Simulation technology:

The current state of the art
FEATURES

The College should be instrumental in adapting simulators to education 10
Gerald B. Healy, MD, FACS

A critical approach to medical simulation 12
Steven L. Dawson, MD

2003 state legislative sessions: New opportunities for change 19
Jon H. Sutton

The origins of regulated resident work hours: New York and beyond 23
Gregory S. Cherr, MD

Statement on scope of practice 28

DEPARTMENTS

From my perspective 4
Editorial by Thomas R. Russell, MD, FACS, ACS Executive Director

FYI: STAT 7

Dateline: Washington 8
Division of Advocacy and Health Policy

In compliance... 29
...with HIPAA rules
Division of Advocacy and Health Policy

Keeping current 30
What’s new in ACS Surgery: Principles and Practice
Erin Michael Kelly

Socioeconomic tips of the month 32
ICD-9-CM changes
Division of Advocacy and Health Policy

About the cover...

This month’s cover features an augmented reality view of the chest subsequent to insertion of a test tube. Simulation technology of this sort may prove beneficial in surgical training, allowing residents to make mistakes “in realistic, but not real, situations where patients are not put at risk,” according to Steven L. Dawson, MD, author of “A critical approach to medical simulation,” p. 12.

Also in this issue of the Bulletin, Gerald B. Healy, MD, FACS, ACS Regent, explains why “The College should be instrumental in adapting simulators to education,” p. 10. Dr. Healy’s proposals are drawn from recommendations made during a College-sponsored symposium on the subject.
NEWS

Richard R. Sabo installed as 83rd ACS President

F. William Blaisdell receives Distinguished Service Award

College names four Honorary Fellows

Citation for Prof. Alan C. Bird
Lee R. Duffner, MD, FACS

Citation for Prof. Juan Carlos Parodi
Paul E. Collicott, MD, FACS

Citation for Prof. Graham M. Teasdale
Edward R. Laws, MD, FACS

Citation for Sir Magdi H. Yacoub
William S. Pierce, MD, FACS

Web site answers common HIPAA/privacy questions

Meeting of Young Surgeons Representatives:
Reflections of a young surgeon
David R. Jones, MD, FACS

Mission group seeks surgeons for trip to Dominican Republic

Text chronicles the life and times of Evarts Graham, MD, FACS
Officers and staff of the American College of Surgeons

Officers

Richard R. Sabo, MD, FACS, Bozeman, MT
President
Amilu S. Rothhammer, MD, FACS, Colorado Springs, CO
Second Vice-President
John O. Gage, MD, FACS, Pensacola, FL
Secretary
John L. Cameron, MD, FACS, Baltimore, MD
Treasurer
Thomas R. Russell, MD, FACS, Chicago, IL
Executive Director
Gay L. Vincent, CPA, Chicago, IL
Comptroller

Officers-Elect (take office October 2003)

Claude H. Organ, Jr., MD, FACS, Oakland, CA*
President
Anna M. Ledgerwood, MD, FACS, Detroit, MI
First Vice-President
Murray F. Brennan, MD, FACS, New York, NY
Second Vice-President

Board of Regents

Edward R. Laws, Jr., MD, FACS, Charlottesville, VA
Chair*
Edward M. Copeland III, MD, FACS, Gainesville, FL
Vice-Chair*
Barbara L. Bass, MD, FACS, Baltimore, MD
L. D. Britt, MD, FACS, Norfolk, VA
William H. Coles, MD, FACS, New Orleans, LA
A. Brent Eastman, MD, FACS, La Jolla, CA
Richard J. Finley, MD, FACS, Vancouver, BC
Josef E. Fischer, MD, FACS, Boston, MA
Alden H. Harken, MD, FACS, Denver, CO*
Gerald B. Healy, MD, FACS, Boston, MA
Charles D. Mabry, MD, FACS, PineBluff, AR
Jack W. McNinch, MD, FACS, San Francisco, CA*
Mary H. McGrath, MD, FACS, Maywood, IL*
Robin S. McLeod, MD, FACS, Toronto, ON
Carlos A. Pellegrini, MD, FACS, Seattle, WA
John T. Preskitt, MD, FACS, Dallas, TX
Ronald E. Rosenthal, MD, FACS, Wayland, MA
Richard R. Sabo, MD, FACS, Bozeman, MT*
Maurice J. Webb, MD, FACS, Rochester, MN*

*Executive Committee

Board of Governors/Executive Committee

J. Patrick O'Leary, MD, FACS, New Orleans, LA
Chair
Timothy C. Fabian, MD, FACS, Memphis, TN
Vice-Chair
Julie A. Freischlag, MD, FACS, Los Angeles, CA
Secretary
Steven W. Guyton, MD, FACS, Seattle, WA
Mary Margaret Kemeny, MD, FACS, Jamaica, NY

Rene Lafreniere, MD, FACS, Calgary, AB
Courtney M. Townsend, Jr., MD, FACS, Galveston, TX

Advisory Council to the Board of Regents
(Past-Presidents)

W. Gerald Austen, MD, FACS, Boston, MA
Henry T. Bahnson, MD, FACS, Pittsburgh, PA
Oliver H. Beahrs, MD, FACS, Rochester, MN
John M. Beal, MD, FACS, Valdosta, GA
Harvey W. Bender, Jr., MD, FACS, Nashville, TN
George R. Dunlop, MD, FACS, Worcester, MA
C. Rollins Hanlon, MD, FACS, Chicago, IL
James D. Hardy, MD, FACS, Madison, MS
R. Scott Jones, MD, FACS, Charlottesville, VA
M. J. Jirkiewicz, MD, FACS, Atlanta, GA
LaSalle D. Leffall, Jr., MD, FACS, Washington, DC
William P. Longmire, Jr., MD, FACS, Los Angeles, CA
Lloyd D. MacLean, MD, FACS, Montreal, PQ
William H. Muller, Jr., MD, FACS, Charlottesville, VA
David G. Murray, MD, FACS, Syracuse, NY
David C. Sabiston, Jr., MD, FACS, Durham, NC
Seymour I. Schwartz, MD, FACS, Rochester, NY
George F. Sheldon, MD, FACS, Chapel Hill, NC
G. Tom Shires, MD, FACS, Las Vegas, NV
Frank C. Spencer, MD, FACS, New York, NY
Ralph A. Straffon, MD, FACS, Shaker Heights, OH
James C. Thompson, MD, FACS, Galveston, TX

Executive Staff

Executive Director: Thomas R. Russell, MD, FACS
Division of Advocacy and Health Policy:
Cynthia A. Brown, Director
American College of Surgeons Oncology Group:
Samuel A. Wells, Jr., MD, FACS, Group Chair
Communications: Linn Meyer, Director
Division of Education:
Ajit K. Sachdeva, MD, FACS, FRCS, Director
Executive Services: Barbara L. Dean, Director
Finance and Facilities: Gay L. Vincent, CPA, Director
Human Resources: Jean Defourny, Director
Information Services: Howard Tanzman, Director
Journal of the American College of Surgeons:
Wendy Cowles Husser, Executive Editor
Division of Member Services:
Paul E. Collicott, MD, FACS, Director
Division of Research and Optimal Patient Care:
R. Scott Jones, MD, FACS, Director
Cancer:
David P. Winchester, MD, FACS, Medical Director
Trauma:
David B. Hoyt, MD, FACS, Medical Director
Executive Consultant:
C. Rollins Hanlon, MD, FACS
As a body representing all of surgery, the College:

• Provides a cohesive voice addressing societal issues related to surgery.
• Is working toward having an increasingly proactive and timely voice in setting a national tone and agenda with regard to health care.
• Is dedicated to promoting the highest standards of surgical care through education of and advocacy for its Fellows and their patients.
• Serves as a national forum through which surgeons can reinforce the values and ethics that traditionally have characterized the surgical profession.

There IS strength in numbers.

Our members represent every specialty, practice setting, and stage of practice. Their views and concerns are helping to shape the College’s agenda for the future.

If you aren’t a member of the American College of Surgeons, apply for Fellowship today. If you are already a member, maintain that status and consider getting involved in the work of the College.

Only by banding together and using our collective strength can we bring about positive change for our patients and ourselves—and for surgeons of the future.

Here are some of the many benefits being a member of the College affords you:

• Free registration at the Clinical Congress
• Access to the College’s free coding consultation hotline
• ACS NewsScope, the College’s weekly electronic newsletter
• The Bulletin of the American College of Surgeons
• The Journal of the American College of Surgeons
• Access to all College-sponsored insurance, credit card, collection service, and other helpful programs
• Access to the College’s free job and resume data bank

Information on becoming a member of the College and an application form are available online at: http://www.facs.org/dept/fellowship/index.html. Or contact Cynthia Hicks, Credentials Section, Division of Member Services, via phone at 312/202-5284, or via e-mail at chicks@facs.org.
Following the successful completion of the 88th annual Clinical Congress in San Francisco, the College’s leadership, staff, and I are reviewing and attempting to put in place plans to implement many of the excellent ideas and suggestions that emerged during the week. Following is a brief overview of the meeting itself and a discussion of some of the issues and proposals that were considered during the Clinical Congress.

**The program**

This year’s Clinical Congress was well attended, with more than 15,400 participants coming to San Francisco for the meeting. I am pleased to report that many of the postgraduate courses and general sessions were well subscribed and well received. To help make this year’s meeting more attractive and user-friendly for our Fellows, we implemented some substantial changes, which included reducing the length of the educational program by one day, combining the Opening Ceremony with the American Urological Association Lecture, and hosting a very open and inclusive reception for new Fellows of the College following the Convocation ceremony. I believe all of these changes added significantly to the success of this year’s meeting. Further improvements are under consideration and are likely to be activated in the very near future.

As always, my sincere appreciation goes out to all of the volunteers who gave so generously of their time in developing and participating in the courses and to the members of the Program Committee, which planned the content of the meeting. I believe the staff performed in an exemplary fashion, as usual, making this a most worthwhile and successful educational event.

**Surgical training**

The dialogue, discussion, and debate that occurred at various venues during the meeting were also very helpful. The Board of Governors, for example, again examined issues related to the new era of surgical education, including resident work hours and related concerns about continuity of care, as well as the effectiveness of our academic environment in instilling professional values in residents. As many of you know, the College will host a workgroup discussion at our Chicago headquarters in December for the purpose of delving deeply into the issue of surgical training and the appropriate environment in which to conduct it. The panel will take an in-depth look at the direction in which the surgical profession appears to be going and at how we can prepare young surgeons for the future. Hopefully, this think tank will generate some specific ideas that will allow us to develop plans that are best suited to this changing environment.

“The programs and activities that took place during the Clinical Congress underscored the exciting new directions the College is undertaking that will benefit surgical patients, as well as surgeons themselves.”
Professional liability

Another very positive occurrence at this year’s meeting was the announcement and unveiling of an ACS-sponsored professional liability program. Because of concerns about the current situation with regard to professional liability insurance—especially lack of or limited access to coverage for some of our Fellows—the College has established a business relationship with The Doctors Company of Napa, CA, through which it is sponsoring a professional liability insurance program for its members. Since we announced this program, a number of surgeons throughout the country have requested information about it and expect to experience some relief with respect to their liability insurance costs. Although it remains important for the College to continue its effort to achieve the types of tort reform that were enacted in California through the Medical Injury Compensation Reform Act (MICRA) of 1975, I believe this insurance option will be a significant benefit to Fellows who are feeling the effects of the malpractice insurance crisis.

ACSPA

Throughout the week, there was continued discussion about the recently formed American College of Surgeons Professional Association (ACSPA) and the subsequent creation of a political action committee (PAC)—ACSPA-SurgeonsPAC. The ACSPA now has a PAC board in place, which is chaired by Andy Warshaw, MD, FACS, of Boston, MA, and it is well on its way to raising the money the profession will need to become a significant force in effecting the reform of some of the policies that are having a negative impact on health care today. The enthusiasm for the PAC and its potential to provide surgeons with better access to legislators and to allow the ACSPA to act as a bridge between some of the other surgical specialties is quite interesting to observe.

Board of Regents

Some significant changes were made and plans enacted during the Board of Regents meeting, which occurred just prior to the opening of the Clinical Congress.

For example, the Regents agreed to increase the size of the Board from 18 to 21 members so that we will have better representation of specialties that have advisory councils but that heretofore have not officially been represented. These specialties are pediatric surgery, colon and rectal surgery, and vascular surgery. This move is an attempt to ensure that all areas of surgery are fairly represented in the College’s decision-making process.

I also am pleased to report that the Regents approved the concept of developing a center for surgical patient safety, which will be housed in the Murphy Memorial Auditorium, one of two historic buildings on Erie Street in Chicago, IL, the College owns. The Regents approved the idea of retaining ownership of these buildings through a partnership arrangement with an outside entity that could assist in the process of obtaining the funds needed to update and maintain the properties for a patient safety center and other uses.

Dues increase

The programs and activities that took place during the Clinical Congress underscored the exciting new directions the College is undertaking that will benefit surgical patients, as well as surgeons themselves. They do, of course, require substantial financial resources if they are to be successful and achieve their goals.

For that reason, last year, after debate by the Governors’ Committee on Fiscal Affairs and the

Working with industry

Also during the Clinical Congress, the College explored appropriate new ways to interact with industry by hosting a breakfast meeting for approximately 60 representatives of health care manufacturers. Participants in this meeting looked at ways in which we could truly partner with industry to help manufacturers in assessing new technology and allow the College to become more active in this process.
full Board of Governors, the American College of Surgeons decided that a dues increase was necessary. However, because of the reimbursement difficulties surgeons experienced last year, the dues hike was postponed for one year. At this point in time, a $65 increase for U.S. Fellows and a $15 raise for Canadian Fellows will be implemented in the upcoming dues cycle.

In thinking about this issue, it is important to note that this is the first time the College has raised its dues in more than 11 years, and that they have remained static at $375 for domestic membership for that entire period of time. Moreover, I can assure all of our members that we are fiscally responsible at the College, and that we have added many new programs but with a minimal increase in personnel. The fact of the matter is that over the past 11-plus years, inflation has continued to weaken the purchasing power of the dollar, which is one of the reasons why the College felt it had to raise dues if important existing programs are to be maintained and new activities successfully established.

We believe that these additional programs will be extremely important in maintaining the vitality and relevance of the College for all of its members and the patients they serve. The decision to raise the dues was unanimously approved by the Board of Governors. I trust that all of our members will understand the need for this increase, which is moderate in terms of dollars, but of tremendous value in helping us to carry out our activities while remaining fiscally responsible.

**Closing thoughts**

Again, my appreciation is extended to all individuals who worked so diligently to make this year’s Clinical Congress a success. In the very near future, we will be offering Web casts of some of the sessions from the meeting. We will also be offering an extensive collection of audiotapes and CD-ROMs of some of the sessions. Thus, Fellows who couldn’t physically be present in San Francisco can still benefit from the wonderful educational offerings that comprised the meeting.

Finally, whether it’s regarding the Clinical Congress or other activities or issues, please keep your suggestions and ideas coming.
At a meeting of the AMA/Specialty Society Relative Value Scale Update Committee in late September, ACS representatives successfully won the panel’s acceptance of a new methodology for assessing the amount of physician work involved in providing individual physician services. Such assessments of work—measuring both time spent and the “intensity” of a service—form the basis for a major portion of the payments made under the Medicare physician fee schedule. It has been shown that the methodology proposed by the College, which is based on the “intrawork per unit of time” or IWPUT, provides a clearer measure of the intensity of physician services and is particularly useful when evaluating high-risk, global services such as surgery.

Because of concerns about the current situation with regard to professional liability insurance—especially lack of or limited access to coverage for some of its members—the American College of Surgeons has established a business relationship with The Doctors Company. Through this relationship, the College is sponsoring a professional liability insurance program for its members. Founded by doctors for doctors, The Doctors Company—the leading national physician-owned professional liability insurer—provides medical malpractice protection for more than 26,000 physicians coast-to-coast. A mutually owned entity, The Doctors Company offers a unique product line and is a quality carrier as indicated by its “A” rating from A.M. Best Company. For more information about the program, call The Doctors Company at 800/352-0320 or visit http://www.thedoctorscompany.com.

Following his nomination by the American College of Surgeons, Rep. James C. Greenwood (R-PA) was recently announced as a 2003 winner of the American Medical Association’s Nathan Davis Award. The award is intended to recognize outstanding public service in the advancement of public health. Representative Greenwood was nominated by the College because of the broad scope of important health issues he has championed in recent years—ranging from medical liability reform to trauma system development.

ACS Executive Director Thomas R. Russell, MD, FACS, continues to spend considerable time visiting ACS chapters and other groups of importance to the College. In recent weeks, Dr. Russell attended the New Mexico Chapter meeting and the meetings of the San Francisco Surgical Society, the Western Vascular Society, and the Portland Surgical Society. He also visited the VA National Center for Patient Safety, gave a lecture and was a participant in a panel discussion at the University of California, Davis, and participated in Grand Rounds at Oregon Health Sciences University.

The Committee on Development is once again offering a seminar that addresses tax and estate planning for Fellows. The information-packed seminar provides the latest in effective strategies to preserve assets and is available for presentation at chapter meetings. For more information, contact fholzrichter@facs.org or call 312/202-5376.
The American College of Surgeons is a not-for-profit scientific and educational association of surgeons that was founded in 1913 to improve care for the surgical patient by setting high standards for surgical education and practice. Examples of activities conducted by the ACS include educational programs such as the Clinical Congress and standard-setting programs in cancer and trauma care.

The American College of Surgeons Professional Association is an affiliated not-for-profit corporation founded by the ACS Board of Regents in 2002 to develop new products and services to benefit surgeons and their patients. An initial effort being undertaken by the ACSPA is the formation of a political action committee (PAC) that will work to improve the legislative and regulatory climate in which surgeons practice. The American College of Surgeons Professional Association Political Action Committee (ACSPA-SurgeonsPAC) was established in October 2002 to work toward that goal.

The American College of Surgeons holds a restrictive 501(c)(3) tax-exempt status that limits the range of services it may provide to and on behalf of its Fellows. Notably, the College's tax classification forbids participation in any political activity. When the ACS Board of Governors in 2001 voted unanimously in favor of a College affiliate establishing a PAC, a new organization with the more flexible 501(c)(6) tax-exempt status had to be created. That affiliated corporation, the ACSPA, will manage a broader range of activities and services of benefit to surgeons and their patients, including an expanded legislative action program that features a PAC.

This new corporation allows the College to continue the standard-setting and educational activities that have always been at the heart of its mission. However, it also expands the opportunities to provide more direct benefits to surgeons and their patients. In addition to political activities, the ACSPA’s structure could allow us to create new educational and credentialing programs, provide management services to other associations, market new insurance and investment products, and more. For the present, however, the ACSPA will house only the expanded legislative action program.
**Do I need to choose between membership in the ACSPA or Fellowship in the College?**

No. Surgeons hold a single and seamless membership in both the College and in the ACSPA.

**Where do I send my dues payment?**

Beginning this year, check or credit card payments should be made to the American College of Surgeons Professional Association. The ACSPA will provide funds to the American College of Surgeons to support its ongoing scientific and educational activities. A portion of dues receipts will be retained by the ACSPA to finance the legislative support program.

**Will any of my dues dollars be spent on political activities?**

No. All political activities will be financed through voluntary, personal contributions made directly to the ACSPA-SurgeonsPAC.

**Are dues paid to the ACSPA still deductible from my federal income tax?**

A small portion of each ACSPA member’s annual dues will no longer be deductible from federal income taxes as a business expense. The exact dollar figure (somewhere in the range of 3 to 5%) will be shown on the back of your dues statement.

**What if I have questions?**

Questions about membership and the annual dues statements should be referred to the Division of Member Services, at 1-800/621-4111 or ms@facs.org. Questions about the ACSPA-SurgeonsPAC should be referred to Erin LaFlair, Political Coordinator, ACSPA, in the Washington Office at 202/672-1520, or e-mailed to acspa@facs.org
The College should be instrumental in adapting simulators to education

by Gerald B. Healy, MD, FACS, Boston, MA

As part of its major reorganization, the American College of Surgeons has rededicated itself to the education and training of surgeons everywhere. A significant part of the education of the surgeon of the twenty-first century may well involve the use of simulators. To gain insight into the value of simulators in medical education, the College sponsored a two-day symposium on the subject. This meeting was held in conjunction with the National Board on Educational Testing and Public Policy April 20-21 at Boston College, Chestnut Hill, MA.

Issues discussed

A cross-section of individuals—including surgeons, educators, engineers, and experts in educational testing—participated in this important discussion. Invited participants were divided into four discussion groups, including clinical, technical, assessment, and organizational.

The clinical group was asked to enumerate the qualities and skills that define surgical competency. In addition, this group considered simulation’s relationship with the initial development of these competencies and their lifelong maintenance.

The technical group was asked to try to determine the technical possibilities of surgical simulation and the focus of our efforts to use simulation to improve surgical education.

The assessment group was asked to determine the role that simulation might play in evaluating the clinical skills and outcomes that define surgical competency. In addition, this group was asked how an organization might validate the metrics and assessment techniques used.

Lastly, the organization group concentrated on conceiving a structure that might best support the focused effort to advance surgical education through simulation. This group also was asked to consider the key dimensions of a strategic plan and the management and financing of such an effort.

All groups met individually and then jointly to engender cross-fertilization of ideas and strategies. These sessions were unique in that they brought together multiple disciplines that before this meeting rarely interacted. This sort of collaboration led to a broadening of ideas, which brought the concept of the use of surgical simulators to a single proposition with four supporting recommendations.

Conclusions

The composite group concluded that the overwhelming need facing all surgeons is to improve patient safety and that simulation may play a major role in advancing that goal. Therefore, the conference participants have made the following recommendations to the Board of Regents.
The American College of Surgeons should establish itself as the steward and leader for improving the safety of the surgical patient. This role should be promulgated as a service to the public and to the College membership. This effort would require the establishment of a center or repository for stewardship related to all aspects of patient safety. In so doing, the College would establish itself as a visible educational resource that would evaluate new techniques, new technology, and surgical outcomes. The College also would assume the role of integrator of research objectives and funding related to simulation in surgical education and training. This work would relate to surgeons at all levels of development. The College would also advocate the use of simulation education/training in the professional growth and assessment of surgeons.

In relation to patient safety, the working premise would be that medical simulation would reduce surgical error by way of: (1) screening of potential surgeons for demonstrable aptitude; (2) providing initial training in surgical experiences; (3) promoting ongoing education of surgeons through a consistently reproducible process; (4) enabling periodic assessment of acquired surgical skills; and (5) maintaining proficiency through rehearsal of complex, patient-specific procedures.

The College would: (1) identify targets for simulation; (2) research, write, and implement the plan for medical simulation training; and (3) investigate sources of funding for the plan. The College would need to embark on an immediate national fund-raising effort to promote the use of simulation in surgical training, education, and assessment. Potential sources of funding would include federal agencies (such as the National Institutes of Health and the Department of Defense), industry, and private philanthropy.

The College should seize the opportunity to become the visible leader in patient safety initiatives. In promoting a comprehensive educational program that would include simulators as a critical piece and housing this effort in a visible center, the College could quickly be identified as a crucial patient advocate.

The participants in this meeting concluded that simulators should be used well into the future to teach, refine, and test surgical skills. Assessment techniques may be developed to validate these skills and relate them to patient outcomes with a high level of certainty. In addition, simulators may be joined with techniques that assess judgment and decision making. Finally, organizational structures and initiatives may be designed to place the College at the center of the patient safety issue in the U.S. while simultaneously enhancing the role of simulation in surgical education and training.

Dr. Healy is otolaryngologist-in-chief, Children’s Hospital, Boston, MA, and a Regent of the College.
A critical approach to medical simulation

by Steven L. Dawson, MD, Boston, MA

Editor's note: The following article is based on a keynote address that was originally presented at a workshop on surgical simulation co-sponsored by the American College of Surgeons, Boston, MA, April 20-21, 2002.

Physicians are justifiably proud of our residency experience, with long days and nights on call treating whoever "comes in the front door." We accept that the vagaries of illness and accidents will provide us with enough experience to prepare us for a lifetime of practice. We learn from older faculty members in large academic medical centers, training on rich and poor alike, but more frequently on the poor or uninsured. This traditional system dates back to Halsted, but has its origins in the ancient Egyptians, who would apprentice young boys to a master "mechanical healer" whom we would today call a surgeon. We accept these customs as necessary rituals of learning. Medicine's traditional methods of learning have been just that—traditional.

Yet surgeons must also remain current in the present state of the art and new methods that develop after the end of residency. When continuing medical education (CME) was introduced, we maintained our edge by attending didactic lectures or reading journals and answering CME quizzes. Hands-on animal courses provided us with certificates of attendance that demonstrated competence performing new procedures in surgery, cardiology, radiology, and other procedural specialties. These one- or two-day animal courses were accepted as valid learning methods for complex new surgical procedures because there was little alternative. As a result, organized learning of surgical techniques became a cottage industry of weekend pig courses with the experts. The educational role of organized specialty societies diminished.

At a two-day conference in Boston, MA, sponsored by the American College of Surgeons and the National Board on Educational Testing and Public Policy on April 20-21 of this year, leaders from the College met with experts from academic medical centers, educational testing designers, engineers, and computer scientists to discuss alternatives to the traditional methods of surgical learning, especially the use of medical simulation. As the opening lecturer for that meeting, I was able to demonstrate the current state of the art, and present the issues surrounding the development of medical simulation, the challenges that remain, and the potential roles that simulation could fulfill in lifelong medical learning. My comments were based upon my background as an interventional radiologist, an educator, and a researcher in the field of medical simulation. This article presents a summary of the points I made for the leaders of the College during that keynote lecture.

Note: During the meeting, the phrase "simula-
tion technology” was used to encompass the entire domain of computer-assisted learning techniques, from CD tutorials to interactive learning. The term “simulators” was used to describe skills trainers or procedural training systems that to a greater or lesser degree incorporate computers for presentation, control, and metrics. Most of the remainder of this article will discuss simulators as learning systems under the more global rubric of simulation technology.

Why simulation?
Organized medicine had the gauntlet thrown at its feet in 2000, when the Institute of Medicine released its report, To Err Is Human: Building a Safer Health System.¹ This report, which awakened the general public to the prevalence of medical errors, also challenged medicine to do better. According to this report, at least 44,000 Americans die from medical errors every year. In other words, the seventh leading cause of death in this country is being cared for by a physician. As part of the plan for improvement, the authors stated in their recommendations that health care organizations should incorporate proven methods of training such as simulation.

The key phrase in that statement is that we should adopt “proven methods of training.” In medical disciplines such as anesthesia, established curricula for team training and crisis management have demonstrated outcomes improvement after simulator training. In fact, in Massachusetts, anesthesiologists who have had simulator training receive a discount on their annual malpractice premiums. For anesthesia, simulation is a “proven method of training.” Surgical simulation, by comparison, is just beginning to define a course that will result in proven effectiveness. But there is much work to be done before College members can exchange today’s two-day for-profit pig courses for independent, sanctioned, validated training in new laparoscopic, endoscopic, or catheter-based techniques.

However, when we do create these new learning tools, a powerful educational revolution will occur. For example, in a simulation system, new techniques can be practiced over and over, alone or with a mentor, without the need for animals. Errors can be tracked while the operation continues until the surgeon recognizes the error. At that point, an effective simulator will have an UNDO button, and the operation can be “rewound” to a point before the error.² The surgeon can then practice the technique again, either on his or her own or under the eye of a tutor who could guide the trainee through the point of error safely. With a RESTART button, the correct technique can be practiced over and over until it becomes a natural response.

Mistakes would lose their consequences and become ways to learn. And one master surgeon’s new trick of the trade, one critical maneuver during an operation, could be learned in situ by every simulation user. The opportunity to learn something new in this way has never before been available to medicine.

Simulation also offers benefits outside of the realm of error reduction, for both novices and experts. It could:
- Permit learning in a completely safe and risk-free environment for patients.
- Refresh techniques for surgeons returning to practice after an extended absence.
- Correct for case-mix inequalities in a training program, so that what you learn in your residency doesn’t depend on what comes through the front door while you’re on call.

¹To Err Is Human: Building a Safer Health System, Institute of Medicine, National Academy Press, 2000.

²The VIRGIL™ Chest Trauma Training System.
• Allow examining boards to certify competence through a technical examination of skill rather than an oral discussion.
• Permit prototyping new procedures in silico, giving a whole new meaning to the phrase “the practice of medicine.”
• Allow biomedical engineers and designers to test new devices in a simulated environment.
• Eventually, with the proper design, permit patient-specific rehearsal of operations involving anomalous anatomy or other variants that would have bearing on intraoperative decisions.

For the purpose of this brief discussion, one more aspect of continuous professional learning deserves comment. While we are all familiar with the concept of a learning curve at the beginning of our careers, there is also a curve at the end of our careers. This decline in skills and judgment has traditionally been assessed by individual surgeons or chiefs of service. A mature, validated system of simulation-based education could offer for the first time a lifelong log of performance on standardized techniques, allowing measurement of skills independent of age or other arbitrary milestones.

What is required?
Most simulators today are designed as technical boxes that allows one to practice a series of hand-eye maneuvers without the benefit of performance measures. A few systems have been designed with metrics as an integral component of learning assessment, and studies showing transfer of knowledge from simulation to the operating room are just beginning to appear. To become a learning system, and not just an elaborate game, requires that designers carefully consider content, purpose, end-users, and eventual metrics that will be used to prove transfer of learning. The challenges that face the designers may be generalized into three broad areas:

• **Realism:** Realistic organ responses, realistic tissue-tool interactions, realistic visual display, and real-time interaction.
• **Authenticity:** Integrated educational content, clinically useful training, and validated transfer of learning.
• **Acceptability:** Testing in medical centers, acceptance by teaching physicians, and approval by specialty organizations, such as the American College of Surgeons.
In general terms, these three areas are, respectively, best addressed by research scientists, physicians, and organized medicine. But physicians must be involved at each level of content choice, system design, educational content, and validation measures. Without continuous involvement by informed medical advisors, system designers may create simulators that superficially resemble training systems, but that are neither clinically relevant nor educationally effective.

What is a simulator?

Simulators may be considered a broad taxonomy consisting of two classes—mannequin-based and computer-based. A third class, hybrid simulators, incorporating elements of both computer- and mannequin-based systems, is just being designed and will likely become the standard simulation architecture in future systems.

Mannequin-based systems, sometimes called realistic patient simulation, use a patient form as the trainee interface. These systems are most familiar in Advanced Cardiac Life Support and Advanced Trauma Life Support® (ATLS®) courses, and in anesthesia simulations. The system frequently incorporates extensive physiologic responses to drug administration, cardiac compression, intubation, or other predominantly external manipulations. They are excellent systems for team training and crisis management and have an accepted, validated role in anesthesia training. Drawbacks to the systems are their limited adaptability to operative training, relatively high faculty to trainee ratios and relatively high personnel training costs. Examples of such systems are the METI patient simulation systems and the Laerdal SimMan7 ATLS systems.

Computer-based simulations use a computer monitor and custom-designed instrument interfaces for interaction with the onscreen display. Because the systems are software-based, there is some degree of adaptability in procedures, and error tracking and correction can be performed easily. These designs easily integrate educational content either as an “upfront” introductory learning phase or as an integral component of the procedure—for example, when an error is committed, a literature review of anatomic variants that could contribute to the error or the likely outcome of similar errors can be called up by the trainee in a hypertext linked document. Drawbacks of these systems are the lack of proven efficacy of advanced systems, and the high development costs for what are currently individual research program efforts. A few commercially available systems have been created, from the MIST-VR basic skills training system (Mentice), which uses abstract graphics, to the CathSim IV access trainer (Immersion Corp.), to the most advanced system, which is called VIST (Vascular Interventional System for Training) (Mentice). The VIST system has been installed in Brussels to train interventional cardiologists in angioplasty, coronary stenting, pacemaker placement, and carotid interventions. During 2002, more than 2,000 physicians will learn these techniques using the VIST simulator.

Since surgical simulation is most likely to arise initially from the computer-based branch of this taxonomy, let’s examine in more detail the components that make up a computer-based system. An ideal system consists of the following parts:

- **Segmentation.** The anatomic area to be represented in the procedure is separated from the surrounding organs, giving an anatomic workspace that incorporates the organs likely to be involved in the procedure. The source data from which the organs are taken can be the visible human data, or cross-sectional imaging studies from a “generic” patient.
- **Tissue modeling.** This idea involves measuring the material properties of individual organs and then creating mathematical models of those properties so that the organ can be represented realistically in a computer program. For surgeons, a critical element of realism will be added when the graphical display of the organ actually feels like the organ. This is a daunting challenge and represents an area of cutting-edge biomedical engineering research at academic centers around the world.
- **Tissue-tool interactions.** Once the organ responses are known, and mathematical rules governing the behavior of the segmented anatomic data set have been formulated, computer programs that represent the collision and interactions between the surgical instrument and the tissue must be created, in order to allow the surgeon to manipulate the organs.
- **Haptics.** This term refers to the “feel” of the system. Haptics means the feedback that is pro-
vided by the system to the operator, and it is intimately related to both the tissue modeling and the tissue tool interactions mentioned above. The level of fidelity required for effective haptics response is another area of active research, especially as it pertains to the amount of feedback that needs to be apportioned between the visual aspects of the system and the “touch” of the system.

- **Visual feedback.** How does the system show the operator the procedure? Initial simulations used graphics methods available at the time they were developed, and frequently showed false color anatomy or crude abstract graphical representations of geometric shapes rather than actual organs. Some of the most common events in surgery, such as bleeding or the appearance of a suture, represent formidable graphics challenges in simulation research.

- **Physiology.** An ideal system will allow errors to occur and will also include physiologic models that represent the result of those errors. By inference, the physiology model will also accurately portray ongoing homeostatic states such as blood pressure, pulse, and other surgically relevant components.

- **Education.** Unfortunately, most medical simulators developed to date have neglected the most compelling reason for their creation: education. In the near future, any complete medical simulation system must be judged by how well it incorporates medically relevant education. Although medical input is necessary at each level of the system design, it is crucial that physicians be responsible for assuring that the end product incorporates the elements that will make the overall simulation educationally useful. Without educational content, the best simulator is just a very good video game.

- **Real-time system integration.** All the components described previously must come together as one integrated system within which all parts communicate in real time. Any time lag in system performance will immediately destroy the critical state of “suspension of disbelief” that is necessary for immersion into the scenario. If the system doesn’t run in real time, it will not be clinically useful, nor will it be accepted by medicine.

**When will simulation be ready?**

According to the old story, the three most important words in real estate are “location, location, location.” A similar condition can be set for simulation: the three most important words are “validation, validation, validation.” Many of us have heard enthusiastic reports about the coming era of silicon-based learning among surgeons of the twenty-first century. Unfortunately, to date, the reality hasn’t matched the hype. Too often, existing simulators have been designed by teams of engineers or computer scientists with little or no involvement of the physicians who are actually knowledgeable about what must be learned and how it must be presented. The result for many systems has been either polite but passing attention or rejection by organized medicine’s leading practitioners. What’s missing is validation of clinical learning: simulation will be ready when proponents can show that clinically useful learning results from simulator use.

Validation is a science familiar to those individuals who write high-stakes tests, such as the SAT, MCAT, and LSAT exams. Within such a test, there are multiple tiers of internal proof so that the exam consistently gives valid results, assuring that performance on any given day reflects the true ability of the examinee. These internal tiers are face
validity, content validity, concurrent validity, and predictive validity. A rigorously conceived surgical simulator must incorporate these same internal architectural elements in order to be validated as effective for training. This pedagogical design will underlie and support the educational content necessary to validate the user’s clinical knowledge. To date, very few simulation systems have incorporated this thorough educational approach during their design phases; most have concentrated instead on technical elements such as hand-eye interfaces or computer graphics displays. Obviously, experts from both education and medicine must collaborate during the creation of a simulation system that can be rigorously validated.

Physicians will have to make informed a priori decisions about which technical measures are used to determine clinical competence based upon performance on a simulator. The simulator must then be designed to evaluate those metrics. Although this seems like an obvious statement, it has not been a guiding principle for present simulators. To date, the most common metrics are the time to complete a task and instrument path as a task is performed, which are useful initial steps. However, in some situations the time to perform a manipulation may not be a critical clinical measure, as opposed to dexterity or avoiding injury to an adjacent organ, for instance. One current focus is the creation of a generalized, task-independent set of metrics that can be used across various simulator platforms. As simulators become more sophisticated, procedure-specific technical measures will likely become appropriate, but at the current state of development, such specificity is premature.

What is our role?

As practicing physicians, we enthusiastically embrace the challenges that arise from treating patients. In the case of surgeons, or interventional radiologists like me, we want to be personally responsible for fixing what’s wrong: “Give me a problem, and let me fix it.” Academic surgeons bear a special responsibility for training subsequent generations of surgeons: “Give me a problem, and let me teach someone else how to fix it.” Our roles are to cure and to educate, and if we don’t accept our responsibility to educate, some-
one else will step in and do it for us. I have had a corporate officer sit in my office and tell me that his company’s business plan is “to become the educational source for the specialty.” This particular company had six employees at the time, all but one from the medical device industry.

In the present domain of simulation, venture capitalists are funding entrepreneurial start-ups around single prototypes and a few ideas. If medicine is involved in these start-ups, this might be a good choice. But for most existing companies, physicians are not active creators, and technology’s limitations are driving content.

Our role is to ensure that some traditions in medicine continue: medicine must be taught by respected, experienced physicians to eager young physicians. Mistakes must be made under a watchful eye and corrected without impairment to the patient. Training must encompass the broadest range of cases so that when we are alone at night, not much will surprise us. The decision about how we learn is at a crossroads: we can continue to use the same methods we’ve used for centuries, or we can keep the best of the traditional methods and simultaneously leverage new techniques that we derive from the revolutions in computing and information technologies that are occurring in parallel with our own revolutions. We can invest in the science that will create revolutionary ways to learn, making our mistakes in realistic, but not real, situations where patients are not put at risk. We can work together to create learning situations where it’s okay to make a mistake, and learning how to correct that mistake can be shared among every surgeon, not just the one at your side in the operating room. And our investment can be used by every one of us in practice, when our colleague 3,000 miles away comes up with a new way to do a fundal plication, or someone in a related field discovers a new way to treat an aortic aneurysm.

References


Dr. Dawson is associate radiologist, departments of radiology and surgery, Massachusetts General Hospital, leader of The Simulation Group-CIMIT, Boston, MA, and associate professor, Harvard Medical School, Cambridge, MA.
With results settling in from the November elections, newly elected or reelected state officials will soon begin treks to their capit- 
als to shape their respective legislatures’ agendas for the 2003 session. A number of complex health care issues likely will await them. Lobbyists, not-
for-profit organizations, and individual citizens will spend countless hours pushing for action on a particular issue, while others will simply work to maintain the status quo.

Following is the College’s perspective on some of the key health care issues that may be addressed at the state level in 2003, both in the public and private arenas.

2003 legislative session

In 2003, states will be looking at a number of matters of interest to the surgical community. These issues include medical liability reform and better access to affordable professional liability insurance, development and maintenance of comprehensive statewide trauma care systems, regulation of office-based surgery, deeper involvement of state boards of medicine regarding expert witness testimony and scope of practice, and private sector litigation over prompt payment statutes and fair contracting standards (see Fig. 1, p. 20).

Medical liability reform

While every physician in the country is aware of the severe professional liability insurance crisis, surgeons are perhaps most acutely affected by this problem. Surgeons, even those who practice in states where meaningful tort reform has been enacted, are experiencing mild to double- and triple-digit increases in their insurance premiums. A number of states are in crisis mode (see Fig. 2, p. 20). This list will likely grow as more states experience a shortage of specialty care due to more surgeons retiring early or moving their practices to states with more stable and reformed medical liability environments.

To reverse this trend, legislatures in states such as Nevada have proceeded with pushing through tort reforms during a special session of the legislature. The Nevada package includes a number of measures that the College has been fighting for at the national level for years, such as periodic payment of awards, joint and several liability reform, and, most importantly, a cap on noneconomic dam-

New opportunities for change

by
Jon H. Sutton,
State Affairs Associate,
Division of Advocacy and Health Policy

2003 state legislative sessions:
States with surgeons exiting en masse due to skyrocketing insurance premiums are now taking a close look at Nevada in hopes of replicating these reforms within their borders. Passage of tort reform could also depend partly on whether legislative initiatives can survive constitutional challenges through the state supreme courts. A few states (Alabama, Florida, Illinois, Kansas, Kentucky, New Hampshire, Ohio, Oregon, Texas, and Washington) have passed reforms, including caps on noneconomic damages, only to have these measures declared unconstitutional by the courts. Therefore, surgeons should vote and become active in the election of legislators and jurists who will be more favorable to liability reform (see Fig. 4, p. 21).

It is important to note that in many states where liability reform is being addressed, parallel efforts are under way to link this issue with patient safety programs and reporting of medical errors. This approach was successful in both Pennsylvania and Nevada. Some states, such as Florida, Illinois, and New Jersey, are considering stand-alone legislation that would require the reporting of medical errors. Surgeons should be mindful of these efforts and work with the legislature to ensure that any reporting requirements are linked with appropriate confidentiality and discovery protections. These protections are essential to fostering open discussion of adverse outcomes—an integral aspect of resident teaching and sentinel event conferences.

In addition, some tort reform packages may include language to permit public disclosure of malpractice awards and settlement information a physician may have had within the last five to 10 years. If adopted, it will be crucial that this information be presented to the public in an understandable format with appropriate disclaimers and explanatory statements.

**Trauma planning and development**

The liability crisis has also been carrying with it serious consequences for state trauma care systems. A number of states have been experiencing trauma center closures because of the inability of these acute care centers to secure insurance coverage for high-risk specialties. In addition, many surgeons are extremely reluctant to take trauma call given the disproportionate liability associated with these services. This is a critical problem that state governments will need to address to ensure that their health care response network is ready—not only for a possible future terrorist attack but also for the injuries that occur every day in our society.

As a result of the federal government resurrecting funding for its trauma care systems development program (Title XII of the Public Health Service Act), virtually every state is now receiving small amounts of federal seed money ($40,000) to either develop or enhance their trauma care system. During 2003, the College will be working at the state level to ensure that ACS State Committees on Trauma work closely with their respective public health departments and emergency medical services offices in lobbying for increased state support of statewide and regional trauma care systems.

---

**1. State legislative sessions for 2003**

Most state legislatures operate under a tighter schedule (January-June) than the U.S. Congress. Legislation often moves at a fast and furious pace through these legislative bodies.

To see the schedule for your state’s legislature, access the National Conference of State Legislatures Web site at http://www.ncsl.org/programs/legman/legman.htm.

**States in crisis**

<table>
<thead>
<tr>
<th>Florida</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>Oregon</td>
</tr>
<tr>
<td>Mississippi</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Nevada</td>
<td>Texas</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Washington</td>
</tr>
<tr>
<td>New York</td>
<td>West Virginia</td>
</tr>
</tbody>
</table>

Source: American Medical Association Professional Liability Advocacy Campaign, June 2002.
such as expert witness testimony and scope of practice for nonphysician providers. Regarding the former, a handful of state boards have begun to pay closer attention to expert witness testimony. At a recent meeting of the Federation of State Medical Boards (www.fsmb.org), participants discussed the matter of disciplinary action against physician expert witnesses who provide false testimony. Knowingly submitting false testimony is now considered unprofessional conduct as part of the disciplinary process for determining medical license termination in a number of states.* The College supports these and any other efforts by state medical boards to expand this policy around the country.

Regarding the latter, the battle between physicians and nonphysicians continues in a number of states. For example, optometrists in Oregon and North Carolina are lobbying to secure the right to perform laser surgery and use injectable pharmaceuticals. Single-degree oral surgeons in Alabama and Colorado will be working through their state legislatures and dental boards to expand their scope of practice into cosmetic surgery of the head.


Office-based surgery
As surgical technology has improved, and site of service payment differentials have widened between the inpatient and outpatient settings, the number of surgical procedures being performed in ambulatory surgery centers and surgeons’ offices has steadily grown. In response to a number of adverse outcomes in office-based surgery, a handful of states have passed legislation or adopted regulations for the office setting to safeguard patients. In Florida, a number of highly publicized cases involving liposuction prompted the legislature to mandate office-based surgery standards, which were implemented by the state board of medicine. In Virginia, legislators provided the Virginia Board of Medicine with the authority to establish its own guidelines for office-based surgery.

In an effort to provide state medical boards with sound guidance, a number of national specialty societies, including the College, have developed guidelines for office-based and ambulatory surgery. The College’s Guidelines for Optimal Ambulatory Surgical Care and Office-Based Surgery (http://www.facs.org/commerce/2002/catsplash.html) addresses important patient safety issues relating to anesthesia, surgical care, facility standards, and accreditation. Fellows in Georgia, Kentucky, New York, and Ohio should be aware that legislative or regulatory action on this issue is possible during 2003.

State medical boards
The practice of medicine is regulated by state governments, mostly through each state’s medical board. The board establishes policy over issues such as expert witness testimony and scope of practice for nonphysician providers. Regarding the former, a handful of state boards have begun to pay closer attention to expert witness testimony. At a recent meeting of the Federation of State Medical Boards (www.fsmb.org), participants discussed the matter of disciplinary action against physician expert witnesses who provide false testimony. Knowingly submitting false testimony is now considered unprofessional conduct as part of the disciplinary process for determining medical license termination in a number of states.* The College supports these and any other efforts by state medical boards to expand this policy around the country.

Regarding the latter, the battle between physicians and nonphysicians continues in a number of states. For example, optometrists in Oregon and North Carolina are lobbying to secure the right to perform laser surgery and use injectable pharmaceuticals. Single-degree oral surgeons in Alabama and Colorado will be working through their state legislatures and dental boards to expand their scope of practice into cosmetic surgery of the head.


NOVEMBER 2002 BULLETIN OF THE AMERICAN COLLEGE OF SURGEONS
The College believes that surgery should only be performed by surgeons, and will closely monitor state medical board deliberations in this area. The College has developed a scope of practice action kit (www.facs.org/dept/hpa/issuekits.html), which contains suggestions regarding how Fellows may respond to these issues in their states.

Private sector activity

While managed care companies continue to trumpet their “voluntary” measures to improve patient access to specialty care, they are simultaneously employing business practices that have increased the frustration level within the surgical community. Automatic downcoding and bundling of claims, failure to meet state prompt payment requirements, and refusal to provide fee schedules at contracting time are compelling many physician groups to file suit against the largest managed care plans in the country.

For example, a federal racketeering suit brought by the California Medical Association against industry giants such as Cigna, Aetna, and Humana has now entered the discovery phase. The suit, which was subsequently joined by a number of other medical societies around the country, alleges that these companies violated contracts and defrauded physicians.‡ A separate lawsuit was filed in 1997 by the Medical Association of Georgia against the state Blue Cross/Blue Shield plan to force the carrier to reveal complete contract and fee schedule information when negotiating with physicians. A final ruling on the case was issued by the Fulton County Superior Court earlier this year, which now requires release of this information. Soon after, the Georgia Insurance Commissioner ordered that all plans doing business in the state must comply with the ruling.‡

Physician groups are also working the legislative track for better oversight of unfair managed care business practices. For example, the medical community in Illinois was instrumental in persuading the legislature to consider fair contracting legislation. This legislation (The Fairness in Health Care Services Contracting Act, S.B. 1849) focused on issues such as downcoding and bundling or other payment reductions are not permitted unless included in the contract. Downcoding and bundling or other payment reductions are not permitted unless included in the contract.

Physicians permitted to bill patients to collect any difference between the amount paid by the plan and the amount due under the contract, and to bill for noncovered services.

5. Main provisions in the Fairness in Health Care Services Contracting Act

- Physicians are permitted a minimum of 30 days to review/sign a complete contract.
- Payment rates and methodologies/formulas must be agreed to in the contract.
- Downcoding and bundling or other payment reductions are not permitted unless included in the contract.
- Detailed payment statements must be provided with each claim, including services billed, contracted payment rates, and actual payment or reason for reduction in payment or denial of the claim.
- Ninety days notice of a proposed material change in the contract must be given to the provider, who will have the option of terminating the contract if the change is unacceptable.
- Physicians permitted to bill patients to collect any difference between the amount paid by the plan and the amount due under the contract, and to bill for noncovered services.

6. ACS State Affairs Division of Advocacy and Health Policy

Christopher Gallagher
Manager of State Affairs
Washington Office
202/672-1502
cgallagher@facs.org

Jon H. Sutton
State Affairs Associate
Chicago Headquarters
312/202-5358
jsutton@facs.org

American College of Surgeons: Currents, May and July 2002.
Website: http://www.facs.org/hpa/pubs/pubs.html.

continued on page 41
The origins of regulated resident work hours:
New York and beyond

by Gregory S. Cherr, M.D., Buffalo, NY
The recent policy change by the Accreditation Council for Graduate Medical Education (ACGME) regarding resident work hours may have come as a surprise to some health care professionals. However, a review of related events provides insight into factors contributing to the ACGME decision.

Of particular interest is the interplay between various groups with stakes in the training of residents. Medical students and residents argue for work-hour limits on the basis of health and safety of trainees (although “lifestyle issues” may also contribute). Federal and state governments and the public at large lobby for constrained resident work hours in order to reduce medical errors. As for consumers of health care, fewer errors will give them a “better product.” Finally, physicians argue that control of resident training should remain the purview of medical organizations (such as the ACGME) to maintain a high degree of professionalism within medicine.

This article reviews the events culminating in the ACGME policy change and outlines possible strategies for surgical training programs attempting to comply with the proposed regulations.

New York State

Initial interest in limiting resident work hours started in New York State as a result of the Libby Zion case. In March 1984, Ms. Zion presented to a New York City teaching hospital with fever, chills, and dehydration. In the emergency department, a junior medical resident evaluated her, and she was admitted to the medical service after telephone consultation with the attending physician. Her brief hospital stay was notable for delirium and continued fevers. After treatment with meperidine and haloperidol, she suffered a cardiopulmonary arrest and expired. Her cause of death, as listed by the medical examiner, was bilateral bronchopneumonia. Points of controversy regarding her care included resident knowledge of her home prescription medications and their possible drug interactions, adequacy of junior resident supervision by senior residents and attending physicians, and the contribution of resident fatigue caused by prolonged work hours.

The woman’s father, Sidney Zion, was a prominent newspaper columnist and former federal prosecutor. The resulting publicity led the state health commissioner to convene an ad hoc advisory committee on emergency services, led by Bertrand Bell, MD, professor of medicine at Albert Einstein College of Medicine, New York, NY. This committee, commonly called the Bell Commission, made the following recommendations regarding resident work hours: (1) an 80-hour work week, averaged over four weeks; (2) a 24-hour limit per work shift; (3) eight hours between work shifts; and (4) at least one 24-hour period per week not on call. Surgical residencies would be exempt from the 24-hour limit on work shifts under the following circumstances: (1) residents, while on call at night, are generally resting with infrequent interruptions for patient care; (2) residents are on call no less than every third night; (3) residents receive rest periods of 16 hours after on-call shift; and (4) residents may be relieved of duty if fatigued while on call.

These recommendations were passed into law by the New York State legislature. On July 1, 1989, section 405 of the New York State health code (“Bell Commission regulations”) went into effect. Initially, New York State hospitals were frequently found to be in violation of the regulations. Reports documenting failure to comply were issued with great publicity in 1994 and 1997. Subsequently, the New York State Department of Health began to fine hospitals in violation of the regulations. In 1999, a cardiology fellow training in New York State died in an automobile accident after a night on-call. Again, negative publicity ensued and ultimately led to enactment of the passage of the state’s Health Care Reform Act of 2000. Included in this legislation are significant funds to actively monitor hospital compliance with resident work hour limitations, as well as increased financial penalties for institutions found in violation of resident work hour regulations.

The situation elsewhere

In 2000, the Institute of Medicine (IOM) reported that each year medical errors cause more than 1 million patient injuries and as many as 98,000 patient deaths. Although the methodology and results of the publications cited in this report have been questioned, the findings have generated great publicity in the lay press. As one potential solution to medical errors, the IOM stressed the need to explore physician workload, work hours, and their relationship to fatigue, alertness,
The report also addressed the relationship between worker safety and patient safety. In particular, it noted that “limiting long work hours [is] aimed at protecting workers but can also protect patients.” The estimated number of injuries and deaths linked to medical errors were frequently quoted in the lay press, including reports examining resident work hours. Notably, limiting resident work hours is assumed to be an easy way to prevent medical errors and associated patient injuries and deaths. Although this belief is intuitively attractive, rigorous data giving it support are lacking.

Resident work hours again came to national attention through a petition filed with the Occupational Safety and Health Administration (OSHA) in 2001. Signers of the petition included: Public Citizen, a consumer and health advocacy group; the Committee on Interns and Residents; a house staff union; the American Medical Student Association; Dr. Bell; and Kingman Strohl, MD, director of the Sleep Disorders Research Center at Case Western Reserve University. The petition called for national resident work hour limits modeled on those in New York State. It noted the health risks posed to residents by “excessive hours,” including motor vehicle crashes, mental health issues, and obstetric complications. The petition also observed that resident work hours have been limited in other countries, including Australia, Denmark, Germany, the Netherlands, and the United Kingdom, with all European Union countries planning to impose caps in 2003. The petition further noted that the U.S. federal government has established work-hour limits for the aviation, highway, maritime, and railroad industries.

The petition received widespread coverage in the lay press, and soon the issue of resident work hours caught the attention of members of Congress. Rep. John Conyers, Jr. (D-MI), introduced The Patient and Physician Safety and Protection Act of 2001, H.R. 3236. Noting that “overwork has detrimental effects on the health and well-being of residents, of even more concern is the impact of physician fatigue on patient safety.” The bill calls for resident work hour limits based upon the Bell Commission regulations and also addresses hospital enforcement of the standards. Standard whistle-blower protections would apply to residents who report hospitals that are in violation of the regulations. Finally, the bill would increase hospital funding for the hiring of additional ancillary support staff. Sen. Jon Corzine (D-NJ) has recently introduced The Patient and

### Principles for successful general surgery training

**Program management-based principles**
- Computerize database to document resident case experience.
- Structure resident assignments to meet caseload requirements.
- Eliminate redundant experiences.
- Prioritize and limit procedural experiences according to national standards.
- Prioritize and control resident time and activity.
- Dedicate program to achieving and documenting outcomes.
- Increase program coordinator authority and responsibility.
- Transfer some clinical service activities to mid-level providers.
- Integrate and incorporate educational sessions.

**Communication-based principles**
- Make residents aware of goals and performance.
- Communicate issues and outcomes to residents and faculty frequently.
- Use Web-based reporting of resident compliance.

**Time-based principles**
- Strict stop/start times.
- Maximum use of administrative turnover time.

**Career development-based principles**
- Focus on career development.
- Limit resident activity to career-enhancing experiences.
- Emphasize professional and supervisory responsibility of senior residents.
- Stress time management and priority setting.
- Encourage residents to be self-directed learners.
- Allow residents to take control of and responsibility for career development.
Physician Safety and Protection Act of 2002, S. 2614, the companion to Representative Conyers’ bill in the house.3

Meanwhile, state regulation of resident work hours has been proposed in New Jersey by Assemblyman Eric Munoz, MD, FACS. Additionally, the Massachusetts Medical Society has adopted a resolution in support of limited resident work hours.

Response from physicians

Physicians historically have been opposed to regulation of resident work hours. Reasons cited include the loss of autonomy by physician training programs and medicine as a whole, poor continuity of care, inadequate preparation for the rigor of practice after residency, loss of professionalism in medicine (shift-work mentality), and increased costs to hospitals. Contributing to physician skepticism about the benefits of constrained resident work hours is the lack of data supporting their implementation. Previously published articles have been noted to suffer from methodological deficiencies, including small sample sizes, lack of control groups, and the absence of clinically relevant endpoints, such as medical errors or resident education.8,9

Surgical training in particular seemed poorly suited to limited work hours. Surgical illnesses often occur at night and can change markedly over 36 hours. Work hour limits would force surgical residents to leave the operating room at the end of a shift. Surgeons-in-training would miss the opportunity to learn from changes in a patient’s condition or complications of a previous surgery. Thomas R. Russell, MD, FACS, Executive Director of the American College of Surgeons, noted that “constrained work hours do not prepare residents for the real world of surgical practice.”12

A recent trend toward fewer applicants for general surgery residencies has led surgical educators to critically examine graduate surgical education.13,14 The reduced interest of medical students in general surgery training is felt to be due, in part, to “lifestyle issues” and the long hours inherent in general surgery training are perceived to be part of the problem. Potential solutions offered are based upon reducing resident service requirements while strengthening clinical and educational experiences. There were not, however, calls for restricting resident work hours.

Some surgeons seem resigned to restrictions on resident working hours,13 while others predict that an 80-hour workweek would have a “disastrous effect” on the future of graduate surgical education.14

ACGME response

In 2000, David C. Leach, MD, executive director of the ACGME, acknowledged the increasing controversy surrounding resident work hours.15 He noted the frequency of residency review committee (RRC) violations in both surgical and nonsurgical specialties. (The percentage of programs in violation of RRC guidelines has dropped markedly since 1999).16 These violations lead to the “abuse [of] our trainees and compromise patient care.”15

In summary, he deemed resident work hours the “Achilles heel” of medicine and called for better adherence to existing RRC requirements.15

Subsequently the ACGME board of directors created the Work Group on Resident Duty Hours and the Learning Environment in September 2001. Led by Paul Friedman, MD, FACS, the group also included two other surgeons. The committee was charged with developing a comprehensive approach to work hours that addresses resident education and resident and patient safety. The new official ACGME guidelines on resident work hours, again modeled on the Bell Commission regulations, were unveiled in June 2002. The constrained work hours will go into effect for all training programs July 1, 2003. Although the work-hour limits are similar to those proposed in the petition to OSHA and before Congress, the ACGME proposal does serve to maintain control of physician training within the medical community.

Future direction

As previously noted, the lack of rigorous data regarding resident work hours casts a shadow of doubt over whether the proposed changes will have a beneficial effect on resident health and safety or reduce medical errors. Although clear evidence likely will come too late to influence policy, two prospective trials currently under way may better evaluate the effect of training on patient safety and resident health.

One prospective observational study will survey all physicians beginning training in the U.S. in July 2002. Using an Internet-based template, residents will self-report on both medical errors and
health/quality-of-life issues. A second interventional crossover study will compare a standard medical intensive care unit call schedule (every third night call with resulting 30-plus hour shifts) with a call schedule designed to minimize sleep deprivation (such as 12-hour shifts). Residents will self-report errors and take computerized performance tests. Errors made on a computerized medication entry system will be noted and observers will monitor resident performance. Unfortunately, the results of these trials will not be available until after the national changes in residency work hours have been implemented. Because these study designs are the most rigorous and complete to date, it is anticipated that the results will be used to guide the formulation of appropriate resident work-hour limitations. However, it is hard to imagine that the ACGME will allow a return to the previous work hours, even if these studies show no link between work hours and patient outcomes or resident health and safety.

Surgical residency programs in New York State may serve as models for compliance with reduced resident work-hour schedules. These programs have extensive familiarity with restricted work hours, and much can be learned from their experiences. With careful oversight, general surgery residents may meet operative requirements of the ACGME and achieve an adequate educational experience (measured by performance on the American Board of Surgery Qualifying Examination) while complying with work-hour constraints (see table, p. 25). Further research is needed to assess the impact of reduced general surgery resident work hours on the health and safety of trainees, patient outcomes, and professional performance and satisfaction after training.

References

1. Selected press coverage of issues regarding resident work hours available at www.amsa.org/hp/rwh_cov.cfm

Dr. Cherr is assistant professor of surgery, department of surgery, Erie County Medical Center, State University of New York at Buffalo.
The American College of Surgeons maintains that high-quality surgical care for the sick and injured patient can be carried out only by qualified surgeons. Qualified surgeons are those physicians who have completed a surgical residency/fellowship approved by the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada (RCPSC); are certified, recertified, or qualified for examination by a surgical board recognized by the American Board of Medical Specialties (ABMS) or the RCPSC; and who maintain continuing education and proficiency in their specialty. These qualifications are required for Fellowship in the American College of Surgeons.

A surgeon’s scope of practice is determined by the appropriate surgical specialty board recognized by the ABMS or the RCPSC. Procedures performed are dictated by the guidelines set by a specialty board. Performing procedures outside of the field defined by a specialty board mandates additional education and experience, as well as certification where appropriate.

Surgeons are expected to study and evaluate new procedures and to become knowledgeable and proficient with advances that are appropriate. Technical skill alone is not sufficient to qualify a surgeon to perform new procedures. Procedural skills must be acquired within the context of in-depth knowledge about the natural course of a disease. It is mandatory when acquiring new skills that appropriate training by an accredited educational organization be obtained.

The College maintains that public education is vital. Specifically, patients must be informed about the qualifications of their surgeons. Any claims regarding expertise or any advertising done by a surgeon must be factual, documented with adequate data, and within the limits of his or her training and experience.

The College may take disciplinary action against Fellows who engage in surgical procedures outside their scope of practice as previously described or who falsely advertise their training, certification, or experience.
In compliance...

...with HIPAA rules

by the Division of Advocacy and Health Policy

The Health Information Portability and Accountability Act (HIPAA) requires practices not only to post a "Notice of Privacy Practices," but also expects physicians' offices to notify patients of their specific rights, which include the following:

- To request that the practice restrict uses or disclosures of confidential information about the individual in order to providetreatment, submit payment requests, and share information with family members. Patients do not have to agree to the restriction and practices may decide not to accept the restrictions, and not to treat the patient.
- To request and to accommodate reasonable requests to receive communications of confidential information by alternative means or at other locations. Practices may ask patients to make the request in writing. When appropriate, practices may ask that patients provide reasonable accommodation on information such as to how payment will be handled and specification of an alternative address or other method of contact. Practices may not require an explanation from patients about the reason for the request.
- To access and inspect their confidential health information. This would include information compiled in reasonable anticipation of legal action or proceedings and confidential information related to certain laboratory tests as required by the Clinical Laboratory Improvement Amendments.
- To amend confidential information held by your practice. A practice may deny a patient's request for amendment if the requested information was not created by the practice, is not part of the confidential record, would not be available for inspection under the provisions for a patient's right to inspect and copy confidential information, or is accurate and complete. The practice must include information about these denial provisions and regarding the practice's process for contesting any such denial of access in the notice.
- To receive an accounting of disclosures of confidential information. Disclosure information must be maintained and be made available for a six-year period, beginning with the date the practice begins to comply with this rule (no later than April 14, 2003). A record of disclosures is not required when they are: related to treatment, payment, and health care operations; made to patients about their own confidential information; for release of the practice's directory or to persons involved in the patient's care; for national security or intelligence purposes; or provided to correctional institutions or law enforcement officials.
- To obtain a paper copy of the notice from your practice upon request, even if the patient has agreed to receive the notice electronically. If a patient who has received the notice electronically requests a paper copy, the practice must provide it.

Next month, we plan to address the elements that need to be included in your privacy manual.

Keeping current

What’s new in ACS Surgery: Principles and Practice

by Erin Michael Kelly, New York, NY

Following are highlights of recent additions to the online version of ACS Surgery: Principles and Practice, the practicing surgeon’s first and only Web-based and continually updated surgical reference. A sample chapter and detailed information on ACS Surgery, including how to save $20 on a subscription to the online version, is available by visiting www.acssurgery.com/learnmore.htm.

I. Resuscitation

10. Substance Abuse. Mark A. Kirk, MD, and John A. Marx, MD. The authors consider five classes of abused substances in some detail: narcotics, stimulants, hallucinogens, sedative-hypnotics, and alcohol, and they address separately acute exposure, chronic use, and withdrawal.

Among the substances covered is the sedative-hypnotic gamma-hydroxybutyrate (GHB), which is currently enjoying popularity at raves and on college campuses. Its rapid absorption leads to rapid onset of CNS depressant effects. A typical GHB misadventure presents with coma and respiratory depression necessitating intubation. GHB’s short duration of effect typically results in an awake and alert patient who is easily extubated within two to four hours of the onset of symptoms. Upon ingestion, gamma-butyrolactone (GBL) and 1,4-butanediol are converted in vivo to GHB, producing identical clinical effects. Alcohol has an additive CNS depressant effect with GHB and GBL. Patients coingesting alcohol with 1,4-butanediol may have delayed effects because alcohol inhibits its conversion to the active metabolite, GHB, by competing for alcohol dehydrogenase. GHB compounds, flunitrazepam (so-called roofies), and chloral hydrate have been implicated as date rape drugs.

VIII. Postoperative Management

2. Postoperative Pain. Henrik Kehlet, MD, PhD. In his chapter, Dr. Kehlet provides recommendations aimed at surgeons working on the general surgical ward. In particular, he gives consideration to the efficiency of each analgesic technique, its safety versus its side effects, and the cost-efficiency problems arising from the need for intensive surveillance.

Dr. Kehlet emphasizes the use of nonopioids for pain relief, and gives special mention to NSAIDs and the new COX-2 inhibitors. In addition to acetaminophen as a basic component of multimodal analgesia, the new COX-2 drugs have the potential to achieve analgesic efficacy
comparable with that of conventional NSAIDs but with fewer side effects. Despite the gaps in our current understanding of the working and differential effects of NSAIDs and COX-2 inhibitors, there is sufficient knowledge to suggest that these drugs should be recommended for baseline analgesic treatment after most operative procedures. However, NSAIDs should not be given in the earliest part of the postoperative period immediately after heparinization during cardiovascular procedures or in high-risk patients. Indications for COX-2 inhibitors may be extended as a consequence of their superior safety profile with respect to the GI tract and platelet function. NSAIDs and COX-2 inhibitors are valuable components of multimodal pain treatment and may be of special value in patients undergoing short operations, such as laparoscopic procedures, in which opioid-sparing effects may reduce postoperative nausea and vomiting.

Dr. Kehlet also discusses the benefits of patient-controlled analgesia (PCA): Traditional I.M. dosing of opioids does not result in consistent blood levels, because opioids are absorbed at a variable rate from the vascular bed of muscle. Moreover, administration of traditional I.M. regimens results in opioid concentrations that exceed the concentrations required to produce analgesia only in about 30 percent of the time during any four-hour dosing interval. PCA avoids these pitfalls by allowing repeated dosing on demand, and it provides more constant and consistent plasma opioid levels and therefore better analgesia. (It must be emphasized, however, that the effect of PCA on movement-associated pain is limited in comparison with that of epidural local anesthesia.)

**Looking ahead**

New and revised chapters scheduled to appear as online updates to ACS Surgery: Principles and Practice in the coming months include the following:

- “Injuries to the Chest,” by Asher Hirshberg, MD, and Kenneth L. Mattox, MD, FACS.
- “Hand Infection,” by Thomas M. Sinclair, MD, CM, and H. Bruce Williams, MD.
- “Ultrasonography: Surgical Applications,” by Grace S. Rozycki, MD, FACS.
- “Emergency Department Evaluation of the Patient with Multiple Injuries,” by Felix Battistella, MD, FACS.
- “Multiple Organ Dysfunction Syndrome,” by John C. Marshall, MD, FACS.
- “Organ Procurement,” by Charles M. Miller, MD, FACS, and Thomas R. Starzl, MD, FACS.

**Mr. Kelly** is editor, What’s New in ACS Surgery: Principles and Practice, WebMD Reference, New York, NY.
Socioeconomic tips of the month

ICD-9-CM changes

by the Division of Advocacy and Health Policy

Surgeons need to be aware of some of the changes in the ICD-9-CM diagnosis codes that became effective October 1, 2002. These codes must be used on claims filed beginning on January 1, 2003.

A new coding convention for sequencing a diagnosis that is a causal condition has been added to the ICD-9-CM Official Guidelines for Coding and Reporting. To access the new guidelines, please go to: http://www.cdc.gov/nchs/datawh/ftpserv/ftpicd9/ftpicd9.htm#guide.

Several new codes that have been added are those used to report dieulofey lesions of the stomach, duodenum, and intestine, as well as the disruption of internal and external operation wounds. The code to report “other general symptoms” has been changed from a four-digit to a five-digit classification.

There have been a number of changes in those used for vascular heart disease and heart failure. Specifically, the four-digit codes used to report arterial dissection has been expanded to new five-digit codes that describe which artery has been dissected.

A new series of V codes has been introduced to report aftercare following surgery to specified body systems and for healing traumatic pathological fractures. We should caution you that the ICD-9-CM V codes should not be used unless they require or affect patient case treatment of management. You should only use these aftercare codes when you would previously have used V 58.4 or V 54.4-8.

All surgeons and their staffs should review the ICD-9-CM changes and make sure that the changes are added to any software used to generate claims for their practices. The complete index and tabular list of ICD-9-CM changes can be viewed at and downloaded from the National Center for Health Statistics Web site at http://www.cdc.gov/nchs/datawh/ftpserv/ftpicd9/ftpicd9.htm#addenda. The files are posted in Adobe Acrobat format (*.pdf).

Medicare carrier bulletins

Surgeons may download from the Medicare Part B Web site any provider newsletters released during the Centers for Medicare & Medicaid Services (CMS)-mandated moratorium on distribution of paper copies of newsletters scheduled from July through October 2002. Some topics that appeared in these newsletters during this time were new and revised local medical review policies (LMRPs) for diagnostic colonoscopy, removal of benign or premalignant skin lesions, and ablation of hepatic tumors. Please note that each carrier implements LMRPs on an independent schedule and some practices may be unaffected by the changes. We invite you to visit the ACS resource page that contains links to all Part B carriers at http://www.facs.org/dept/hpa/practmanres.html. Surgeons who do not have access to the Internet are encouraged to contact their carriers to get paper copies of the information contained in those publications.

This column helps answer questions from Fellows and their staffs and provides useful tips for surgical practices. Developed by the College staff and consultants, this information will be accessible on our Web site for easy access. If there are topics that you would like to see addressed in future columns, please contact the Division of Advocacy and Health Policy by fax at 202/337-4271, or e-mail HealthPolicyAdvocacy@facs.org.
Richard R. Sabo, MD, FACS, a private practice general surgeon from Bozeman, MT, was installed as the 83rd President of the American College of Surgeons during Convocation ceremonies that concluded the College’s 2002 Clinical Congress in San Francisco, CA.

Dr. Sabo is a staff surgeon at Bozeman Deaconess Hospital, and he has been an adjunct professor in the department of medical science at Montana State University. Dr. Sabo has been in private practice for 31 years, and his professional interests have focused on the problems associated with surgical practice in rural areas and the use of computers in clinical practice and for continuing medical education.

A native of Bozeman, Dr. Sabo attended the University of Notre Dame and received a medical degree in 1964 from Cornell University Medical College, New York, NY, where he was named a member of the Alpha Omega Alpha national honor medical society (1963).

He completed a surgical internship at the University Hospitals of Cleveland (1964-1965), and continued at University Hospitals as a resident in general surgery (1965-1966, 1968-1971). Between those two periods, Dr. Sabo served as a general surgeon in the U.S. Air Force at Altus (OK) AFB (1966-1968).

Dr. Sabo became an ACS Fellow in 1974, and has been an active participant and leader in numerous College activities. For the last year, he was the College’s First Vice-President-Elect. Dr. Sabo served on the Board of Regents (1991-2000) and acted as its Vice-Chair (1999-2000). He was a member of the College’s Communications Committee from 1991 to 1995, and served as its Chair (1999-2000). Dr. Sabo also served as Chair of the Regents’ Committee on Medical Records Confidentiality (1999-2000), and was a member of the Central Judiciary Committee (1997-1999) and its Chair (1998-1999). He was a charter member of the Regents’ Committee on Informatics (1995-2000) and served as the Committee’s Regent’s liaison for several years. Dr. Sabo served a term on the College’s Board of Governors (1985-1991) and was a member of the Governors’ Committee on Surgical Practice in Hospitals (1987-1991) and the Governors’ Committee on Blood-Borne Infection and Environmental Risk (1989-1991). He also served as President (1981-1982) and Secretary (1979-1981) of the Montana Chapter of the American College of Surgeons.

Dr. Sabo has been awarded memberships and has held leadership positions in numerous surgical societies and organizations. He joined the Montana Medical Association in 1971 and the Society for Clinical Vascular Surgery in 1975. He was a board member of the Montana Foundation for Medical Care (1974-1980), and chair of the board (1986-1989) and board member (1983-1989) of the Bozeman Deaconess Foundation.

Over the course of his career, Dr. Sabo has demonstrated a strong commitment to disseminating surgical knowledge. In 2000, he served as Web Editor of the Journal of the American College of Surgeons, and he has also given many presentations at the College’s annual Clinical Congress, at ACS chapter meetings, and at other gatherings of surgical organizations on a wide range of subjects, including AIDS, private practice management, and the practice of surgery in rural areas.

Dr. Sabo currently resides in Bozeman, MT, with his wife Melanie, and has two daughters, Kim and Katie.
ACS
insurance
Ad
F. William Blaisdell receives Distinguished Service Award

The Distinguished Service Award—the highest honor awarded by the American College of Surgeons—was presented to F. William Blaisdell, MD, FACS, of Sacramento, CA, during the Clinical Congress last month in San Francisco, CA.

In presenting the Distinguished Service Award to Dr. Blaisdell, the Board of Regents highly commended him for being an eminent scholar, leader, clinical surgeon, and mentor—especially in the disciplines of general surgery, cardiovascular surgery, trauma care, critical care medicine, and surgical education. Additionally, the Regents recognized his original contributions to advancement in the care of patients with peripheral vascular disease, shock, thromboembolism, and adult respiratory distress syndrome; expressed appreciation for his contributions to the College through his many committee and chapter involvements; and acknowledged him for his work in trauma and his contributions to academic departments and other surgical organizations.

Since becoming a Fellow of the College in 1962, Dr. Blaisdell has served the College in numerous capacities. He served as Secretary-Treasurer (1965-1968), Councilor (1966-1970), and President (1968-1969) of the College’s Northern California Chapter. Dr. Blaisdell was active on the College’s Committee on Trauma; he was Chair of the Northern California Committee on Trauma (1972-1979), and a member of the national Committee on Trauma (1974-1984). In addition, he was Chair of the College’s Committee on Applicants (1976-1978), a member of the College’s Credentials Committee (1970-1978), and a member of the Graduate Medical Education Committee (1977-1979). A renowned surgical educator, Dr. Blaisdell served as lecturer for the Scudder Oration on Trauma at the American College of Surgeons Annual Clinical Congress in 1983. In 1999, Dr. Blaisdell was presented with the National Safety Council Surgeon’s Award for Service to Safety.

A 1952 graduate of Stanford University’s School of Medicine, Stanford, CA, Dr. Blaisdell served as a medical officer in the U.S. Naval Reserves, reaching the rank of lieutenant (1952-1954). Today, he serves as professor and chair emeritus of the department of surgery at the University of California, Davis, School of Medicine; associate dean for East Bay Affairs; and chief of surgery at the Veterans Affairs (VA) Northern California Health Care System.

Dr. Blaisdell has been active in the San Francisco area medical community, including having served as chief of surgery at San Francisco VA Hospital (1960-1966) and chief of surgery at San Francisco General Hospital (1966-1978). Furthermore, while serving as chair of the department of surgery at the University of California, Davis, Dr. Blaisdell organized the East Bay Surgical Program, which has been so ably run by Claude H. Organ, Jr., MD, FACS, the 1999 recipient of the College’s Distinguished Service Award.

Dr. Blaisdell has held many leadership positions in organized surgery. He served as president of: the American Association for the Surgery of Trauma (1990-1991); the Northern California Vascular Society (1974); the Bay Area Vascular Society (1974-1980); the Society for Vascular Surgery (1978-1979); the Pacific Coast Surgical Association (1987); the Michael F.

He also served as a member of the Residency Review Committee for Surgery and as a member of the American Board of Surgery. During his tenure on the American Board of Surgery, Dr. Blaisdell organized the first in-training examination and the first examination for certification in vascular surgery and critical care medicine.

In addition, Dr. Blaisdell has served as associate editor of Archives of Surgery and the Journal of Trauma and as a member of the editorial boards of several journals, including the Journal of the American Medical Association, the New England Journal of Medicine, the Journal of Clinical Surgery, and the Journal of Vascular Surgery.

Dr. Blaisdell also has made admirable contributions to clinical research and, as such, has received numerous grants from the National Institutes of Health to facilitate research of cerebrovascular disease, respiratory distress syndrome, intravascular coagulation, fibrinogen metabolism, and trauma.

The College’s Board of Regents is pleased to recognize Dr. Blaisdell’s outstanding contributions by naming him the 2002 recipient of its highest honor, the Distinguished Service Award.

Honorary Fellowship in the American College of Surgeons was awarded to four prominent surgeons from England, Scotland, and Argentina during Convocation ceremonies at last month’s Clinical Congress in San Francisco, CA. The awards presentation is one of the highlights of the Clinical Congress. The recipients were:

- Alan C. Bird, MD, BS (Lond), MRCS, LRCP, DO (Lond), FRCS (Eng), MD (Lond). Professor Bird is a professor of clinical ophthalmology at the Institute of Ophthalmology of the Moorsfield Eye Hospital, London, England.
- Juan Carlos Parodi, MD. Professor Parodi is director and chief of the department of cardiovascular surgery, the Instituto Cardiovascular de Buenos Aires, in Buenos Aires, Argentina.
- Graham M. Teasdale, FRCS (Edin, Glas), FRCP (Lon), FMedSci, FRSE. Professor Teasdale is professor and head of the department of neurosurgery and associate dean for medical research at the University of Glasgow, Glasgow, Scotland.
- Sir Magdi H. Yacoub, FRS, FRCS (Eng, Ed, Glas), FRCP(Hon), DSc(Hon), Mch(Hon), FACC. Sir Magdi is currently founder and director of research of the Harefield Research Foundation and is British Heart Foundation Professor of Cardiothoracic Surgery, Imperial College Faculty of Medicine, Heart Science Center, Harefield, London, England.

Presenting the Honorary Fellowships on behalf of the College were: Lee R. Duffner, MD, FACS, Golden Beach, FL; Paul E. Collicott, MD, FACS, Chicago, IL; Edward R. Laws, MD, FACS, Charlottesville, VA; and William S. Pierce, MD, FACS, Hershey, PA.

Fellowship in the American College of Surgeons is awarded during the ceremonies to surgeons whose education and training, professional qualifications, surgical competence, and ethical conduct have passed a rigorous evaluation and have been found to be consistent with the high standards established and demanded by the College.

During the College’s Convocation ceremonies this year, 1,512 surgeons from around the world were admitted into Fellowship. With a membership of more than 64,000, the College is the largest organization of surgeons in the world.

Sir Rickman Godlee, President of the Royal College of Surgeons (England), was awarded the first Honorary Fellowship in the College during the College’s first Convocation in 1913. Since then, 378 internationally prominent surgeons, including the four chosen this year, have been named Honorary Fellows of the American College of Surgeons.

College names four Honorary Fellows
Mr. President, I am honored to present to you Prof. Alan Bird of London, England, for Honorary Fellowship in the American College of Surgeons.

Alan Charles Bird was born and raised in Bromley, Kent, England. He received his medical degree from Guy’s Hospital Medical School in London in 1961 and then served as house physician and house surgeon at several hospitals in and around London before being appointed as a resident surgical officer at the Moorfields Eye Hospital.

He qualified and was made a Fellow of the Royal College of Surgeons of England in 1967. The following year, he received additional training during a fellowship at the Bascom Palmer Eye Institute of the University of Miami, FL.

Upon his return to London in 1969 as a lecturer at the Institute of Ophthalmology, Alan Bird established one of the first subspecialty retina services in Europe, which has grown to be the largest service at the Moorfields Eye Hospital.

He qualified and was made a Fellow of the Royal College of Surgeons of England in 1967. The following year, he received additional training during a fellowship at the Bascom Palmer Eye Institute of the University of Miami, FL.

Many ophthalmic surgeons throughout the world know Professor Bird from 44 named lectures that he has presented in Europe, North America, and Asia and from his teachings as a visiting professor. All who learn from him are charmed by his wit and perspicacity.

He has authored more than 325 publications in peer-reviewed journals. In addition, he has trained over 150 ophthalmologists as Fellows, many of whom have become leaders in their own countries.

He has received the Francois Medal from the International Council of Ophthalmology, an Honorary Fellowship of the Royal Society of Medicine, and a Fellowship of the Academy of Medical Sciences. He also has been Master of the Oxford Congress.

Although he no longer plays, Alan Bird has been a lifelong ardent follower of the Rugby Union. He now resides in Dulwich, south of central London, where his leisure time activities include chess, bridge, puzzles, and gardening.

Mr. President, it is my privilege to present this world-renowned ophthalmologist, Prof. Alan Charles Bird, for Honorary Fellowship in the American College of Surgeons.
Citation for Prof. Juan Carlos Parodi

by Paul E. Collicott, MD, FACS, Chicago, IL

Mr. President, I am pleased to present Prof. Juan Carlos Parodi of Buenos Aires, Argentina, for Honorary Fellowship in the American College of Surgeons.

Professor Parodi was born in Buenos Aires, to which his grandparents emigrated from Italy. He was educated in that city at the Universidad del Salvador and at the University of Buenos Aires. He was a recipient of a Physician and Surgeon Honor Certificate at the Universidad del Salvador. He completed his surgical training at the University of Buenos Aires and spent one year at the University of Illinois, following which he served as chief resident in the department of vascular surgery at the Cleveland Clinic Foundation.

From 1977 through 1984, he was chief of the Unit of Vascular Surgery at the Instituto Cardiovascular de Buenos Aires. From 1993 through 1996, he was designated adjunct associate professor at the Bowman Gray School of Medicine, Wake Forest University, Winston-Salem, NC. His wife, Graciela, is from Betanzos in Galicia, Spain, and has given him a son, Federico Ezequiel, who finished medical school this year, and a daughter, Juleita Maria, who is a psychologist.

Professor Parodi is a member of the Argentina Society of Angiology, the International Society of Endovascular Surgery, the Society of Vascular Surgery, the Andreas Gruntzig Society, the European Society of Vascular Surgery, the New York Academy of Sciences, and the Colegio Argentino de Cirujanos Cardiovasculares. He is a member of the editorial board of the Journal of Endovascular Surgery, the Annals of Vascular Surgery, editorial consultant for Latinoamericana de Hemodinamia, Angiologia y Terapeutica por Cateterismo; and Tecnicas Endovasculares (Spain).

He has been the recipient of distinctions and awards beginning while he was in training and continuing to the present. He received the Argentine Medical Association Award in 1974; the Cleveland Clinic Foundation (Research) Award in 1976; the Argentine Academy of Surgery Award in 1973, 1976, and 1979; the Argentine Society for Cardiovascular Surgery Award in 1989; the Andreas Gruntzig Award as the Best Inventor in 1995; the Spanish American Medical Society of New York Award in 1996; and the American College of Surgeons Jacobson Innovation Award in 1998.


He catalyzed the field of endovascular surgery, which has now been received enthusiastically in the U.S. and throughout the world. Endovascular surgery has transformed the field of vascular surgery and may have the same impact that laparoscopic surgery had on intraperitoneal operations.

The ease with which Professor Parodi can see mechanical situations is complemented by an open mind that questions traditionally held assumptions about biological behavior. I am told that many of these visions appear while he is on vacations.
in the Brioche Lake region in Argentina. Professor Parodi’s willingness to share information, ideas, and expertise with anybody interested in the endovascular field is admired by everyone.

Mr. President, it is most appropriate that the American College of Surgeons bestow this Honorary Fellowship to Prof. Juan Carlos Parodi, a man of vision who instituted and developed a quantum change in the management of patients with vascular disease.

Citation for Prof. Graham M. Teasdale

by Edward R. Laws, MD, FACS, Charlottesville, VA

In the 1960s and early 1970s, the lexicon for the description of the response of a patient to head injury was confused and confusing. Terms such as obtund, stuporous, semi-comatose, unresponsive, comatose, and “gorked-out” were used with reckless abandon and great imprecision. In 1974, largely because of the untiring efforts of our Honorary Fellow-Elect, Prof. Graham Michael Teasdale of Glasgow, Scotland, the medical community was given the first objective method of measuring the impact of head injury on the central nervous system and reliable milestones for following the progress and response to therapy of patients with head injury. This was the Glasgow Coma Scale, which is now utilized worldwide and has been the basis for many significant improvements that have occurred in the management of head injury patients.

Graham Teasdale was born in County Durham, England, and did his medical training at Newcastle-upon-Tyne. His neurosurgical education began in Newcastle-upon-Tyne as well, and was supplemented by periods of time spent in London and in Birmingham. He completed his neurosurgical education and obtained his first faculty appointment at Glasgow. He has been at Glasgow ever since, currently serving as professor and head of the department of neurosurgery.

Professor Teasdale’s brilliant surgical career has been punctuated by periods of time in highly productive research, one of which was a six-month appointment as visiting professor and staff neurosurgeon at the University of Texas Medical Branch in Galveston.

At the University of Glasgow, he has served as dean of research and dean of the faculty of medicine. He has been president of the Society of British Neurosurgeons and currently is editor of Acta Neurochirurgica, the journal of the European Association of Neurological Surgeons.

In addition to the Glasgow Coma Scale, Professor Teasdale and his colleagues developed a scale for the assessment of subarachnoid hemorrhage patients, which was published in 1983, and which was the basis for a number of therapeutic trials for the management of subarachnoid hemorrhage. He and his group produced other assessment tools for the management of intracerebral hemorrhage and head injury, along with the formulation of the initial guidelines for the management of such patients.

In 1998, he made another contribution that has had worldwide impact—the development of the Glasgow Outcomes Score, utilized for evaluation and outcome assessment of patients.
with brain injury from a variety of causes. He has been chair of the European Brain Tumor Consortium and has been widely recognized for his expertise in the treatment and outcome assessment of patients with pituitary adenomas.

His most recent work has incorporated molecular biology into the study of patients with traumatic head injury, demonstrating a molecular genetic susceptibility to brain injury in certain patients.

Professor Teasdale has been the author of some 400 peer-reviewed publications, many of which are widely cited, and is the author of four books.

He and his wife and co-worker, Evelyn Arnott, who is a neuroradiologist, enjoy a wonderful family life with their four children. His accomplishments in many areas will undoubtedly continue, and it is a pleasure and a privilege to present him for Honorary Fellowship in the American College of Surgeons.

Citation for Sir Magdi H. Yacoub

by William S. Pierce, MD, FACS, Hershey, PA

Mr. President, I am honored to present to you Sir Magdi Yacoub, of London, England, for Honorary Fellowship in the American College of Surgeons.

Magdi Habib Yacoub received his medical degree in Cairo in 1957 and began his surgical training in that city. In 1962, he took a post as surgical house officer at the London Chest Hospital. The following year he was appointed senior surgical registrar at the National Heart Hospital and Brompton Hospital where he worked for the next five years under Lord Brock and Mr. Donald Ross. After a brief stay at the University of Chicago Medical School, he returned to England to become a consultant cardiac surgeon at Harefield Hospital, a position he held for many years.

Currently, he heads a broad-based cardiac research program as founder and director of research at the Harefield Research Foundation and also serves as British Heart Foundation Professor of Cardiothoracic Surgery, Imperial College Faculty of Medicine, Heart Science Center, Harefield.

Sir Magdi is a Fellow of the Royal College of Surgeons, licentiate of the Royal College of Physicians, and fellow of the Royal Society of Medicine. He holds honorary degrees from Brunel University, Cardiff University, the University of Loughborough, the University of Middlesex, and the University of Lund. He holds honorary positions in Lahore, Pakistan, and at the University of Sienna, Italy. He has received many awards and distinctions, including the Clement Price Thomas Award of the Royal College of Surgeons of England. He was recently elected a fellow of The Royal Society (UK) and was presented with the society’s lifetime achievement award in recognition of his contribution to medicine.

Sir Magdi is a pioneer in the field of heart and lung transplantation and one of the world’s leading cardiac surgeons with a major focus on the surgical treatment of congenital heart disease. He is particularly known for his expertise in heart surgery on newborns, treatment of babies with transposition, and both homograft and pulmon ary autograft aortic valve replacement. He is a prolific contributor to the medical literature and has a bibliography exceeding 500 citations.
In 1995, Sir Magdi organized a charity in the United Kingdom known as the “Chain of Hope” through which physicians provide lifesaving cardiac operations to underprivileged children, free of charge, either in their country or by bringing the children to the U.K. To date, surgical care has been provided to patients in Ethiopia, Mozambique, Egypt, and Jamaica.

Sir Magdi has had a long-standing interest in raising orchids and was recently honored by having a beautiful white and red hybrid Phalaenopsis orchid named the “Professor Magdi Yacoub” orchid.

Mr. President, it is with great pleasure that I present to you this distinguished cardiothoracic surgeon, Sir Magdi Yacoub, for Honorary Fellowship in the American College of Surgeons.

Web site answers common HIPAA/privacy questions

With the final Health Information Portability and Accountability Act (HIPAA) privacy rule just five months away from enforcement, the Office of Civil Rights at the Department of Health and Human Services (HHS) has launched a “frequently asked questions” (FAQ) Web page to release answers and information regarding some of the practical issues covered entities face, including:

- Which covered entities can charge patients for copies of their medical records.
- The application of the rule to genetic information.
- How the rule affects commonplace physician office practices, such as calling out patients’ names in waiting rooms or using sign-in sheets.
- The effect of the business associate provisions on outside workers, such as plumbers, electricians, or photocopy repairers.
- Issues connected with information disposal.

Updates will be posted regularly. Visit the FAQ Web page at http://www.hhs.gov/ocr/faqs1001.doc.

2003 LEGISLATIVE SESSION, from page 22

Legislative Action Center

The College recently collaborated with a number of national surgical specialty societies to establish a Surgery State Legislative Action Center—an electronic advocacy tool that the College and many of these societies already use for federal advocacy efforts. Under this new state initiative scheduled to debut in January 2003, a Web site will be established that will match surgeons (by zip code) with their elected state representatives, allowing them to reach out to members of their state legislatures on an ad hoc basis or through a coordinated grassroots campaign. The College is hopeful that this new advocacy tool will allow surgeons and the chapters to be more proactive at the state level.

Be an ACS StAR

The College remains committed to helping chapters and Fellows respond to state-level legislative and regulatory proposals. However, the College cannot do it alone. Chapters must be prepared and ready to move forward with advocacy activities when critical issues arise. We are, therefore, looking for Fellows who have close ties with individuals within their state legislature, medical board, or public health department. If you are already involved in state activities or would like to become involved, we encourage you to become an ACS State Advocacy Representative (StAR) and help us to help the chapter and your colleagues set the agenda at the state level. If you would like to become an ACS StAR, please contact the State Affairs staff in the College’s Division of Advocacy and Health Policy (see Fig. 6, p. 22).
In an effort to meet the growing and ever-changing needs of our Fellows and a diverse surgical community, the Division of Education will be offering six online general sessions from the Clinical Congress. These sessions will be offered in the form of a Web cast through the College’s Web site approximately four to five weeks after Congress.

Each session will be offered separately and will contain a written transcript, audiovisual displays, a post-test, an evaluation, and, upon successful completion of each session, an online printable CME certificate.

Available courses:

- **GS 08:** New Technology: What’s Proven, What’s Not
- **GS 10:** Patient Safety
- **GS 21:** Damage Control in Trauma and Emergency Surgery: New Applications
- **GS 23:** Programa Hispanico
- **GS 34:** Should Axillary Dissection Be Abandoned?
- **GS 40:** Management of Metastatic Disease of the Liver
Meeting of Young Surgeons Representatives

Reflections of a young surgeon

by David R. Jones, MD, FACS, Charlottesville, VA

I was fortunate to be chosen by the Virginia Chapter of the American College of Surgeons (ACS) to be one of its representatives at the annual Meeting of Young Surgeons Representatives, held this past May in Chicago, IL. For the first time, this meeting was combined with the Chapter Leadership Conference and thus offered a unique opportunity for a young surgeon such as myself to visit the College and to better understand the relationship between the local ACS chapter and our parent organization.

Despite this unique opportunity, I was uncertain that the benefits of attending the conference would merit a three-day absence from my busy practice. Fortunately, I committed to attending and soon realized how important and informative this conference was.

The goals of the program were: (1) to introduce young surgeons to the College, (2) to encourage surgeon participation in their local ACS chapters, and (3) to help young surgeons find value in their membership with respect to their professional needs. To meet these goals, the content of the conference centered on the four pillars on which the ACS is currently grounded—education, health policy and advocacy, member services, and clinical research.

Participants heard an excellent talk by Ajit K. Sachdeva, MD, FACS, FRCSC, Director of the ACS Division of Education, who spoke on medical student and resident mentoring and preceptorship. This presentation prompted an open discussion of different strategies whereby surgeons, working with the College, can improve public and medical student perception about our profession. In addition, several participants discussed ways in which they as individuals, or as part of their chapter, have begun to implement undergraduate and medical student preceptorship programs locally. It is clear that the College is very supportive of chapter programs that introduce undergraduate and medical students to the profession of surgery.

One highlight of the conference was an afternoon session devoted to developing a strategic plan for our ACS chapters. We had the opportunity to create an updated mission statement and working plan for our chapters. The strategic planning tools and organizational skills emphasized during this portion of the program were invaluable. They will certainly prove useful in guiding chapter leaders, but will also be valuable for us as surgeons in our respective roles in our own practices and institutions.

The second day was opened by R. Scott Jones, MD, FACS, then-President of the ACS. Dr. Jones stated that despite the difficulties facing young surgeons today, he believed this was one of the most exciting times in surgery and that he “wished he was a young surgeon practicing today.”

The program continued with updates on the activities of the College that were presented by the directors of the various ACS divisions. This review was particularly helpful because it allowed me to have a better appreciation of the scope and accessibility of the College’s programs as they relate to my own practice and our chapter.

We then had the option of participating in one of three educational workshops. These sessions...
were all excellent and focused on membership communication, effective federal and state advocacy strategies, and educational program development for chapter members, including residents and medical students.

Additionally, for those who were interested, we were given a tour of the College's facilities, including the Board of Regents' meeting room and the Executive Director's office. The facilities of the ACS headquarters are state-of-the-art, and the staff members are enthusiastic and dedicated.

The final day focused on issues relevant to the young surgeon. The session was opened by ACS Executive Director Thomas R. Russell, MD, FACS, and was followed by an evidenced-based discussion of risk management communication strategies for surgeons and their staffs.

This session was followed by a humorous but extremely helpful presentation by Erle E. Peacock, Jr., MD, FACS, on how to be an expert witness. His observations and experience were invaluable to those of us who have been asked to participate in medical liability cases. Finally, Frank Opelka, MD, FACS, provided an informative session on how young surgeons can better analyze their practice's finances and understand how to improve their management in a time of decreased reimbursements and escalating costs.

While the formal educational program was excellent, the coffee-break sessions and dinners were equally informative and helpful. Discussions on medical liability reform, opinions on how to attract the “best and brightest” to our profession, as well as how to get involved in local and national ACS activities were just a few examples of what was discussed in the “off time.” These interactions provided me with firsthand information about how other surgeons were handling their practices, marketing their services, teaching residents and students, and participating in their local College chapters.

Flying home after the conference ended, I reflected on what I had learned. Certainly, I had a much clearer understanding and appreciation of what the College is and of the resources it commands. I also realized that I am a part of the next generation of surgeons and that the time for us to make our mark on our profession is upon us. The meeting reemphasized to me that just as the practice of surgery is active and not passive, so is ensuring that our profession remains healthy, robust, and dynamic. The talks we heard during those few days also served as a reminder of the individual stewardship required by all members of the College to ensure the College’s productivity and longevity. The meeting allowed me to enjoy the fellowship of other young surgeons who share many of my own goals, aspirations, and concerns. Finally, it reaffirmed that the College is alive and active and is an understudied resource for ACS chapters and young surgeons alike.

In summary, I had to agree with Dr. R. Scott Jones that it is good to be a young surgeon in the American College of Surgeons.

Dr. Jones is assistant professor of surgery and surgical director, lung transplantation program, department of thoracic and cardiovascular surgery, University of Virginia, Charlottesville.

Mission group seeks surgeons for trip to Dominican Republic

Medical Ministry International (MMI) is sending a mission group to the Dominican Republic January 11-25, 2003, to provide surgical care in the small village of Cabara, which is on the north coast of the island. A full team of nurses, anesthesiologists, certified registered nurse anesthetists, and various assistants has been assembled, but the team is still in need of one or two surgeons.

Operations likely to be needed include hernia, hysterectomy, thyroidectomy, cholecystectomy, and other general surgical procedures. The pathology is the same as that seen in the U.S., but is often further advanced.

For further information, contact swartley@southwind.net, or visit MMI’s Web site at http://www.mmint.org.
MBNA ad
Evarts A. Graham, MD, FACS, a Past-President (1940-1941), Regent (1940-1954), and Chairman of the Board of Regents (1951-1954) of the American College of Surgeons, is the subject of a new book entitled Evarts A. Graham: The Life, Lives, and Times of the Surgical Spirit of St. Louis, by C. Barber Mueller, MD, FACS.

In the book’s foreword, Ben Eiseman, MD, FACS, states: “Graham dominated almost every facet of American surgery during the middle third of the twentieth century. As a clinical scientist, his innovations altered the management of gallbladder disease by his invention of a radiologic method to visualize the gallbladder; his laboratory and clinical studies altered the management of the empyema that was a major source of mortality during the influenza epidemic; his physiologic studies set the stage for the emergence of thoracic surgery. Graham performed the first one-stage pneumonectomy for lung cancer, and he was a major force in establishing the relationship between cigarette smoking and lung cancer.”

The bulk of the source material for the book, containing 1,568 files and covering 78 linear feet of shelving, is currently housed in the Washington University Medical Library Archives, St. Louis, MO, and required three to four visits per year by the author for eight years. “I have attempted to give Evarts Graham to the reader through his own words...I wish to show his vision of greatness and purpose, as well as his pettiness, suspicions, anger, and sense of injury... I have also attempted to show the status of surgery, anesthesia, and pathology during these years, and how Graham related to and influenced them,” Dr. Mueller notes.

The 494-page text delineates Dr. Graham’s triumphs, tribulations, and sensitivities in his own words and placed against the backdrop of contemporaries and surgery as practiced in the first half of the twentieth century. “Evarts Graham’s accomplishments and the practice of surgery are intertwined—as the times shaped him, so did he shape the times—more so than any surgeon of his day,” Dr. Mueller states.

The author was Dr. Graham’s last chief resident and has been honored with the College’s Distinguished Service Award. He currently resides in Hamilton, ON, as professor emeritus of surgery on the McMaster University Faculty of Medicine.

Evarts A. Graham: The Life, Lives, and Times of the Surgical Spirit of St. Louis is available for $48 per copy, plus shipping and handling, by contacting Medical Center Alumni Association, Campus Box 8509, 660 S. Euclid Ave., St. Louis, MO 63110-1093. Further information about the book may be obtained by contacting Bryan Prince Bookseller, tel. 1-800/867-0090, fax 905/528-1877, email orders@princebooks.net; Web site: www.princebooks.net.
They fit not only in your pocket, but into your busy schedule as well. You can take the 2002 Syllabi Select courses wherever you have access to a computer ... at home, at work, or even on the road.

Syllabi Select is a CD-ROM containing 14 postgraduate course syllabi from the 2002 Clinical Congress. These syllabi—selected and packaged for your convenience—can be purchased by calling 312/202-5474 or through the College’s Web site at http://secure.telusys.net/commerce/current.html.

The 2002 Syllabi Select CD-ROM is priced at $75. There is an additional $16 shipping and handling charge for international orders.
Who
• Young surgical investigators (principal investigator is first named author).
• Up to eight (8) co-authors allowed.

What
• 250 maximum word abstract that presents a concise summary of research done and in progress, but not presented or published previously. Title must be brief; body of abstract must include Introduction, Methods, Results, Conclusions. One-page table may be submitted separately (see Author Instructions on Web site) if absolutely necessary; table does not count toward the 250 maximum word count.

When
• Abstracts accepted from December 1, 2002, through March 1, 2003.

Where
• Online submissions ONLY: http://www.facs.org/sfabstracts/
• Final Decision: May 2003 (principal author will be contacted).
• Format: Follow Author Instructions, Online Submission.
• Questions: kkoenig@facs.org or: 312.202.5336.