manager.

The recent media frenzy surrounding the death of Michael Jackson, and the now confirmed implication of propofol, was a potential landmine for anesthesiologists. The juggling of media requests, reassuring the public, and focusing on a message of patient safety would not have been as effectively accomplished without the help of the professional staff in the ASA's Communications office.

The ASA staff under the direction of Dawn Glossa, ASA Director of Communications, mobilized anesthesiologists around the country to be available for the inevitable deluge of coverage. The proactive anticipation led to inquiries by several major news outlets such as, CNN, CBS, TMZ, Inside Edition, the *New York Times*, and *Newsweek*. There were even calls from overseas news. Many of us gave interviews locally as well as nationally. More importantly, we were all there to send a clear message that powerful anesthetic agents, such as propofol, are safe drugs when administered by anesthesiologists, who understand the medication and are trained to handle intended and unintended consequences of sedation and general anesthesia. Solidifying our message and screening of interview requests were efficiently and effectively handled by the ASA communications staff.

Our ASA leadership is to be commended for their organizational vision and foresight. As expressed by Dr. Bacon, "a new attitude has spread throughout the organization," where "a very modern, can-do spirit will bring anesthesiologists to the forefront of American medicine." The ASA Communications Department and its interaction with other components of ASA will be a key in attaining that goal.

Kenneth Elmassian, D.O.  
Member, ASA Committee on Communications  
East Lansing, Michigan

## Jackson Death Underscores Need for Emphasizing Position on Non-Anesthesia Providers

ASA has always supported the position that non-anesthesia providers should not dispense sedative-hypnotic drugs, even though more and more non-anesthesia providers are using propofol.

Now there is Michael Jackson's death that was caused by "acute propofol intoxication." Not to mention the three different benzodiazepines that Dr. Murray, a cardiologist, allegedly gave to Jackson all at the same time.

I would like to know how anyone could justify giving Jackson propofol in his home by I.V. drip to begin with. Insomnia is not a medical emergency, and as far as I can remember, no one ever died from insomnia.

Dr. Murray allegedly got himself into this mess using three benzodiazepines at the same time and an intravenous sedative hypnotic on top of that to treat insomnia. They may not be able to convict Dr. Murray of homicide, but at the very least, he should lose his license to practice medicine.

ASA should continue its position that non-anesthesia providers should not be giving sedative-hypnotic drugs.

Shari M. Yudenfreund-Sujka, M.D.  
Winter Park, Florida

*Continued on page 56*

The views and opinions expressed in the "Letters to the Editor" are those of the authors and do not necessarily reflect the views of ASA or the NEWSLETTER Editorial Board. Letters submitted for consideration should not exceed 300 words in length. The Editor has the authority to accept or reject any letter submitted for publication. Personal correspondence to the Editor by letter or e-mail must be clearly indicated as "Not for Publication" by the sender. Letters must be signed (although name may be withheld on request) and are subject to editing and abridgement.





## The Politics of Safety – Where ASA Can Do More

**President Obama correctly identifies a litany of challenges** in reforming the U.S. health system: improving morbidity and mortality statistics for various diseases, the need to implement information technology systems across the board (e.g., the electronic medical record), upgrading access to care for all Americans, affordable prescription drugs and tort reform. These are obvious and noble goals toward any meaningful national health policy reform. What the President is missing, however, is a high-profile, non-political partner in the quest to tackle the most under-reported and troubling reality of the U.S. medical system: safety loopholes that needlessly lead to over 100,000 error-related deaths (and over 1.5 million medical errors) in American medical institutions each year. That “partner” should be ASA.

No U.S. health care plan will work to save lives and reduce costs as long as there is a lag in the push to get available technologies widely accepted in the health system. This includes radio frequency identification (RFID) chips and other technologies to track sensitive medications and supplies from the factory to the bedside. These technologies can minimize drug diversion, tampering, abuse and misuse.

Consider that the current rate of mortality due to drug “mistakes” and other medical errors has been compared to a large jetliner filled with passengers crashing every couple of days. The number of deaths from car crashes alone, or AIDS alone, in any given year is less than the number of iatrogenic deaths in the United States. There are many studies and initiatives under way to further elucidate the reasons for the roughly 100,000 avoidable deaths attributable to health system errors per year. Some conclusions and statistics have already begun to trickle in, and they place the blame on medication labeling errors, medical management or judgment errors, and deficiencies in skill (e.g., performing a given procedure or surgery for which one is not qualified).

Here are some additional facts: One in five medications in health care facilities is incorrect (wrong time, wrong dose or unauthorized drug), *Archives of Internal Medicine*, 2002; 162(16):1,897-1,903; Two percent of those admitted to a hospital experience major disability or death, *Int J Qual Health Care*, 2000; 12(5):379-388. One and a half million people per year in America require hospitalization and 100,000 die as a result of prescription drug-related injuries, *Journal of the American Medical Association*, 1998; 279:1,571-1,573.

American politicians need to be frank with their constituents with regard to the realistic ability of any national health system to literally “pay for everything,” but a focused effort to reign in medical errors will more than pay for itself multiple times over.

The president, in advancing the cause of national health care reform, should know better than to play doctor with the crucial issues of patient safety and medical resource allocation. No one knows these problems better than American doctors – in particular, anesthesiologists. ASA should be positioned at the forefront of the national fight against medical errors and preventable health care deaths.

One way to effect positive outcomes in the fight against medical errors would be the accelerated creation and widespread publication of a new ASA product for both academic, layperson and political consumption, called the “ASA Benchmarks and Targets for Operating Room and Critical Care Patient Safety.”

Rather than merely perpetuating rote regulations and rules, as do accrediting bodies, ASA would produce a semi-annual report that not only identifies solid, statistically valid conclusions about clinical safety, but also creates target goals and regional “study sites” through which to actively measure and test these goals. In other words, ASA would unilaterally position itself as a proactive force to effect national health policy. We, as a nation, should not rely on a consortium of individual clinical research studies across a smattering of safety-related topics to dictate health policy. The problem of medical errors in American institutions should be ratcheted up to the next level of examination, and no organization is better suited to take a global, non-political and scientific view of patient safety than ASA.

Adam F. Dorin, M.D., M.B.A.  
San Diego, California

**Editor’s Note:** Dr. Dorin’s thoughtful and insightful comments come at a time when ASA is positioning itself to take the lead on solving many of the issues mentioned in his letter. Chartered in 2008, the Anesthesia Quality Institute (AQI) is now up and running at ASA headquarters, with the goal of providing the specialty with unbiased, comprehensive data that will be used to create quality indicators and standards and provide incontrovertible evidence as to the safety of our specialty. Through the AQI, ASA will be the proactive force that effects patient safety policy in America and the world over, just as Dr. Dorin envisions. The AQI is currently exploring certification as a government-designated Patient Safety Organization, and an “AQI Advisory Panel” had its first face-to-face meeting at the ASA Annual Meeting last October in New Orleans. For further information on the AQI, see the article by Richard P. Dutton, M.D., AQI Executive Director, on page 40 of the October NEWSLETTER. If you have suggestions or comments pertaining to the AQI, please feel free to contact Dr. Dutton at [r.dutton@asahq.org](mailto:r.dutton@asahq.org).





## Honor the Memory of Dr. Gertie Marx – Submit Your Obstetric Research Grant Application to FAER

Nicole Brudos Ferrara

Gertie Marx, M.D., was a pioneer in anesthesiology, helping to establish obstetric anesthesiology as a subspecialty. Dr. Marx's contributions to the practice of OB anesthesia include acute hydration for prevention of postspinal hypotension, studies of aorto-caval compression, and the use of regional anesthesia for emergency cesarean sections. She was honored with the ASA's Distinguished Service Award in 1988. Often called "the Mother of Obstetric Anesthesia," she passed away on January 25, 2004.

Dr. Marx's passion for obstetric anesthesiology lives on through the Gertie Marx Research and Education Fund, which she established at FAER several years before her death. In 2005, this fund was the beneficiary of \$320,000 from her estate, with contributions of roughly \$30,000 to follow yearly thereafter.

Dr. Marx's work also continues through another of her beneficiaries, the Society for Obstetric Anesthesia and Perinatology, which seeks to improve the pregnancy-related outcomes of women and neonates. One of the ways SOAP works to fulfill this mission is through its support of FAER and obstetric anesthesiology research. SOAP and its members have donated \$160,000 to FAER since 1998.

"Regional anesthesia is now used for roughly three quarters of the four million births that take place each year in the United States," said SOAP Past President William R. Camann, M.D. "The birth of a child is a very important time in the life of a woman and her family. Funding obstetric anesthesiology research is essential to ensuring the safe and effective pain relief necessary for a good experience in the delivery room."

Along with the Gertie Marx Research and Education fund, SOAP's generous donations have supported FAER funding for the following OB anesthesiology research projects:

- *2002 Research Training Grant:* Chuanyao Tong, M.D., Wake Forest University, Winston-Salem, North Carolina, "Visceral Pain of Uterine Cervical Distention: Role of COX."
- *2000 Research Starter Grant:* Barbara L. Leighton, M.D., Cornell University Ithaca, New York, "Mechanisms of Epidural-Associated Labor Slowing."
- *1999 New Investigator Award:* Ellen M. Lockhart, M.D., Duke University, Durham, North Carolina, "Progesterone as an Endogenous Neuroprotectant."

Though FAER continues to benefit from the generosity of both Dr. Marx and SOAP, FAER has not had the opportunity to fund an OB anesthesiology research project in several years. "FAER and SOAP share a vision consummate with Dr. Marx's emphasis on education in obstetrics," said FAER President Alan D. Sessler, M.D. "Together, we wish to perpetuate her wishes by continuing to co-sponsor education and research programs in obstetric anesthesia."

Please help FAER honor Dr. Marx's love for obstetric anesthesia by submitting a research grant application in her field. Applications for OB-related research projects will be accepted for all three FAER grant categories; Mentored Research Training, Research in Education, or Research Fellowship. Details on FAER grants and the application process are available online at [www.faer.org/programs/grants](http://www.faer.org/programs/grants). The next FAER grant application deadline is **Tuesday, February 16, 2010**.

### Endo Pharmaceuticals to Co-sponsor 2009 FAER Grant

FAER is pleased to announce the co-sponsorship of one of our 2009 research grants. Endo Pharmaceuticals is co-sponsoring the research project being conducted by Dusica Bajic, M.D., Ph.D., of Children's Hospital of Boston, titled "Age Differences of Brain Circuits Mediating Morphine Effect and Development of Morphine Tolerance." To view a summary of Dr. Bajic's project, visit [www.faer.org/programs/grants/grantrecipients](http://www.faer.org/programs/grants/grantrecipients).

Nicole Brudos Ferrara is  
Programs Coordinator, Foundation for  
Anesthesia Education and Research,  
Rochester, Minnesota.





# NEWSLETTER

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# Wired!

## Survey Shows Members' Use of Personal Technology

Technologies have not only changed the way anesthesiologists practice but, as with much of society, influence how they prefer to communicate. A May 2009 survey initiated by ASA's Education Department asked members about what technology tools they currently use or are likely to use. The results showed that technology use spreads across generations, and we had the most responses from physicians practicing for 11 to 20 years.

From the more than 2,600 survey responses, we can paint this techno picture:

- Web sites and electronic newsletters are still the digital way most physicians stay current.
- While 12 percent currently report reading blogs, another 32 percent would consider using them.
- Attending live Web casts and virtual learning labs received high ratings as preferred technology platforms for continuing professional development activities.
- A high percent are Mac OS users, and much cross-platform usage of Windows and Mac OS.
- More than 25 percent of respondents use smartphones – iPhones, BlackBerrys and Palms – to read journals, take CME courses and share peer-to-peer topics of interest.



- Although a small percentage of physicians use electronic book readers, the majority (61 percent) use the devices to read journals and newsletters.
- More than 50 percent of respondents would consider using eBooks.

Recognizing the growing demand to reach learners through a variety of technologies, ASA is exploring how to design and expand its professional development offerings to different technology platforms, including mobile devices. But for those who favor paper, we are not abandoning print publications.

The ASA Education Department thanks everyone who took the survey.



# Survey Says...!

The ASA NEWSLETTER staff would like to express sincere thanks to all members who participated in a survey that was sent electronically to ASA members last July. Members were asked to rate their favorite parts of the NEWSLETTER and what they would like to see in future issues. All of your comments were read and considered and will be used to help make the NEWSLETTER even better than it already is.



As added incentive for participating in the survey, ASA gave away an Apple iPhone and two \$100 gift cards in a random drawing. The lucky winners appear below.



**iPhone**

Michelle D. Fleischmann, M.D.  
West Bend, Wisconsin



**Gift Card 1**

William E. Davis, M.D.  
West Des Moines, Iowa



**Gift Card 2**

Claudia Garcia, M.D.  
Palm Beach Gardens, Florida

*Again, thanks to everyone who participated in the survey!*



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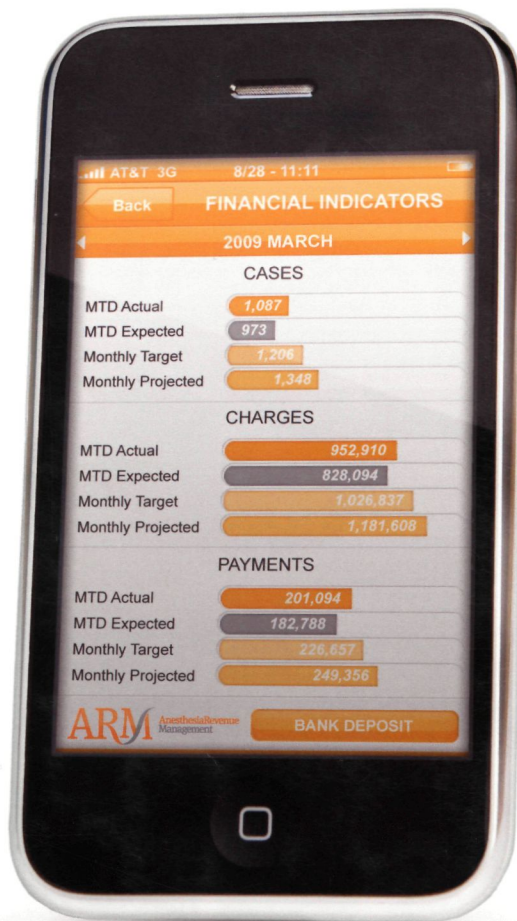
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