AUA
Association of University Anesthesiologists
Update
Summer 2004

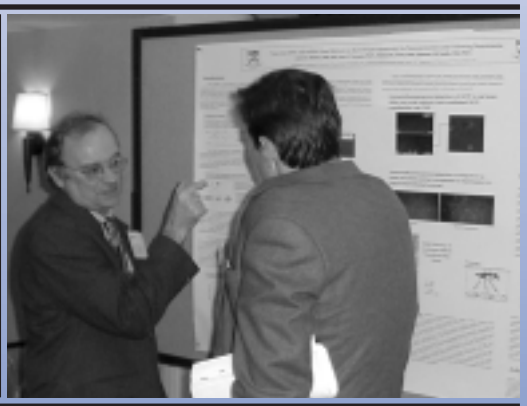
## Inside:



# 2004 Annual Meeting

## Sacramento, California

## May 13-15



***AUA members may not have struck gold while in Sacramento, California, for the AUA 51st Annual Meeting, but they discovered a wealth of information of specific interest to university anesthesiologists in an array of panel presentations, lectures and poster presentations. Not to mention unique social activities that were conducive to the free and informal interchange of ideas and renewal of friendships.***

# SABReport: Science News at the Annual Meeting

*C. Michael Crowder, M.D., Ph.D., Chair*
*AUA Scientific Advisory Board*

The scientific program at the Annual Meeting in Sacramento, California, on May 13-15, consisted of the usual unique mix of talks and posters, ranging from very basic science to nitty-gritty clinical trials. One plenary talk, one National Institutes of Health (NIH) speaker, 12 oral abstract presentations, nine poster-discussion presentations and 32 posters comprised the program. The plenary speaker, Jeanine P. Wiener-Kronish, M.D., University of California-San Francisco, gave a fascinating but disconcerting overview of Pseudomonas aeruginosa pathogenicity. Pseudomonas is one of the most prevalent pathogens in nosocomial pneumonias and one of the most deadly, with a mortality rate of more than 50 percent. An eerie movie reminiscent of a Hollywood alien film illustrated how these bacteria attack lung epithelial cells by injecting toxins into the cells through a specialized bacterial channel. Work from Dr. Wiener-Kronish and her collaborators have identified the proteins that form this channel and have developed antibodies against some of them. Despite the initial impression, at least on my part, that Pseudomonas was going to kill us all, the talk ended with a hopeful outlook that development of antibody-based therapeutics against Pseudomonas was in an advanced stage and that we may soon have effective prophylaxis and treatment for this deadly bug.

**NIH Session**

Story Landis, Ph.D., gave the NIH session talk. Dr. Landis was recently appointed Director of the National Institute of Neurological Disorders and Stroke (NINDS). Her talk was a summary of the missions of NINDS, the sorts of scientific questions that NINDS funds and the budgetary outlook for the coming year. While the National Institute of General Medical Sciences funds the majority of NIH-funded anesthesiology research, Dr. Landis pointed out that NINDS funds a number of other scientific areas of interest to us. In particular, mechanisms, prevention and treatment of ischemic cell death, pain research, and basic mechanisms of neuronal signaling encompass the efforts of a large number of anesthesiology investigators. As for the budget outlook, Dr. Landis did her best to paint as optimistic a picture as possible. She made it clear, however, that for a variety reasons, the budget at NINDS and throughout NIH will be tight for the foreseeable future.

**Oral Presentations**

The oral presentations were uniformly outstanding and at the same time topically diverse. All oral presentations and poster-discussion titles and authors are listed at < www.auahq.org/Final/AbstractPresenters.pdf. >

Three talks were given by the Massachusetts General Hospital/Harvard anesthetic mechanism group. The three speakers discussed the latest work from their respective laboratories on the nature of general anesthetic binding sites on proteins. Another molecular-level talk reported biochemical studies defining the dantrolene binding site on ryanodine receptors. Four talks described rodent studies exploring the efficacy of novel therapeutics for spinal cord ischemia, sepsis-induced multiorgan failure, amitriptyline-induced cardiotoxicity and arteriovenous malformations. Knockout mice were used for another study that suggested a protective role of beta-2-adrenergic receptors against cardiac myocyte death. Finally, three human studies were reported: one examined the effects of general anesthetics on explicit memory of human volunteers; another showed that nicotine nasal spray was surprisingly effective as a postoperative analgesic adjunct; and the third study reported the results of a large clinical trial comparing common prophylactic regimens for postoperative nausea and vomiting.

*C. Michael Crowder, M.D., Ph.D.*

**Poster-Discussions**

The poster-discussion and poster presentations were equally eclectic. Unfortunately space does not permit their listing here. Again the titles of these abstracts are posted on the AUA Web site. Of note both the poster-discussions and posters were presented in formal sessions this year. This was a change from recent meetings where the posters were only viewed during coffee breaks. In addition the posters were grouped by topic. Nine posters examined various aspects of cardiac and neuroprotection. Another nine reported clinical studies. A third set of posters fell into a loose collection that examined pain, immunity or coagulation questions. Finally, a smaller group of five posters reported on basic work in molecular neurobiology.

In summary, although the number of abstracts was down from the previous year, the overall quality of the presentations and participation by attendees was excellent, continuing the tradition of the AUA Annual Meeting as a forum for presentation of the best work in anesthesiology. I look forward to next year's meeting in Baltimore, Maryland, and hope to see your abstract submission this winter.

**For a complete list of titles and authors of the Annual Meeting Oral Presentations and Poster Discussions, visit**

**<www.auahq.org>**

**Then click on the abstract link under**

**"Current News"**

# EAB Report: Physician competency and patient safety

*Jonathan B. Mark, M.D., Chair*
*Educational Advisory Board*

The AUA Educational Advisory Board (EAB) offered a number of thought-provoking presentations that focused on physician competency and patient safety in a two-day program during the AUA 2004 Annual Meeting on Friday morning and Saturday afternoon.

This year the discussion centered on the practicing anesthesiologist rather than our trainees. The opening panel was titled "From Recertification to Maintenance of Certification: An ABA Perspective." In this panel, Patricia A. Kapur, M.D., Secretary of the American Board of Anesthesiology (ABA), described in detail the new Maintenance of Certification in Anesthesiology (MOCA) program that is currently being phased into practice by ABA. Bruce F. Cullen, M.D., American Society of Anesthesiologists (ASA) Vice-President for Scientific Affairs, complemented Dr. Kapur's discussion with his description of ASA's attempts to enrich its continuing medical education offerings and better meet the needs of practicing anesthesiologists, including those practicing in subspecialties. Perhaps the most public expression of the impact of their presentations was offered by Edmond I. Eger II, M.D., from the University of California-San Francisco. He came to the microphone during the question period and explained that, contrary to his expectations of being "bored out of my mind," he found the panel very interesting and appreciated the update on these efforts by both ABA and ASA to advance the quality of clinical practice.

***… [O]ther physicians, including pediatricians and emergency medicine physicians, are now carrying out procedures and practices historically considered to be the exclusive purview of an anesthesiologist.***

The second EAB panel examined issues in patient safety, beginning with a lecture by Steven J. Barker, Ph.D., M.D., called "Keeping our Patients Safe: When Should You Call for an Anesthesiologist?" Illustrating his points with a series of clinical case reports, Dr. Barker emphasized how other physicians, including pediatricians and emergency medicine physicians, are now carrying out procedures and practices historically considered to be the exclusive purview of an anesthesiologist. Just two of the many thought-provoking scenarios described by Dr. Barker regarded whether neonatologists should administer propofol for general anesthesia in the intensive care unit or whether emergency room doctors should attempt fiberoptic intubation in high-risk patients.

Paul R. Barach, M.D., M.P.H., University of Miami, continued the theme of patient safety with his talk "Studying Patient Safety: Important Questions and Innovative Research Methods." It is clear that improvements in patient safety will result, in part, by eliminating rare untoward events, but studying them using traditional quantitative methodologies has been problematic. Dr. Barach described a number of academic approaches adopted from the social sciences and human factors research that offer promise for investigating these problems in patient safety. He described ethnography, grounded theory, phenomenology and focus groups as examples of methods his research team has applied to the study of medical error and patient injury.

*Jonathan B. Mark, M.D.*

The final speaker sponsored by EAB was Daniel Greenstein, University Librarian and Executive Director of the California Digital Library in Oakland. Dr. Greenstein's presentation, "Medical Libraries and Information Services: Current Crisis and Future Solutions," addressed a topic that has been on the minds of all in the audience who have seen their university libraries forced to make difficult choices and eliminate many valuable resources because of fiscal constraints and wildly escalating subscription fees. Dr. Greenstein provided a stimulating and fitting conclusion to our Annual Meeting. He implored us to recognize that this is not a "library" crisis but rather an academic crisis that we all share and must solve together.

EAB will organize next year's program over the summer months. Peter Rock, M.D., University of North Carolina-Chapel Hill, has assumed the Chair of EAB, and I know that he looks forward to your input and suggestions for the 2005 Annual Meeting in Baltimore, Maryland. Any input can be sent to <prock@aims.unc.edu>.

I want to thank the membership for the privilege of serving on EAB and chairing this committee over the past four years.

*Jonathan B. Mark, M.D., at podium, Bruce F. Cullen, M.D., middle, and Patricia A. Kapur, M.D., discuss the roles of ABA and ASA in continuing medical education.*

# 2004 Treasurer's Report

*Lydia A. Conlay, M.D., Ph.D., 2002-04 Treasurer*

*The following report was presented by Dr. Conlay at the AUA 2004 Annual Membership Business Meeting in Sacramento, California, last May.*

The Association is in good financial health with assets totaling $338,294* invested in bank CDs at 1.45 percent and 1.75 percent interest and in a checking account at the Northern Trust Bank of Illinois [Figure 1]. Fiscal Year 2003 ended with a $25,003 profit. (Please note that the corporate donations for that year totaled $30,000 [Figure 2].) Almost half (48 percent) of AUA's assets, $160,000, reflect corporate donations received since acceptance of such donations was implemented five years ago [Figure 3]. The AUA Annual Meeting continues to essentially break even on its operations with a profit of $13,621 from the meeting in Milwaukee, Wisconsin, last year [Figure 4].

There have been no additional changes in budgetary and accounting practices; however, the procedures previously put in place have been continued. For the fifth year, an annual budget has been submitted to Council for its approval. Accounting procedures have continued on an accrual basis for the third year, and the Association's finances have been consolidated with all expenses now handled by AUA management. Check-writing controls continue with approval of invoices by the Treasurer followed by the issuance of a check by AUA management. The President and Treasurer also receive monthly financial statements of accounts, income, expenses and dispersements.

The Council has considered comments from the membership regarding the relatively high registration fee for the Annual Meeting. In an effort to encourage attendance, the Council has once again reduced the registration fee and, to offset this change, has increased dues. This contribution from dues to the Annual Meeting is now shown as a line item on the Annual Meeting Sub-Budget. The relationship between Annual Meeting registration fees and dues is shown below:

| | Registration Fee | Dues |
|---|---|---|
| FY 2003 | $495 | $125 |
| FY 2004 | $425 | $150 |
| FY 2005 | $300 | $200 |

A $35,000 donation to the Foundation for Anesthesia Education and Research was recommended for the current fiscal year.

*As of December 31, 2003, end of the fiscal year.

**Figure 1: Asset Allocation**


**Figure 2: End of Year — 2003**

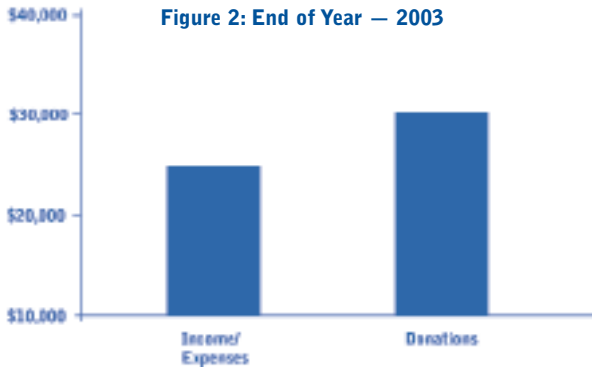



**Figure 3: Total Assets (as of 12/31/03)**

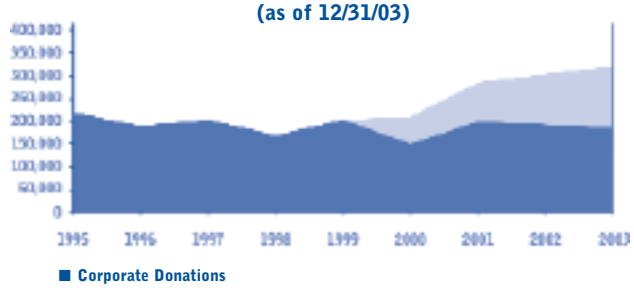
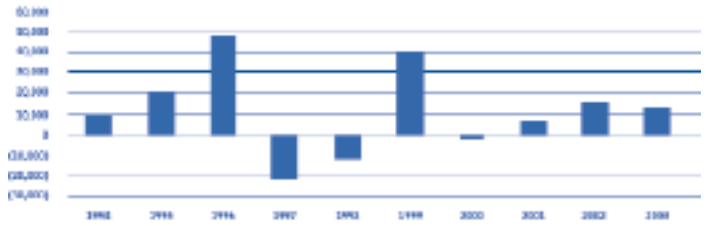



**Figure 4: Annual Meeting P/L (excludes corporate donations)**



# ASRA-PM: Here to Stay

*Terese T. Horlocker, M.D., President*
*American Society of Regional Anesthesia and Pain Medicine*

*"Regional anesthesia has come to stay. Its development and progress have been slow, principally because the anesthetist must have an accurate knowledge of anatomy and a high degree of technical skill in order that the anesthesia may be safe and satisfactory, and that the operation not delayed."*

These words by surgeon William J. Mayo, M.D., opened the foreword to the book *Regional Anesthesia, Its Technic and Application* by Gaston Labat, M.D. Published in 1922, Dr. Labat's text popularized regional anesthesiology in the United States. The ongoing relevance and success of the subspecialty was documented on August 2, 1923, with the founding of the American Society of Regional Anesthesia.

The art and the science of regional anesthesiology have progressed significantly over the last century, resulting in improved patient safety and increased success rates. The frequency of serious complications related to regional anesthesia continues to decrease and is similar, if not superior, to that of general anesthesia. Improved methods of neural localization and imaging have facilitated accurate needle/catheter placement. Most importantly prospective, randomized clinical investigations have demonstrated improved outcomes for patients undergoing major surgical procedures when regional anesthesia and analgesia are utilized. Overall, concerns regarding safety, success rate and efficacy have been addressed.

It is noteworthy, however, that several of the early concerns have changed little. For example an understanding of anatomic relationships, neural innervation and physiology remain paramount in the application of regional anesthetic and analgesic techniques. Many clinicians do not have ready access to an anatomy laboratory, and classic anatomical atlases were constructed by anatomists, not regional anesthesiologists, resulting in illustrations that depict neural anatomy with the "wrong" limb orientation and/or cross-sectional view. Ongoing pressures to increase operating room efficiency result in confrontations regarding block time and time-to-hospital dismissal. These issues remain to be reconciled.

The American Society of Regional Anesthesia and Pain Medicine (ASRA-PM), initially ordained the Labat Society, is well-suited to the challenge. The Society's mission is to associate physicians and scientists who are engaged in regional anesthesia for surgery, obstetrics and pain medicine; to encourage education and research in these areas for the benefit of physicians and the public; and to publish the highest quality scientific information on these subjects. ASRA's activities in these arenas are briefly summarized below.

• ASRA-PM remains the largest subspecialty society in anesthesiology. Membership continues to rise; there are approximately 7,300 members, including physicians and scientists, and a rich international distribution.

*Terese T. Horlocker, M.D.*

• The Society will continue to sponsor both an Annual Spring Meeting on Regional Anesthesia and an Annual Fall Meeting on Pain Medicine. Both annual meetings will emphasize evidence-based analysis to support innovative as well as historical treatment modalities. Oscar A. de Leon-Casasola, M.D., Roswell Park Cancer Institute, Buffalo, New York, Program Chair of the 2004 fall program, has devised a cutting-edge and clinically relevant meeting. Nationally and internationally recognized speakers in pain management will provide lectures both in basic science and clinical care. A "Special Session of Palliative Care and End-of-Life Issues" is scheduled. The number of interactive sessions, including cadaver and fluoroscopy workshops, also has been increased in 2004 due to overwhelming support and requests. The meeting will take place on November 11-14, at the Pointe Hilton at Squaw Peak, Phoenix, Arizona.

Honorio T. Benzon, M.D., Chair of the 2005 spring program, has continued the evolution of the regional anesthesiology meeting. Following the precedent of previous consensus conferences on neuraxial anesthesia and anticoagulation and the 2004 Conference on Infectious Risks of Regional Anesthesia last March, a multidisciplinary, comprehensive (one-day) review of "Complications of Regional Anesthesia" has been planned. In addition, a four-hour, hands-on session on "Neural Localization Using Ultrasound" has been added as a special workshop.

The Labat and Bonica lectureships continue to epitomize lifetime achievements in regional anesthesiology and pain medicine. David L. Brown, M.D., gave the 29th Labat Lecture at the Annual Spring Meeting. The Bonica lecturer at the third Annual Fall Meeting in November will be Daniel B. Carr, M.D., who will discuss "Pain Treatments: Elegant Theories, Inelegant Universe."

• The ASRA Carl Koller Memorial Research Fund has been increased to a total of $50,000 biennially to support research related to any aspect of local anesthetics and regional anesthesiology and their application to surgery, obstetrics and pain control. The purpose of the grant is to encourage anesthesiologists and other researchers who are interested in this field. Application deadline was April 1, 2004, with the award starting July 1, 2004. Details are available on the Society Web site at <www.asra.com> by clicking on "Research."

ASRA also co-sponsors, with the Foundation for Anesthesia Education and Research (FAER), a Research Starter Grant.

*Continued on page 8*

# Lessons From B School — Strategic Planning

*W. Andrew Kofke, M.D., Editor*
AUA Update

Strategic planning is the "art and science of formulating, implementing and evaluating cross-functional decisions that enable an organization to achieve its objectives."[1] It is an essential element of success in any organization. It has been well developed in the business sector and used in academics. It can be applied at all levels of a university from division or subspecialty units on up to and encompassing the entire university. I will review the basic principles of strategic planning, review some of the tools and present a sample strategic analysis of a mythical anesthesiology department.

These are the primary elements of a strategic analysis:

1. Identify the department's key features (who they are and what they are about — the mission statement);
2. Perform the analysis;
3. Identify potential strategic plans, evaluate each and make recommendations.

Good strategic planning is mostly art, instinct and common sense. It can be characterized into four basic types: 1) integration strategies, 2) intensive strategies, 3) diversification strategies and 4) defensive strategies. With an *integration* strategy, one aims to increase control or ownership of distributors, suppliers or competitors; for example, getting department members into hospital leadership or buying feeder pain clinics or critical care practices.

An *intensive* strategy is aimed at increasing sales and distribution of one's product. So an anesthesiology department may seek to increase market penetration by expanding into the community or introducing new off-site anesthesia markets.

In *diversification* strategies, the organization is trying to expand, adding new but related products or services such as an electronic intensive care unit service or medical direction of a respiratory therapy business.

*Defensive* strategies include joint ventures where separate organizations may cooperate on a project to minimize risk, e.g., jointly developing a neurointensive care unit service with other departments; or there may be retrenchment through cost and asset reduction, which, for example, might result in selling a money-losing pain or preoperative evaluation clinic or physical assets.

How does one rationally pick the best strategies? The steps in an anesthesiology department's strategic analysis follow:

1. **Identification of the department's key features.** Identify the department's key qualities, vision/mission statement and role in the hospital/medical school.

2. **A detailed evaluation of internal qualities and external factors.** A typical tool for this is the SWOT analysis, although there are other approaches. Such an analysis entails a systematic evaluation of internal **S**trengths and **W**eaknesses, and external **O**pportunities and **T**hreats. Each item selected is then assigned an estimate of its importance. The issues to consider in evaluating the external environment include economic, social and cultural, demographic, environmental, political, legal, governmental, technological, competitive and customer issues. Categories of analysis for evaluations of internal strengths and weaknesses include management, marketing, financial, production, research and development, and information technology/computers.

3. **Identification of potential strategies and evaluation of each.** The above-noted analysis then allows one to systematically analyze all the important, relevant factors and allows formulation of potential strategies, which may entail interactions of these SWOT categories. For example, strategies based on internal strengths combined with external threats versus those based on internal weaknesses combined with external opportunities will result in different strategic plans. In evaluating a strategy, four criteria have been suggested by Richard Rumelt: 1) *Consistency*. Goals and policies of various strategies must be compatible and mutually supportive. What is good for one part of the department may be bad for another; 2) *Consonance*. This means that strategies need to be consonant with external trends. You do not cut back on your obstetric services if obstetric units are closing everywhere else in town and new obstetricians are in the pipeline; 3) *Feasibility*. Any plan, of course, must be within the realm of your department's ability to do it; and 4) *Advantages*. A strategy must offer competitive superiority (resources, skills or position) to the department.

4. **Recommendations.** The final part of the analysis is to then combine steps one, two and three to produce recommendations. The recommendations include identifying the critical or most important strategic plans with inclusion of timetables and specific actions and steps that need to be taken. An example of a SWOT analysis and a series of recommendations are shown in the table on page 7 (internal weaknesses excluded to save space).

This article was based on David FR. *Strategic Management Concepts*. 7th ed. Upper Saddle River, NJ: Prentice Hall; 1999, and my lecture notes from a course given by Neil Bucklew, Ph.D., West Virginia University.

**Editor's Note:** *I am looking for other anesthesiologist-M.B.A.s (or M.P.H.s or others with similar business/management degrees) interested in contributing articles such as this one. Please send ideas or articles to <kofkea@uphs.upenn.edu>.*

## Sample Partial SWOT Analysis of Mythical Department of Anesthesiology

| | A | B | C | D | E | |
|---|---|---|---|---|---|---|
| | Internal Factors | Internal Strengths | External Factors | External Opportunites | External Threats | Strategy (contributing cells): |
| 1 | Management | Hospital management trusted | Economic | Prosperous community | With capitation, other depts. may seek to decrease anesth. dept. RVU remuneration | Ensure maintenance of academic perks (E2, E11, D9, D7, D11, D13, B6, B5, B7, B8, B9, B10, B11) |
| 2 | Marketing | Anesthesia dept. teaches in years 1-2 of med school | | Demand for pain management services. Pain is No. 1 cause of doctor office visits. | Many competitive, high-paying private-practice jobs with same job but higher salary | Seek institutional suport to cover startup inefficiency of new programs (F5, F6, F7, F8, E11, B5, B10, B11) |
| 3 | Financial | Profitable & busy | | Demand for outpatient O.R. facility | Surgicenter faculty recruitment will draw down reserves | Develop surgicenter (E9, E12, D1, D3, D4, D10, D12, B3, B12) |
| 4 | Production | Very busy ICU, OB and OR | | Near monopoly power with payers | High cost of living depressing recruitment | Develop pain clinic and funded pain research program (F9, E5, E6, E8, E9, E15, E17, C15, C14, C11) |
| 5 | | Good education program | | NIH RFAs for pain | Anesthesia not a big public health problem | Signing bonus or loan repayment for new faculty, set equal to overall recruitment costs (E2, E4, D6, B3) |
| 6 | | Several disease-oriented programs | Social/cultural demographics | Family-oriented community | Minimal SICU role of anesthesia | Develop a CCM fellowship (E1, E5, E6, D9, D12, B1, B4, B5, B10, B13) |
| 7 | Research and Development | Very strong university research environment | | Med student interest in anesthesia increasing | Day of call considered "academic time" by chair but "rest time" by faculty | Gain control of anesthesia in affiliate hospitals (E1, E2, E9, E10, E11, D1, D4, D10, D12, B1, B12) |
| 8 | | NIH funding in dept. | Environment | Unpolluted air and water | Geographically isolated | Develop cardiac anesthesia and OB fellowships (E12, D9, D13, B3, B4, B5, B6, B7, B8, B9, B10) |
| 9 | | Lab space for anesthesiology | Political | State senator chair of education committee | Dems in state legislature expected to oppose more med school funding | Recruit clinical research faculty to collaborate in clinical trials center (E5, E7, D5, D7, B4, B7, B8, B10, B11, B12) |
| 10 | | Planned clinical research center | | Planned spinoff of hospital to be independent of university | University "stole" $40 million from hospital | |
| 11 | | PET available | | NIH-friendly president | Heavily unionized | |
| 12 | Information Technology | Good info system in O.R. | Competitive | No competing tertiary care center | HMOs may develop a competing tertiary care center | |
| 13 | | Network on floors | | Planned clinical trials center | | |

# ASRA: Here to Stay

*Continued from page 5*

Currently the two grants with ASRA co-sponsorship are both related to the field of pain medicine and involve investigations in the areas of acute tolerance to opioid-induced analgesia and anesthetic preconditioning.

- For the second year, ASRA will award a $1,000 stipend to five residents or pain fellows to facilitate attendance at the annual fall meeting and workshops. (This Resident Research Award also is available to five residents and/or fellows to attend the spring meeting.) The intention of this scholarship is to stimulate academic activity through attendance and interaction with program faculty as well as to encourage publication of completed work in the journal *Regional Anesthesia and Pain Medicine*.

Regional anesthesiology *and* ASRA-PM are here to stay. The specialty continues to advance, perpetually balancing scientific achievements, medicolegal issues and economic constraints. Dr. Labat, a surgeon himself, understood the surgeon's point of view regarding block failures and surgical delays. Yet he remained dedicated to the application of regional anesthetic and analgesic techniques. Dr. Labat concluded his book by writing, "Regional anesthesia is an art. Remembering that even experts may fail, we should try often and again, observing scrupulously its principles, until we succeed."

# Safety First!


Photo by Steven J. Barker, Ph.D., M.D.

***"Ladies and gentlemen, this is the captain speaking: First, I'd like to thank you for choosing to fly our airline. As we taxi out to the runway, please make yourself comfortable … and for those of you sitting on the right side of the plane … please look to your LEFT!"***