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Few medical and surgical institutions have the legendary history associated with Cook County Hospital (now Stroger Hospital of Cook County) in Chicago, IL. Many Fellows of the American College of Surgeons (ACS), particularly trauma surgeons, can recall doing at least one rotation through Cook County Hospital (CCH), and most Americans are somewhat familiar with the institution as the model for the hospital featured in the long-running television series ER and for a cameo appearance in the movie The Fugitive.

Many Past-Presidents and other leaders of the American College of Surgeons (ACS)—including John B. Murphy, the Mayo brothers, Albert Ochsner, Allen B. Kanavel, Olga Jonasson, Robert J. Lowe, Herand Abcarian, and L.D. Britt (all MD, FACS)—trained, taught, or practiced at or have been in some way affiliated with CCH. Details about the impact that the hospital has had on all surgical specialties and its strong ties with the ACS are chronicled in a new book, A History of Surgery at Cook County Hospital, edited by ACS Fellows Patrick D. Guinan, Kenneth J. Printen, James L. Stone, and James S. T. Yao—each of whom trained and practiced at CCH. Some snippets of the institution’s fascinating history as documented in the book follow.

Service and education
The first iteration of CCH was set up in the Fort Dearborn trading post in 1803 to provide care to U.S. Army soldiers. The first surgeon at Fort Dearborn was William C. Smith, and the first recorded surgical procedure was a bilateral leg amputation performed by Elijah Dewey Harmon, MD, in 1832. That same year, Cook County was incorporated by the State of Illinois, and the hospital undertook its continuing commitment to serving the sick, injured, and medically indigent citizens of the county. From 1876 to 2002, the main building was located at 1825 W. Harrison. Over the years, it grew into what once was the largest general hospital in the world, with 4,300 beds, and one of the nation’s most highly regarded training centers.

General surgery at CCH originated with Christian Fenger, MD, a pathologist and the first chair of surgery at Northwestern University. Dr. Fenger trained ACS founders, including Dr. Murphy and William and Charles Mayo. At one point, all six Chicago-area medical schools—Rush, Northwestern, University of Illinois, Loyola, University of Chicago, and Chicago Medical School—had attending surgeons and surgical residents teaching and training at CCH with no financial compensation. CCH started as an intern hospital and gradually became a residents hospital in the late 1930s, receiving approval from the recently formed Accreditation Council for Graduate Medical Education in 1939.

As some of you may know, a common practice in the early days of surgical education was to demonstrate an operation in an amphitheater setting. Chicago’s first surgical amphitheater was built at CCH. As an attending surgeon, Dr. Murphy began conducting his well-known surgical clinics in the amphitheater on Friday mornings. Karl Meyer, MD, FACS, and Raymond McNealy, MD, FACS, went on to use the amphitheater for similar purposes, drawing crowds of physicians to observe their wet clinics.

CCH also was one of the first institutions to use night surgeons. This position was designed to hone the skills of the attending surgeon and to develop the surgical judgment of surgical residents. Robert T. Vaughn, MD, FACS, a general surgeon at St. Luke’s Hospital, was the assistant warden for night emergencies at CCH for 33 years (1917–1950), providing clinical instruction and making extensive contributions to the surgical literature on topics ranging from osteomyelitis of the sternum to retrograde amnesia following skull fracture.

In addition to being a leading surgical training ground, CCH was the launching pad of many medical and surgical services that have benefitted patients around the world. For example, Bernard Fantus, MD, founded the first blood bank at CCH in 1937. Also in the 1930s, Dr. Kanavel and Sumner L. Koch, MD, FACS, established a burn surgical service at CCH. Renamed in Dr. Koch’s honor in the 1960s, the burn center would prove remarkably successful in improv-
ing the survival rates and quality of life for burn vict-

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\text{Leaders at the CCH and of the ACS also made invalu-
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able contributions to the development of the surgical specialties, including cardiothoracic, pediatric, neurological, vascular, urological, orthopaedic, plastic, otolaryngological, oral and maxillofacial, ophthalmic, and colon-rectal surgery.

A new age

The 1960s was a period of enormous political, social, and scientific change. It also was a time when health care and medical education were becoming more intensely scrutinized. All of these factors had a significant effect on inner-city teaching hospitals like CCH.

Richard J. Freeark, MD, FACS, was appointed chair of the department of surgery at CCH in 1963 and medical superintendent in 1968. Dr. Freeark laid the groundwork for revitalizing the resources of the hospital to promote quality care and to establish a superior post-

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\text{graduate training program in general surgery and the surgical specialties. He succeeded in many ways.}
\]

With respect to surgical training, Dr. Freeark made two important moves: he established a two-month rotation with surgeons at the Lahey Clinic, Burlington, MA; and he recruited renowned surgeons George Block and Don Ferguson of the University of Chicago and Otto Trippel and John J. Bergan of Northwestern (all MD, FACS) to join the volunteer attending staff.

On the clinical side, Dr. Freeark and Robert J. Baker, MD, FACS, oversaw the development of the nation’s first official dedicated trauma center—the CCH trauma unit—in 1966. The CCH trauma unit became the conceptual model for trauma systems planning, patient care, and training throughout the nation. The trauma unit also housed a computerized trauma registry developed in conjunction with the University of Illinois, Chicago. As the value of trauma registries continued to rise, John Fildes, MD, FACS, and Richard J. Fantus, MD, FACS (Bernard Fantus’s grandson), collaborated to establish the ACS National Trauma Data Bank® in 1989.
The socioeconomic turmoil affecting the city in the late 1960s and early 1970s and decades of neglect took their toll on the institution. Dr. Freeark resigned as medical superintendent in 1970. Gerald Moss, MD, FACS, from the University of Illinois took over the department of surgery in 1972 and led a significant revitalization of the surgery program. He rebuilt the freestanding residency program in general surgery by recruiting outstanding graduates of the program to lead the divisions of general and pediatric surgery. He also retained outstanding residents in general surgery and the surgical specialties to train residents and serve as attendings. For example, in 1972 he appointed Dr. Abcarian, who began his training as an intern at CCH in 1966, to serve as program director of the colorectal surgery residency and section chief of colon and rectal surgery at CCH—positions he would hold for 23 years of tremendous growth and advancement.

Dr. Moss was succeeded by Olga Jonasson, MD, FACS, a skillful academic, general, and transplant surgeon. As chair of surgery at CCH, Dr. Jonasson led the integration of the general surgery residency program with the University of Illinois program. A controversial move at the time, it ultimately improved surgical training at CCH. Dr. Jonasson resigned from CCH in 1986 to serve as the Zollinger Professor and Chair, department of surgery, Ohio State University, Columbus. She ended her career at the ACS headquarters as Director of Surgical Education and Research.

Her successor at CCH was Hernan M. Reyes, MD, FACS, chair of the CCH division of pediatric surgery. Under his leadership, the surgery departments were restructured, new leadership was appointed, and, to attract more competent attending staff, salaries were upgraded. Clinical improvements included better patient follow-up, reinstitution of the cardiac surgery program, recruitment of a full-time director of breast surgery service, replacement of an outdated cancer registry with an electronic record-keeping system, establishment of the Hektoen Institute for Medical Research focused on advancement in surgical technology, advancements in laparoscopic surgery, and improved survival rates among critical care patients.

A must read
The book ends with historical vignettes, and the print edition also contains photos collected from CCH alumni and the ACS Archives. This column has barely skimmed the surface of all the information covered in this book and hardly touched upon the contributions of ACS Fellows associated with CCH.

The editors are to be commended for their efforts to compile a comprehensive, compelling, and loving reflection on an institution to which the surgical profession and patients around the world are deeply indebted. I would encourage anyone who is interested in learning more about the history of our profession and the ACS to read the book.

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
Strategies for sustainability:

Going green in the OR

by Tony Peregrin
“When we say we are here for your health—we mean it on every level. Green OR programs are a great way to show commitment to the overall well-being of a patient—not just giving them medicine, but providing an environment in which they will be safer, cleaner, and healthier.”

—Dr. Paluch

Going green, particularly in the operating room (OR), is a meaningful goal for many environmentally conscious surgeons, but for budget-wary hospital administrators, the decision to adopt more sustainable practices is often about the other green—money. Current research suggests sustainable OR initiatives do, in fact, reduce operating cost while eliminating waste and improving environmental sustainability.

According to Greening Health Care: How Hospitals Can Heal the Planet, U.S. hospitals produce more than 2.3 million tons of waste each year, with an average of 26 pounds of waste per staffed bed in the course of a single day.1 When the environmental ramifications of these numbers are considered along with the impact on health care expenditures, the validity of cost-cutting environmental stewardship programs becomes increasingly apparent. Whether it’s the red bag waste reduction initiative of the Carolinas Medical Center (CMC), Charlotte, NC, which resulted in a $50,000 per year savings, or the streamlining of surgical kits at the University of Minnesota Medical Center, Fairview, which has yielded $104,000 in savings annually—these programs have demonstrated that they protect both the environment and the institutions’ bottom line.2,3

In this article, surgeon leaders discuss effective green OR strategies, offer guidelines for reporting program outcomes, and highlight practical solutions for promoting the kind of culture change necessary to achieve long-lasting results.

Single-use devices and surgical kits
“The first step toward [creating] a green OR is to observe what is going on around you and to find out how you are contributing to your environmental footprint,” said Tom Paluch, MD, a general surgeon with the Kaiser Foundation Medical Center, San Diego, CA, and co-presenter of The Environmentally Responsible Surgical Practice Panel Session at the 2014 Clinical Congress. “Reducing disposable instrumen-
tation is the single biggest way a surgeon can have a positive impact on the environment. We eliminated single-use devices (SUDs) for laparoscopy, and we went from consuming $300,000 worth of equipment a year to virtually nothing—and that’s just in one hospital here in San Diego,” said Dr. Paluch.

Each year, Kaiser Permanente reduces medical waste by recycling and safely reusing SUDs, according to Dr. Paluch. Recycling SUDs—which is conducted in strict accordance with U.S. Food and Drug Administration (FDA) regulations—reduces purchasing and overall waste disposal costs.4

In addition to recycling SUDs, Kaiser Permanente has partnered with MedShare, a not-for-profit organization dedicated to repurposing unused, unexpired medical equipment that previously ended up in landfills. MedShare is one organization that redistributes these supplies to clinics and hospitals in the developing world.4 Approximately 2 million pounds of recoverable medical supplies can be found each year in large, metropolitan U.S. academic medical centers. Collectively, these materials hold a potential value of at least $15 million per year.5

Another way surgeons can contribute to the sustainability of their health care institutions is by working with colleagues to standardize operative packs and trays, according to Daniel Klaristenfeld, MD, FACS, FASCRS, a colorectal surgeon, Kaiser Permanente, San Diego, and moderator of the 2014 Clinical Congress Panel Session. “For common procedures like gallbladder surgery or hernia repair, we walk into a case and instead of having every available instrument open and on the table, they are available but not opened, which saves time and money,” he said. All opened instruments, regardless of whether they are used in a procedure, must be sterilized again and repackaged.

Streamlining surgical kits or packs has been a priority for Rafael Andrade, MD, FACS, a general thoracic surgeon at the University of Minnesota Medical Center, since 2009. Dr. Andrade, along with Lynn Thelen, RN, launched a grassroots OR Green Team to explore the feasibility of reducing waste at their hospital. After soliciting input from colleagues, they examined 38 different types of OR packs to determine which devices, such as plastic basins, catheters, and syringes, were unused and then instructed their product vendor to remove the items from the packs.3 For example, a pack designed for inserting an intravenous port in chemotherapy patients was whittled down from 44 devices to 27, and disposable gowns and linens were replaced with reusable items. Overall, this initiative resulted in a reduction of one pound of trash and $50 in supply cost savings per procedure.3

“Most surgeons don’t know what exactly is in the kit when they enter the OR. They simply want to come in and start operating and not waste time trying to get [supplies that are] not available,” said Dr. Andrade. “We explained to the surgeons that items that are never used are going to be removed [from the kits] and that items that are sometimes used can be on hold in the room, but not included in the kit so they don’t get wasted every single time.” Dr. Andrade said in-person meetings with hospital and surgeon leaders were key in dealing with resistance and quickly led to acceptance and support of the initiative. “All upfront work—getting buy-in from the surgeons—is done in person,” he said.

“Go and see if something like this already exists.”
—Dr. Klaristenfeld
Red bag initiative

At CMC, red bags in the OR and intensive care units (ICUs) are designated for biohazardous waste. According to B. Todd Heniford, MD, FACS, chief, division of gastrointestinal and minimally invasive surgery, CMC, it costs 10 times as much per pound to dispose of these materials than other waste, primarily due to the cost of transporting and incinerating red bag waste, not to mention the effect of the toxic release of dioxin on the environment as a result of this processing.

“What we found was that staff was throwing essentially everything that touched a patient into a red bag, so it was simply a matter of educating our teammates about the difference between biohazardous materials and general waste, which typically goes to a landfill. While a landfill is not a great option, it is certainly better than incineration,” explained Dr. Heniford, co-author of “The green operating room: Simple changes to reduce cost and our carbon footprint,” published in a 2013 issue of The American Surgeon.

“We also found that in the ICUs the biggest trash cans held red bags, so people threw everything in there,” Dr. Heniford said. “We changed the trash cans—I say ‘we,’ but it was the institution’s custodial staff who suggested changing the size of the trash cans. They made the red bag trash can the smallest one in the room, and they

“Ours has been a grassroots movement; it was not led by administration.... Peer-to-peer communication means there is a representative from each group on the green team—surgeons, nurses, surgical technicians, physician assistants, custodians, and so on. If I need to get a message out to the surgeons, I talk to them as the surgeon representative on the green OR team.”

—Dr. Andrade
GOING GREEN IN THE OR

“When we began our program, we decided it had to be cost-neutral.... And very quickly we were able to demonstrate with a few small, grassroots initiatives that not only were we able to remain cost-neutral, but we actually saved money. Saving money and reducing our carbon footprint energized the committee and captured the administrators’ attention.”

—Dr. Heniford

also purposely placed these cans in the corner of the room so that you had to walk a few feet to dispose of an item there,” he added. Staff members now have to make more of an effort to dispose of an item in a red bag, which serves as a reminder to only place heavily soiled materials in these receptacles.

Dr. Heniford said his institution observed a 75 percent reduction in red bag waste, with an estimated savings of more than $50,000 a year. The red bag initiative is a product of the CMC’s Green Operating Room Committee (GORC), formed in 2008 with members from surgical, nursing, anesthesia, and OR staff, and environmental services.2

Educating staff members on proper disposal of biohazardous waste versus general waste, rather than underscoring policy mandates and regulations, is the best way to ensure team member buy-in, according to Dr. Andrade. At the University of Minnesota Medical Center, staff members are now required to take an online course on proper waste disposal as part of their annual education requirements.6

Environmentally preferred purchasing
Surgical kit reduction, waste elimination, water conservation, and other green OR initiatives essentially start, in some form or another, with purchasing. Environmentally preferred purchasing (EPP), according to Dr. Paluch, can be defined as the “purchase of products and services whose environmental impact have been considered and found to be less damaging to the environment and human health when compared [with] competing products and services.” These items could include reusable surgical instruments, environmentally safe/reduced product packaging, and even general cleansers and solvents formulated specifically for a reduced impact on the environment.8 In a sense, EPP can be considered “preventive medicine” that promotes a healthy environment through products that are green friendly.8

According to Vanessa Lochner, director of EPP for Kaiser Permanente, buying green occurs in three distinct phases:9

• Pre-sourcing: This step involves the work prior to a sourcing event—researching what various vendors have to offer. For example, it might entail sending a chemical disclosure questionnaire to suppliers or reviewing a product category for reduced packaging opportunities.

• Sourcing: In this phase, also known as procurement, hospital administrators and green OR teams define their requirements so that suppliers in the marketplace may bid on goods and services.

• Implementation: This step is the execution phase of a project or initiative that produces a positive environmental outcome—one that is trackable with metrics.

Surgeon leaders can have an impact on a facility’s purchasing decisions, Dr. Paluch suggests, particularly at the sourcing phase when product requirements are addressed with vendors. Surgeons and OR green teams can also contribute to EPP initiatives by assisting in product assessments, tracking purchasing decisions, and monitoring cost-benefit analysis of these products and services. Perhaps most importantly, surgeons who are champions of EPP can help
develop stakeholder and colleague engagement in these purchasing decisions by promoting the positive effects on the environment.

In 2014, Johnson & Johnson, the pharmaceutical and manufacturing company, partnered with Harris Poll to measure the importance of sustainability issues among global health care professionals, including surgeons, OR nurses, and hospital executives in the U.S. and five other countries. More than half (54 percent) of respondents to the study report that their hospitals currently incorporate sustainability into purchasing decisions, and 80 percent anticipate that will be the case within two years. More than 300 health care professionals participated in the 2014 survey, either online (289) or by phone (40).

According to the study, health care professionals also agree it makes good financial sense for hospitals to go green, both in the U.S. (79 percent) and globally (69 percent). In fact, 67 percent of domestic and 60 percent of international respondents report a growing commitment to sustainability from top hospital management.

"The biggest reason for hospitals to be involved in green initiatives is cost savings—but it is a nice benefit to be able to say to the public that you are environmental [stewards]," said Dr. Paluch. "When we say we are here for your health—we mean it on every level. Green OR programs are a great way to show commitment to the overall well-being of a patient—not just giving them medicine, but providing an environment in which they will be safer, cleaner, and healthier.”

"By being green, we sacrifice nothing,” added Dr. Heniford. “Being green demonstrates our responsibility to not only to our patients but to our communities.”
Culture change

Surgeon leaders can accelerate the culture change needed to encourage and sustain green practices at their institutions. To ensure the longevity and success of these programs, surgeon leaders should develop a collaborative support network throughout the organization and provide hospital executives and staff members with measurable results.

“The raison d’etre for a hospital is not to be an environmentally savvy organization; it is to take care of the patient,” said Dr. Paluch. “How do we best do that? By providing quality care, but also by being environmental stewards. To make these kinds of changes, it is as simple as going to the administration; and, yes, it is as difficult as going to administration. It’s like turning a battleship with a canoe paddle—it’s not an easy thing to do. However, these initiatives tend to catch on—one, because it’s smart, and two, because they save money. That is what gets people interested because it’s measurable. If you can’t measure it, you can’t manage it.”

Providing hospital administrators with tangible results was the justification behind the first green initiative—water conservation—led by the GORC team at CMC. According to Dr. Heniford, the scrub cycles of 100 consecutive physicians, nurses, residents, and technicians were observed to determine how much time they spent scrubbing before an operation. In all but two cases, water ran nonstop while staff members scrubbed, whether their hands were under the water or not. And frequently, the water was left running even when no one was at the sink. To minimize this problem, OR sinks were outfitted with flow meters, and the GORC estimated daily, weekly, and yearly use.

“We demonstrated to OR staff that we could save real [amounts of] water by making a conscious effort to conserve it,” said Dr. Heniford. “At that point, only 20 percent of the surgeons, nurses, and scrub techs used waterless scrub prior to surgery, and when we surveyed staff, the reason was purely based on tradition. There must be something soothing about hearing the water run prior to an operation. Once we convinced staff to use an alcohol-based waterless scrub—which is as safe or safer than water scrub—we have [had] an estimated savings of 2.7 million liters of water per year in the ORs alone, in just our hospital.” Tethered to this water-saving initiative were additional green-friendly cost savings from a decrease in washing and processing towels and lower sewer-use fees.2

“When we began our program, we decided it had to be cost-neutral,” said Dr. Heniford. “And very quickly we were able to demonstrate with a few small, grassroots initiatives that not only were we able to remain cost-neutral, but we actually saved money. Saving money and reducing our carbon footprint energized the committee and captured the administrators’ attention.”

In addition to offering hospital administrators tangible, measurable results, such as cost savings and waste-reduction outcomes, Dr. Andrade and his colleagues were able to help achieve a culture change throughout his organization through peer-to-peer communication. “Ours has been a grassroots movement; it was not led by [the] administration,” revealed Dr. Andrade. “Peer-to-peer communication means there is a representative from each group on the green team—surgeons, nurses, surgical technicians, physician assistants, custodians, and so on. If I need to get a message out to the surgeons, I talk to them as the surgeon representative on the green OR team. If someone needs to communicate something to the nurses, then the nurse on the team conveys that information. We’ve emphasized this model from the very beginning because it’s where you get more bang for your buck. It’s not a surgeon imposing a message or request on nurses, or a surgical tech trying to sell something to the surgeons. Peer-to-peer communication is the best way to engage staff members in green initiatives,” said Dr. Andrade.

“It’s interesting because people tend to come out of the woodwork as soon as you start to talk about green OR initiatives openly,” said Dr. Klaristenfeld. “Other hospital systems and organizations may have this kind of program already in place, with people in

GOING GREEN IN THE OR

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place whose jobs are focused on these issues, and you might not even be aware of it. Go and see if something like this already exists.”

Transparency regarding the sustainability efforts of a green OR team is also key to maintaining staff engagement. Reporting green team outcomes and comparing results from previous years or even results from different departments within the same facility can help generate renewed interest in a water use reduction program or a red bag initiative.

“As a surgeon, being green is not going to be at the forefront of my daily existence, so the only way to keep it a priority is to keep putting it in front of me and my peers,” Dr. Paluch noted. His institution has a regular reporting cycle that details the team’s accomplishments on a monthly or bimonthly basis. “When we remind surgeons that the same patient care can be administered with environmental savvy or stewardship, we’re going to sign on to this—but we need reminders because this is not our primary focus.”

“One of the most important things we were able to do is keep score,” added Dr. Heniford. “Keeping score energizes people because they see that they can make a difference.”

Conclusion
Demonstrating a return on the investment of time and resources is essential when launching a sustainability program and is likely the most convincing way to foster a culture change throughout an organization. Surgeons are natural leaders who foster collaboration both inside and outside the OR and are essential to the long-term success of a green OR initiative. Leading by example, surgeons can play a significant role in developing an interdisciplinary green team, encouraging reprocessing of single-use surgical devices, establishing a sustainable waste management program, and advocating for green-friendly purchasing practices.

REFERENCES
PreOp program:

Can we achieve a “trickle-up” effect?

by Rachael A. Venn, Stefanie P. Lazow, and Gregory F. Dakin, MD, FACS

Few moments really have the power to change an individual, but most people can point to at least one or two life-altering events. For the lead author, Rachael A. Venn, one of these experiences occurred when she was in her early 20s and was given the opportunity to scrub-in on an operation. Up to this point, becoming a surgeon had never crossed her mind. But there she stood, holding a retractor as if it were the most important task she would ever perform. And in that moment, it was. Words cannot adequately describe the intrigue and awe Ms. Venn felt at not only seeing, but touching the uterus, ovaries, and fallopian tubes, each with a gleam and texture that elude the diagrammatic representation of a medical textbook.

By the time the last suture was placed, Ms. Venn knew a few things: she loved the operating room (OR), she had to be that close to a patient again, and she would go to medical school. What she did not know was that, based on the current structure of medical education, if she wanted to re-enter the OR, she would either have to wait several years until her surgery clerkship, or she would have to create the opportunity for it to happen sooner.
PreOp—a preclinical surgical exposure program established through a joint effort at Weill Cornell Medical College and New York-Presbyterian Hospital, New York, NY—was the opportunity that Ms. Venn and co-author Stefanie P. Lazow created in their first year of medical school. This program explores the potential impact of preclinical surgical exposure on medical students’ specialty interest and their surgical confidence and competency. This article describes the PreOp model and how it successfully offers increased surgical exposure to first-year medical students, providing preliminary data from an ongoing longitudinal study of this program.

Generating enthusiasm
Exposure to surgery and surgical education has historically been neglected in the preclinical years of medical school. In light of ongoing concerns about the prospect of surgeon shortages in the near future and growing reports of reduced resident competency, the preclinical years may be an opportune time to pique medical students’ interest in surgery and guide them toward surgical careers. Intensive surgical exposure at this time may contribute to a “trickle-up” effect, providing students with early training that will not only stimulate surgical interest, but also serve as a foundation for increased competency at subsequent stages of their careers.

Most U.S. medical schools follow a two-plus-two pattern, in which the first two years of the curriculum are classroom-based, and the last two are clinical. While there has been a recent push to incorporate more skills-based learning and patient interaction into the preclinical years, early, structured surgical exposure is still lacking.

This dearth of early hands-on experience is especially problematic given projected physician shortages. The U.S. Department of Health and Human Services recently published a report indicating that by the year 2020, the field of general surgery will experience a shortage of more than 20,000 surgeons, meaning demand for their services will far exceed the supply. This projection is based not only on the changing demographic of an aging population, but also on a concomitant decrease in the number of practicing general surgeons.1

These changes emphasize a need to better understand what drives medical student interest in pursuing surgical training. Studies of clerkship students indicate that mentorship and hands-on participation in the OR are two factors that influence students’ desires to pursue surgical careers.2 Several medical school programs have attempted to provide both components to first- and second-year medical students. These institutions have found that participants in these programs had increased enthusiasm about surgery in comparison with matched control students who lacked such exposure.3,4 However, little long-term follow-up research has been conducted to assess whether this increased preclinical exposure ultimately affects specialty preferences or match outcomes.

Further complicating an undersupply of surgeons is the current climate of resident education. Based on examination scores and clinical performance, work-hour restrictions have been associated with a decline in patient outcomes and resident education.5 The same studies described previously also found that preclinical students who experienced more intensive surgical exposure had consistently higher self-reported confidence ratings when asked about basic surgical skills.3,4 Using confidence as a proxy for competence, which has yet to be directly measured, these results suggest that targeting interested students for training earlier in their medical education may enhance their preparedness as third-year clerks, then as residents, and ultimately as young attending surgeons—a sort of trickle-up effect.

Introducing PreOp
With these possibilities in mind, the authors set out to design a program that offers medical students mentored and active participation in the OR, starting from their first month of medical school to the time of their residency match. The purpose of this study is not only to show that there is a place for intensive surgical exposure in the preclinical years, but also to share a
successful model that can be readily implemented in medical schools throughout the country. Examining the factors that influence student satisfaction, career interest, and confidence and competency in preclinical exposure programs may help guide the early stages of training for the next generation of surgeons.

Study design
The PreOp pilot program ran from September 2013 to June 2014 as a collaborative effort between Weill Cornell Medical College and New York-Presbyterian Hospital. Participants included 10 attending surgeons, who served as mentors, and 10 first-year medical students. (One of the 10 selected students decided to terminate his participation in PreOp and was not replaced.)

The mentors were recruited across a number of specialties—including cardiothoracic, general, neurologic, and plastic surgery, as well as otorhinolaryngology, and urology—and were selected based on their interest in medical education and their willingness to engage preclinical students in the OR.

Students from the class of 2017 were invited to apply and were accepted the summer before matriculating. Admittance to the program was based upon a qualitative review of a student’s personal statement and his or her curriculum vitae by Gregory F. Dakin, MD, FACS, the surgical faculty sponsor and a co-author of this article, and Charles L. Bardes, MD, associate dean of admissions at Weill Cornell Medical College. Each month, students rotated with one of the mentors, spending one to five days in the OR and/or clinic. A parallel skills component, which consisted of four skills workshops and two lectures, was designed to increase both student confidence and competence with basic surgical skills.

As part of a study approved by the institutional review board at Weill Cornell Medical College, PreOp program students completed a monthly survey detailing their involvement with and impression of that month’s rotation. Nine matched control first-year medical students were recruited based on a demonstrated interest in surgery, either by signing up to participate in Weill Cornell’s already established but less intensive surgical interest group or by applying to PreOp without being accepted.

Both PreOp and control students completed baseline and end-of-year surveys to gauge the extent to which surgical exposure influenced their specialty preferences. Over the next three years, these two cohorts will be followed longitudinally and resurveyed to assess whether participation in PreOp affects the following: specialty preference and ultimate match outcome, self-reported preparation before and after the third-year surgical clerkship, and competency during the third-year surgical clerkship as measured by the professor’s evaluations and grades. Thus, PreOp is a prospective cohort study that will span all four years of medical school.

Preliminary results
Data collection and statistical analysis included only the nine PreOp students who completed all 10 months of rotations. Results from the pilot year indicate that the PreOp program successfully provided students with increased hands-on surgical exposure. All PreOp students scrubbed in for at least one operation during the year, and the PreOp students had the opportunity to scrub in on more than half of the total rotations (52.6 percent). These numbers are in stark contrast to the control group, in which only one student had the opportunity to scrub in throughout the year, despite the fact that the control students observed more than 43 procedures. Moreover, all PreOp students were able to suture intraoperatively during at least one rotation, while none of the students in the control group had a similar opportunity.

Preliminary statistical analysis was performed to assess factors that increased student satisfaction with each individual rotation. This assessment showed that increased hands-on participation in the OR through scrubbing in was related to increased student satisfaction and higher rotation evaluations (p<0.001), sup-
porting previously reported findings of the importance of hands-on participation in developing student surgical interest.3

After establishing a substantial difference in surgical exposure between the PreOp and control students and determining which factors influenced student satisfaction on a per rotation basis, students were asked whether 10-month participation in the PreOp program affected career interest overall. All PreOp and control students initially expressed an interest in exploring surgery at the start of the year. The students also were asked to anticipate how likely they would be to apply to match into a surgical field as fourth-year students. PreOp students reported increased surgical interest at the end of the year as compared with the beginning, with seven (77.8 percent) reporting being very likely to apply to match into surgery at the end, compared with four (44.4 percent) at the start of the program. In contrast, only two (22.2 percent) of the control students reported being very likely to apply to match into surgery at the end of the year—a number that remained unchanged from the start of the year.

Ready for implementation

PreOp was designed to provide students with attending mentorship and hands-on participation in the OR starting from their first month of medical school. Its successful implementation supports the idea that such programs can be readily formed and can offer markedly increased surgical exposure in comparison with conventional shadowing.

Preliminary data indicate that similar programs should promote hands-on participation to maximize student satisfaction. The authors’ goal is to determine whether surgical exposure through preclinical programs like PreOp can enhance both surgical interest and competency. This study is unique in its longitudinal nature, and the authors intend to continue following PreOp students to assess surgical competency and confidence throughout their four years of medical school. They anticipate that follow-up studies will show that preclinical students represent an ideal target population for career recruitment and earlier training, potentially providing a solution to the dual problem of physician shortages and inadequate resident preparation.

Disclosure

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REFERENCES

Surgeons develop visionary plan to bring corneal transplants to developing countries

by Stephen G. Waller, MD; Maria S. Altieri, MD; and Rahul M. Jindal, MD, PhD, MBA, FACS

HIGHLIGHTS
• Explains the unique characteristics associated with corneal transplants, including eye banking in the U.S. and Central and South America
• Describes the need for corneal transplants in developing nations
• Offers a PPP model for bringing corneal transplants to underserved countries
• Provides details on how the authors implemented the PPP model in Guyana
Many developing nations now have health care providers that offer specialty care. For example, kidney transplantation was practically nonexistent in low- and middle-income countries and end-stage renal disease was considered a death sentence until recent years. Since 2008, a renal transplant program launched in Guyana by Rahul M. Jindal, MD, PhD, MBA, FACS (coauthor of this article), and colleagues has carried out 26 living kidney transplants, numerous peritoneal dialysis catheter placements, and vascular access procedures for hemodialysis. Dr. Jindal’s team has delivered lectures and held press conferences to raise local physician and patient awareness of the transplant program. They also have initiated a public health project to train selected individuals in each village (average education of 12th grade and above) in basic clinical skills, such as recording blood pressure and blood sugar measurements, and noting lifestyle modifications, including dietary practices, and hygiene levels, which will allow the student team to act as primary health care workers.

More recently, the team established a successful, sustainable corneal transplant program in Guyana. To launch this program, Dr. Jindal and his colleagues used a private-public partnership (PPP) model, working with government agencies to attain sponsorship to help offset costs, build surgical capacity, establish an infrastructure for an eye bank, identify appropriate patients, and provide reliable follow-up. This article describes some of the key features of a successful corneal transplantation system, such as the establishment of accredited eye banks; the factors that influence the success of a corneal transplant program; how the authors successfully implemented the PPP model; and the lessons learned in developing this program.

Need in developing countries
Although the prevalence of blindness is greatest in developing countries, the availability of corneal transplant surgery and donor tissue is lowest in such places. As this disparity has become increasingly apparent to health officials, establishing eye banks in low-income countries has become a priority. Despite some efforts by various governmental and nongovernmental organizations, the supply of corneas falls short of the demand. Keratoprosthesis, use of an artificial cornea, may be an alternative to corneal transplant in a small percentage of the cases.

Corneal opacities are cited as the third most common cause of blindness and represent 7 percent to 25 percent of all causes of blindness worldwide. Corneal blindness is more common in developing countries and is underreported, thus making it difficult to estimate its true prevalence. The epidemiology of corneal blindness varies by region and age and is dependent on the ocular diseases that are endemic to the geographic location. Corneal blindness is a leading cause of permanent visual impairment, as scarring and vascularization of the cornea cannot be reversed.

Most causes of corneal blindness in developing countries are either treatable or preventable. According to a 2005 study, the diseases that most frequently lead to corneal blindness include trachoma, onchocerciasis, leprosy, ophthalmia neonatorum, and xerophthalmia. In a study of 12,899 participants in India, the most common causes leading to corneal blindness included pterygium (34.5 percent), ocular trauma (22.3 percent), and infectious keratitis (14.9 percent). Infectious, traumatic, and autoimmune corneal diseases were the three leading causes of corneal blindness in China. A study from Tanzania reported corneal infections, vitamin A deficiency, and measles as the top three causes of bilateral corneal blindness.

In South America, common causes leading to blindness include pterygium, ocular trauma, and trachoma, among others. Ocular trauma constituted 30 percent to 40 percent of all ophthalmological emergencies. Trachoma is another condition that leads to corneal blindness. Some reports from Latin America cite relatively small numbers of infections, which may indicate the problem is being underdiagnosed. In Mexico, a report from 2007 showed up to 42 percent of children in certain locations are affected by the condition. In Brazil, prevalence varied from 2.2 percent in major cities to 50 percent in remote areas, although more recent reports suggest decreasing prevalence.
Eye bank requirements and procedures

The key to any successful transplant program is rigorous organ banking. Eye banks in the U.S. must be certified by the Eye Bank Association of America (EBAA), which was established in 1961 to serve as the national accrediting organization for eye banks in the U.S., and the U.S. Food and Drug Administration. Eye banks in Central and South America, as well as the Caribbean, should be certified by the Pan American Association of Eye Banks, also known as Associação Pan-Americana de Bancos de Olhos (APABO).

To attain certification, eye banks must have a medical director—an ophthalmologist with expertise in cornea transplantation—and an administrative director on staff. The medical director is responsible for ensuring the application of medical standards to all aspects of the system, educating health care personnel, releasing and distributing corneal tissue, and overseeing the waiting list. The administrative director, on the other hand, is responsible for public awareness and quality control and interacts with accreditation agencies, including the APABO, the ministry of health in the host nation, and the national association of ophthalmology.

Eye bank staff also must include at least one technician who is certified by APABO. The technician’s responsibilities include obtaining the consent of the family for corneal donation, conducting a medical history review, examining the donor, evaluating the eye and determining appropriateness of tissue for transplantation, retrieving tissue by following eye bank standard operating procedures (SOPs), and obtaining serologic testing of the donor. The essential materials needed for a bank to operate appropriately are described in the sidebar on this page.

To operate an independent eye bank, SOPs, including medical standards to protect the tissue recipient and the technician, must be established and followed. Processes related to uniform evaluation procedures, recipient and donor data collection, quality assurance procedures, outcome analysis, and accountability should also be established. The technician must follow SOPs regarding consent of the family for corneal donation; obtaining medical history in a uniform manner; and ensuring that there are no specific contraindications for...
Factors for success

Corneal transplantation is one of the most successfully performed tissue transplant procedures. The unique properties of corneal transplants have been previously described in the medical literature. Specifically, research suggests that corneal transplantation success rates have been associated with the immune privilege status of the avascular cornea. Disparity between recipient and donor at the major histocompatibility complex (HLA) is the predominant reason for allograft rejection and the need for immunosuppressive therapy in other transplanted tissues. For corneal transplantation, however, a large, multicenter study showed that neither HLA-A, -B, nor HLA-DR antigen matching reduced corneal graft failure and ABO blood group matching was also insufficient to reduce the risk of graft failure.

Recipients of corneal transplant typically require shorter hospital stays (in some cases, just two hours), incur lower hospital charges, and often need only topical immunosuppressive therapy. In addition, compared with other transplants in which donor age may play a role, multi-center trials have shown that donor age was unimportant in corneal transplant patients younger than age 75, as long as the endothelial cell count was satisfactory.

Estimated average cost per patient of corneal transplantation in the U.S. is approximately $16,500. In other countries, the cost of corneal transplant ranges from $1,300 to $14,807. Table 1, this page, compares costs of corneal transplant in different countries.

Availability of corneas in the U.S.

The number of cornea donations in the U.S. is increasing. A 2013 report from 76 domestic and 10 international eye banks cited 72,736 total corneal grafts—a 5.9 percent increase from the previous year. According to the EBAA, 48,229 corneal transplants were performed during 2013 in the U.S., and 29,646 corneas were obtained from donor registries in 2013. The success of eye banks in the U.S. is largely attributed to public awareness regarding organ donation.

Due to the EBAA’s efficient framework described previously and to high rates of eye donation, the U.S. has sufficient quantities to both meet domestic demands and provide tissue to international recipients. A similar program in the developing world is the National Eye Bank of Sri Lanka, which has emerged as an exemplar of corneal donation and international export of corneas in Asia and serves as a role model for developing countries.

The EBAA authorizes each eye bank to be responsible for distribution of tissue using a list of professionals and institutions approved to receive ocular tissue. If complications occur, such as rejection of the cornea, the transplant surgeon must notify all eye banks involved in the recovery, processing, storage, final distribution, tissue evaluation, and donor eligibility determination. It is expected that the transplant surgeon will notify the eye bank of surgical complications and one-year follow-up even if the corneal transplant is done in another country.

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost*</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>$16,500</td>
</tr>
<tr>
<td>Guyana</td>
<td>Subsidized by our sponsor</td>
</tr>
<tr>
<td>Netherlands</td>
<td>$7,942–$14,807</td>
</tr>
<tr>
<td>Canada</td>
<td>$3,171</td>
</tr>
<tr>
<td>Singapore</td>
<td>$3,710</td>
</tr>
<tr>
<td>South Africa</td>
<td>$1,300</td>
</tr>
<tr>
<td>India</td>
<td>$2,100–$2,300</td>
</tr>
<tr>
<td>Spain</td>
<td>$5,650</td>
</tr>
<tr>
<td>Turkey</td>
<td>$8,640</td>
</tr>
</tbody>
</table>

*Costs are estimates based on conversions from native currencies to U.S. dollars, and may have changed since the data was initially published.
country. However, disposal of corneas in excess of demand depends on the individual eye bank and on the relationship established between them and the U.S. or foreign corneal transplant surgeons.

### PPP model at work

Humanitarian missions are essential to meet the need for sight restoration in developing countries, and several organizations in the U.S. support the growth of eye banks around the developing world. There are variations on our model of PPP that include training of local surgeons and funding from private sources in the U.S. or internationally. In 2013, for example, the Lions Eye Bank of Delaware Valley, Philadelphia, PA, provided corneas to transplant surgeons for a mission in Kenya.35 The San Diego Eye Bank, CA, is involved in the International Cornea Project, which is responsible for missions to provide corneas for transplantation around the world.36 Another example is the Cornea Research Foundation, which sponsored a surgeon to teach advanced surgical techniques to Nepali surgeons.37

At the beginning of 2014, we realized that there was an acute need in Guyana for subspecialty surgical services, in addition to kidney transplantation. We took an incremental approach by reviewing the need for corneal transplantation. This analysis was subjective, as Guyana has no centralized registry for eye diseases. On the first visit, Dr. Waller discussed eye banking and transplantation with Gujarian ophthalmologists and screened 20 patients, eight of whom were suitable candidates for corneal transplants; the transplants were subsequently performed for six patients. Dr. Waller joined the team on its 19th visit and

### CORNEAL TRANSPLANTS IN DEVELOPING COUNTRIES

## REFERENCES


### TABLE 2. RECIPIENT INFORMATION

<table>
<thead>
<tr>
<th>Recipient</th>
<th>Age (years) and sex*</th>
<th>Diagnosis</th>
<th>Procedure</th>
<th>Previous visual acuity</th>
<th>Postoperative corrected visual acuity</th>
<th>Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22 F</td>
<td>Keratoconus with apical scar</td>
<td>Penetrating keratoplasty</td>
<td>6/24</td>
<td>6/9 (pinhole)</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>20 M</td>
<td>Keratoconus with apical scar</td>
<td>Penetrating keratoplasty</td>
<td>1/60</td>
<td>6/9</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>48 M</td>
<td>Pseudophakic bullous keratopathy</td>
<td>Penetrating keratoplasty</td>
<td>HM †</td>
<td>6/9</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>36 M</td>
<td>Leucomatous corneal opacity</td>
<td>Penetrating keratoplasty</td>
<td>HM †</td>
<td>6/6</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>72 M</td>
<td>Post bee sting corneal decompensation</td>
<td>Penetrating keratoplasty with cataract extraction with intraocular lens implant †</td>
<td>HM †</td>
<td>6/36</td>
<td>Mild sub-epithelial haze with high astigmatism</td>
</tr>
<tr>
<td>6</td>
<td>36 M</td>
<td>Keratoconus with apical scar</td>
<td>Penetrating keratoplasty</td>
<td>4/60</td>
<td>6/9</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*F-Female, M-Male; †Penetrating keratoplasty with cataract extraction with intraocular lens implant; ‡Hand motions close to face.

**continued on next page**
performed the corneal transplants during the 20th visit. Other members of the team continued their work with kidney transplantation and related procedures during these visits.

The six successful corneal transplants were performed within a week by the Guyanese surgeon under the supervision of Dr. Waller. Donor age ranged from 26 to 75 years old (mean 63 years). Endothelial cell count ranged between 2,101 and 3,195 cells/mm² (mean 2,509 cells/mm²). Recipient age ranged from 20 to 72 years (mean 39 years). Most (83.3 percent) of the recipient population were male. The diagnosis leading to corneal blindness included keratoconus with apical scar (three patients), pseudophakic bullous keratopathy (one patient), leukomatos corneal opacity (one patient), and trauma (one patient). The operation performed on all patients was penetrating keratoplasty. All patients had improvement in their vision postoperatively (see Table 2, page 26). No complications were noted, except in the case of the patient with traumatic eye injury, who experienced mild epithelial haze at six months’ follow-up.

Our work was made possible because of an intricate partnership between the private and public sectors. In a developing country like Guyana, few patients could afford the cost of corneal transplantation. The Guyanese government plays a significant role in facilitating physician licenses and liability coverage, and importing generic medications, free of charge to the patients, while local medical staff identifies patients and provides pre- and postoperative care under the supervision of Dr. Waller in case of corneal transplants and Dr. Jindal in case of kidney transplants. Our team continues to advise Guyanese physicians via e-mails/Skype and telephone calls on postoperative care.

**Ensuring sustainability**

Conventionally, limited tissue availability and a lack of trained personnel have made corneal transplants in developing countries unaffordable and inaccessible. A sustainable corneal transplant capacity in a developing country requires

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**REFERENCES (CONTINUED)**


*continued on next page*
skilled local surgeons, and our team engaged in teaching and supervising local surgeons. We also are working with the government of Guyana to establish an eye bank based on U.S. standards.

In addition, a waiting list is being generated so that corneas can be optimally allocated for transplantation. Two corneas that our team brought to Guyana from the U.S. went unused as one patient who was screened in the initial visit declined surgery, and the other procedure was canceled because of the patient’s uncontrolled diabetes. Care will be taken to avoid these situations in the future by creating a larger waiting list of suitable patients and by ensuring that local eye surgeons examine transplant candidates at regular intervals to verify suitability for transplantation. At press time, the U.S. team’s next visit was scheduled to take place in April 2015.

Patients, the government of Guyana, and the media appreciate that U.S. surgeons have undertaken a complex surgical procedure using corneas donated by U.S. patients as illustrated by positive reports in the Guyanese press.24,25 Ultimately, we strive to ensure that corneal transplants in Guyana involve appropriate and equitable patient selection, well-trained and informed surgeons, and meticulous follow-up care.

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The enriching portfolio of benefits that is offered by the ACS is only possible with the continued philanthropic support of the Fellowship. Dues revenue and industry contributions alone are insufficient to ensure the longevity and proliferation of many non-revenue programs.

Your contributions to the Sustaining Fund directly support the future of surgery by underwriting Fellowship benefits, including scholarships, Operation Giving Back, patient education, lifelong learning, trauma education, research, the Surgeon Specific Registry, and other initiatives that do not generate revenue. Each gift makes an impact and helps ACS Fellows provide the finest care to surgical patients.

Thank you for answering the call to be part of this great ACS legacy and giving from love of your profession, your patients, and your American College of Surgeons.

Best,

David B. Hoyt, MD, FACS

Executive Director, American College of Surgeons
President, American College of Surgeons Foundation
“I do believe that our legacy is important and that we have an opportunity every day to elevate our profession. This may seem somewhat idealistic to some, but for me, I see Foundation giving as my chance to fulfill the Pledge of Fellowship where it states that we as Fellows of the ACS will ‘cooperate in advancing the art and science of surgery.’ I want to support other young surgeons and surgeons in training, as we will always be strongest as a collective group continuing to expand opportunities.”

—Mark A. Jones, MD, FACS

“I believe that the ACS Foundation is important to supporting and improving surgery. It’s a continued investment in the profession I remain passionate about.”

—Sherry M. Wren, MD, FACS

“As a subspecialty surgeon, I find the ACS educational benefits are superlative. Clinical Congress meeting courses always have something of interest for all surgeons. The Bulletin and JACS cover a wealth of surgical material and keep all of us abreast of the politics of health care, which affects all surgeons.

“We all give to philanthropic causes; the Foundation of the ACS is an extremely worthy cause and a way to support the future of surgery. After all, the ACS represents all of us.”

—John L.D. Atkinson, MD, FACS

“We all are given many gifts, including our ability to operate and change our patients’ lives. We need to give back on many levels.”

—Ruth L. Bush, MD, FACS
“It is my belief that the people who came before us provide the roadmap. It’s up to us to follow the roadmap and hopefully leave our footprints on it so that others can get to the place they want to go. That’s what giving to the College does. It leaves a footprint for others to follow.”
—Idatonye I. Afonya, MD, FACS

“Supporting the ACS Foundation is just one way that I am able to give back to an organization that has given me so much. It’s my way of paying it forward as I continue to become increasingly involved in the ACS and look to support all of the young surgeons in training today. I believe it is critical to involve Resident Members and Associate Fellows today, as they will ultimately become the leaders of this unparalleled House of Surgery tomorrow.”
—Brian J. Santin, MD, Associate Fellow

“The College is a top philanthropic priority of mine, as I have benefited enormously from my membership in the ACS. I have enjoyed innumerable educational opportunities and have especially enjoyed the fellowship with other College members. The ACS embodies all that I hold dear about the field of surgery—the noble intention to continuously improve the surgical care of patients, the educational mission, and the fellowship of surgeons.”
—Kenneth W. Sharp, MD, FACS
What a remarkable year 2014 has been for philanthropy at the American College of Surgeons Foundation. As Chair, I am continually inspired when I witness a donor matching his or her philanthropic passion with a College program. Your generosity means so much to the success of the College, and it is a great privilege to see the meaningful impact that philanthropy has on both the donor and the recipient. A tradition of the College since its inception in 1913, this spirit of giving has been particularly prevalent during the recent Centennial celebration through the 1913 Legacy Campaign. You and other donors responded so generously to the campaign, and it is with gratitude that we list each of you within the full report (available online at www.facs.org/about-acs/acs-foundation/about/annual-report). The Foundation’s single beneficiary is the College, and its Sustaining Fund underwrites lifelong learning, quality initiatives, volunteerism, and other Fellowship benefits that cannot generate revenue.

You are an integral part of these important initiatives.

Equally important was the renewed energy that has invigorated the Foundation with the placement of new volunteers and Chapter Philanthropic Champions who were recruited to promote the campaign. I am delighted and grateful to have these enthusiastic ambassadors join the Foundation.

In total, more than $3.3 million in past and current philanthropic dollars were expended during the 2014 fiscal year. I hope you are proud to know that your gift is an investment in the surgical profession and in the care of patients.

Sincerely,

Amilu Stewart, MD, FACS
Chair, American College of Surgeons Foundation
2014 AT A GLANCE: GIVING REPORT

Fiscal year ending June 30, 2014

TOTAL DONATIONS AND COMMITMENTS:
$2,227,454

TOTAL EXPECTANCIES (PLANNED GIFTS):
$210,000

TOTAL EXPENDITURES FROM CURRENT DONATIONS AND INVESTED FUNDS:
$3,303,067

Scholarships:
$1,579,528

Archives, Patient Education, Operation Giving Back, Trauma Education and Research,
and Other Nonrevenue Programs:
$1,535,802

Lectureships and Other Awards:
$187,737

Made Possible by You!
Developing innovative education resources
Improving quality of care
Fostering tomorrow’s surgical leaders
Promoting the image of the profession
Bringing surgeons together
Outreach through surgical volunteerism

The ACS Foundation Board of Directors is pleased to announce that more than $3 million in donations and commitments has been contributed to these ACS mission-critical activities by generous participants in the 1913 Legacy Campaign. Beginning in the Centennial celebration year of the College, the purpose of this campaign was to honor the historic milestone and secure transformative gifts for current needs and emerging opportunities.

Campaign gifts have been directly invested in the three pillars of the College’s mission: The Surgeon, The Profession, and The Societal Good.

Thank you to all the Fellows and friends who answered the call to invest in the future of the College and the surgical profession.
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MAY 2015 BULLETIN American College of Surgeons
YOUR SUPPORT IN ACTION: SCHOLARSHIPS, AWARDS, AND FELLOWSHIPS

The scholarship and fellowship awards, a philanthropic tradition of the American College of Surgeons, play an important role in shaping future surgical leaders and researchers. In the 2014 fiscal year, nearly $1.6 million was provided to surgeons through a variety of awards, all supported through the generous contributions of friends and Fellows.

- Resident Research Scholarships
- Faculty Research Fellowships
- Clinical Scholar in Residence Fellowships
- International Guest Scholarships
- Special Traveling Fellowships
- Leadership Training Scholarships

“Obtaining the American College of Surgeons Resident Research Award has been a valuable experience from start to finish. . . . With the important lessons I have learned during these two years, relating both directly to the laboratory as well as to my future career, I believe that I have taken an important step ahead in starting a career in academic surgery.”
—John R. Klune, MD

“It was indeed an honor to be awarded the Claude H. Organ, Jr., MD, FACS, Memorial Traveling Fellowship this year. Over the years, my interests in academic surgery have widened to have a focus on leadership and on global health. This award allowed me to marry both interests in a capstone experience that I will always remember.”
—Anees B. Chagpar, MD, FACS

“The ACS Clinical Congress was a superior educational and interactive event for me. I am extremely grateful to the Scholarship Committee for awarding me this high honor and am indebted to the late Dr. Oweida and his widow, Mrs. Oweida, for providing this great experience for rural surgeons such as myself. In fact, I have already implemented some of what I learned at the ACS meeting in my own practice. This experience has given me a renewed enthusiasm and higher level of expertise for caring for my patients as I continue to practice rural surgery in Pendleton, OR.”
—John M. McBee, MD, FACS
Pon Satitpunwaycha, MD, FACS, Community Surgeon Travel Awards

At the 2014 ACS Clinical Congress, four surgeons from various countries, including Iraq and Nigeria, benefited from the generosity of Dr. Pon Satitpunwaycha. His reason for this extraordinary philanthropy is clear: “I am grateful for the opportunity this country has given me. At this point in my life, I feel obliged to give back. I hope this fund leads to a better understanding and friendship between countries.” Dr. Pon’s gift also funded two additional traveling fellowships and support of the annual scholarships luncheon at the ACS Clinical Congress.

“It was a wonderful event in my life to be selected as one of the surgeons in the world to receive one of the 2014 Dr. Pon Community Surgeon Travel Awards. It is an honor to get this privilege from the largest organization for surgeons in the world, and it is a distinguished point in my professional life. It is my duty to give more commitment for patient care, education, and research.”
—Dr. Haidar M. Muhssein, Iraq, Pediatric Surgery

The Jeannette and H. Peter Kriendler Charitable Trust

The Jeannette and H. Peter Kriendler Charitable Trust has supported the College since 2004 with grants dedicated to training young surgeons through the Resident and Associate Society of the American College of Surgeons (RAS-ACS) Leadership Scholarship Award. Three scholarships are awarded to Resident Members and Associate Fellows, covering tuition, travel, and subsistence to attend one of the following ACS leadership courses:

- Outcomes Research Course
- Leadership and Advocacy Summit
- Residents as Teachers and Leaders
Murray F. Brennan, MD, FACS, International Guest Scholarship

The College’s International Relations Committee (IRC), in partnership with the ACS Foundation, led the effort of the scholarship initiative in honor of Murray F. Brennan, MD, FACS. An esteemed Fellow of the ACS since 1977, Dr. Brennan has been an advocate for international engagement as a member of the IRC. The Murray F. Brennan, MD, FACS, International Guest Scholarship recognizes its namesake for his enduring collegiality and the value of investing in quality patient care wherever surgeons practice.

“Altogether the 2014 Murray Brennan International Guest Scholarship was a great experience for me that brought up sustainable new perspectives of various aspects of surgery. I thank the American College of Surgeons for selecting me for this once-in-a-lifetime experience.”
– Roland S. Croner, MD, FACS, of Erlangen, Germany, the 2014 Brennan Scholar

Thomas R. Russell, MD, FACS, Faculty Research Fellowship

After serving the American College of Surgeons as Executive Director from January 2000 to January 2010, Thomas R. Russell, MD, FACS, dedicated the next three years to the philanthropic endeavors of the College as the Chair of the ACS Foundation. Dr. Russell had long been a passionate supporter of continuing and enhancing a culture of philanthropy at the ACS and was a natural fit as Chair. With his heartfelt advocacy, he inspired many Fellows to join him in making a meaningful contribution to the ACS Foundation.

The ACS Foundation Board of Directors established the Thomas R. Russell, MD, FACS, Faculty Research Fellowship to honor Dr. Russell’s advocacy for increased scholarly opportunities at the College. More than $250,000 was given by generous Fellows and friends as a tribute to Dr. Russell’s service to ACS and the surgical profession. The recipients will be outstanding young surgeons who desire to pursue professional development and/or promising research initiatives.

Dr. Russell’s legacy will continue on through the many young surgeons who carry out important work through the support of his namesake scholarship. His imprint will permanently remain on the College and ACS Foundation.

A full memoriam and Thomas R. Russell, MD, FACS, Faculty Research Fellowship donor listing are available on the ACS Foundation’s website (www.facs.org/acsfoundation), as is the announcement of the first Russell Scholar.
SUPPORT FOR SURGEONS

Advanced Trauma Life Support®
In 2014, donations to the Trauma Education Fund supported the development of the Advanced Trauma Life Support® (ATLS®) programs in the Republic of Georgia and Mongolia. The Republic of Georgia held its inaugural ATLS course, training 15 physicians in the Student Course and 10 physicians in the Instructor Course. Also, training materials were translated in preparation for the first ATLS training course in Mongolia, which will take place in the fall of 2015. Groundwork for Ghana, Bangladesh, and El Salvador has also begun.

Rural Surgery Initiative
The Nora Institute Advanced Skills Course for Rural Surgeons brings together rural surgeons throughout the U.S. and provides them with expert mentoring in a variety of disciplines. The course uses a blended learning format that consists of an e-learning component for knowledge acquisition followed by a hands-on mentored skills session. Amy Halverson, MD, FACS, and a team of rural surgeons and adult learning experts have developed 11 distinct learning modules.

The 2014 Nora Institute Advanced Skills Course for Rural Surgeons took place on October 25 in San Francisco, CA, in conjunction with the ACS Clinical Congress. This course welcomed 38 participants, the highest enrollment in a Nora Institute skills course to date.

AJCC Cancer Staging Manual
The American Joint Committee on Cancer (AJCC) formulates and publishes systems of classification of cancer, including staging and end-results reporting, that will be acceptable to, and used by, the medical profession for selecting the most effective treatment, determining the prognosis, and continuing the evaluation of cancer control measures. The AJCC is composed of 20 member organizations, and its activities are administered by the American College of Surgeons.

Considered by many to be the gold standard reference for cancer staging, the AJCC Cancer Staging Manual is the resource used by physicians and health care professionals throughout the world to facilitate the uniform description and reporting of neoplastic diseases. The 8th edition of the AJCC manual will define the stratification criteria for the design and interpretation of cancer clinical trials involving adjuvant and neo-adjuvant therapies for all forms of cancer. It will incorporate advances made in cancer research, staging, diagnosis, and treatment since the seventh edition was published in 2009 and will be in effect for all cancer cases recorded on or after January 1, 2017. The manual will be self-published in both print and electronic formats.
HONORING LEADERSHIP

The Jameson L. Chassin, MD, FACS, Award for Professionalism in General Surgery

Established to honor the life and career of Jameson L. Chassin, MD, FACS, this award is annually presented to young surgeons who are currently in a general surgery residency. The 2014 recipient is Katie White Russell, MD, chief resident in general surgery at the University of Utah.

The Joan L. and Julius H. Jacobson II Promising Investigator Award

For a decade, the Joan L. and Julius H. Jacobson II Promising Investigator Award has recognized outstanding surgeons engaging in research, advancing the art and science of surgery, and demonstrating early promise of significant contribution to the practice of surgery and the safety of surgical patients. The award is supported through a generous endowed fund established by Dr. and Mrs. Jacobson and administered by the ACS Surgical Research Committee.

Olga M. Jonasson, MD, FACS, Lectureship

Using the proceeds from an endowment established to honor the life and leadership of Dr. Jonasson, the 2014 Olga M. Jonasson Lecture was presented by Barbara L. Bass, MD, FACS.

The ACS Women in Surgery Committee, the friends and colleagues of Olga Jonasson, and women in surgery throughout the country established this lecture in 2007 to honor the memory of Olga M. Jonasson, MD, FACS, who was a leader in academic surgery, exemplified by her becoming the first woman chair of academic surgery in U.S. history. She was a devoted teacher and mentor to countless numbers of surgeons, both men and women.
THE SUSTAINING FUND

Gifts made to the ACS Sustaining Fund directly support the future of the surgical profession by funding education and research. The purpose of these unrestricted funds is to ensure stability and advancement of the College’s mission and provide a source of internal capital for College priorities. The Sustaining Fund supports program activities that do not have the ability to produce revenue. Examples of mission-critical activities supported through the Sustaining Fund include the Archives, Patient Education, Scholarships and Fellowships, and Operation Giving Back.

Operation Giving Back

Operation Giving Back (OGB) continues to pursue its mission to recognize, connect, support, enable, and celebrate surgeons committed to humanitarian outreach. The 2014 Clinical Congress International Surgery track and the Surgical Humanitarian Outreach track included a skills course for the international volunteer surgeon as well as panel sessions.

Girma Tefera, MD, FACS, joined the staff of the ACS Division of Member Services as the new Medical Director of the OGB program. The recipient of the Pfizer/ACS Surgical Volunteerism Award in 2011, Dr. Tefera is professor of surgery, department of surgery, University of Wisconsin, Madison. In addition, he is vice-chair, division of vascular surgery, and chief of vascular surgery, Middleton Veteran Affairs Hospital, in Madison. In his new role with the OGB program, Dr. Tefera will develop and lead ACS Clinical Congress programs in global surgery, coordinate the College’s response to disasters worldwide, develop new programs and opportunities for surgeon volunteers, communicate the work of OGB, and increase College participation and recognition among other similar global organizations. He also will oversee a redesign of the OGB website to match members’ needs with volunteer opportunities.

Dr. Tefera stated that he looks forward to partnering with individual ACS members, ACS committees, nongovernment organizations, and government agencies. “In the developing world, trauma and noncommunicable diseases, particularly cancer, have reached epidemic proportions. Trauma will be the third leading cause of death in most sub-Saharan countries. I believe the Committee on Trauma and the Commission on Cancer can play a major role in helping to build systems and train the health care workforce that is desperately needed,” he said. For more information about the OGB program, visit www.operationgivingback.facs.org.

Patient Education

A new initiative to improve outcomes for patients requiring complex wound management was recently announced by the Surgical Patient Education Program of the ACS Division of Education. The ACS will release a new structured teaching and verification program that uses engaging media and self-assessment checklists to educate surgical patients and their families about delivering self-care for wound conditions. An estimated 60 percent of wounds managed in the home occur in patients following their discharge after surgical treatment, and the ACS program will address a critical gap in the availability of standardized patient education resources.
HONORING GENEROSITY

Distinguished Philanthropist Award

The American College of Surgeons Foundation proudly acknowledges the philanthropy of individuals who have distinguished themselves through their extraordinary investment in the mission of the American College of Surgeons. We are pleased to honor them with the Distinguished Philanthropist Award.

Recipients
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Dr. Murray F. Brennan (2012)
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The following statement was originally developed by the Subcommittee on Injury Prevention and Control of the American College of Surgeons (ACS) Committee on Trauma and published in the February 2001 issue of the Bulletin. The ACS Board of Regents approved this updated statement at its February 2015 meeting.

**STATEMENT**

**Statement in support of motorcycle helmet laws**

Total care of the trauma patient includes endorsement of measures designed to prevent or reduce injuries. Regarding the use of motorcycle helmets, the ACS recognizes the following:

- Helmets reduce the risk of death and head injury in motorcycle riders who crash.

- It is estimated that between 1982 and 2001, more than 12,000 motorcyclists lost their lives as a result of not using a helmet.

- Unhelmeted motorcyclists are 40 percent more likely than a helmeted rider to sustain a fatal head injury and 15 percent more likely to suffer a non-fatal injury.

- Helmeted motorcycle riders have up to an 85 percent reduced incidence of serious, severe, and critical brain injuries compared with unhelmeted riders.

- Motorcyclists with a brain injury incur average inpatient health care costs that are more than twice the costs incurred by hospitalized motorcyclists without a brain injury.

- A large portion of the economic burden of motorcycle crashes is borne by the public.

- When universal helmet use laws are enacted, helmet use increases to nearly 100 percent, and fatalities and serious injuries decrease.

- When universal helmet use laws are repealed, helmet use decreases and fatality and serious brain injury rates increase.

Therefore, the ACS supports efforts to enact and sustain universal helmet laws for motorcycle riders.

**BIBLIOGRAPHY**


As health care plans create incentives to improve quality and reduce costs, many entities have started using physician-tiering protocols directing patients to choose certain physicians; or they are offering a narrow network, reducing the number of available providers. Both of these protocols rank physicians based on cost, and some networks rank providers based on quality, as well. These protocols are often improperly implemented, rely on faulty data, use inappropriate cost measures, lack transparency, and lead to the misclassification of physicians. The College regards the provision of high-quality surgical care as a top priority and strongly urges that federal or state government agencies, hospitals, health care organizations, insurance companies, or other interested parties develop policies to ensure that every consideration be given to patients so they receive the highest quality surgical care.

Given the current state of performance measurement in health care, the ACS believes that tiering or narrowing accessibility of out-of-network physicians should be based on quality of care rather than cost of care. Although the ACS agrees with efforts that appropriately lead to the efficient delivery of care, we believe that such protocols should be based solely on quality until reliable and valid methods evaluating both cost and quality are available, ensuring the smallest potential risk of misguiding patients who are seeking surgical care. Cost alone should never be considered an adequate metric, and patients should understand that access to reasonable care may be limited when such payor-based programs are imposed on plan benefits without regard to quality.

The ACS supports the following physician tiering and narrow network programs:

• Programs that use transparent methods and are rooted in logic that patients, physicians, and other stakeholders in the delivery system can comprehend.

• Programs that use quality measures that meet nationally accepted standards for quality based on importance, scientific acceptability, feasibility, and usefulness. Composite measures that combine quality and cost should be held to the same high standards and should include regular audits for reliability and validity.

• Programs that have metrics that incorporate care from all appropriate providers and are in accordance with nationally recognized standards. Health care delivery is an outcome of the actions of many individuals and the systems that support them.

• Programs that incorporate accepted risk adjustments for outcomes and socioeconomic status to ensure ongoing access for patients who are at higher risk for complications and poor outcomes.

• Programs that involve physicians and physician organizations in the development and implementation of any protocol.
Although the ACS agrees with efforts that appropriately lead to the efficient delivery of care, we believe that such protocols should be based solely on quality until reliable and valid methods evaluating both cost and quality are available, ensuring the smallest potential risk of misguiding patients who are seeking surgical care.

• Programs that never tier physicians or remove physicians from health plan networks based on cost alone. Payors should rely on nationally validated and reliable quality metrics, and while cost data should be transparently available to patients to allow them to apply cost information independently in the decision-making process, these data should not be used to make network decisions.

• Programs that set appropriate benchmarks that incentivize all physicians to achieve optimal clinical outcomes and high-value care.

• Programs that impose minimal burdens on physicians so as to avoid impeding the provision of care or patient access to care.

• Programs that provide an opportunity for patients, physicians, or other stakeholders in the delivery system to appeal any classification of the physician in the program.

The ACS is not aware of any physician tiering or narrow network programs that meet these criteria. This gap is likely due, in part, to the lack of transparency associated with these program. The ACS recommends that payors discontinue such programs and direct their efforts toward quality measures currently available to encourage providers to participate in learning health systems and quality improvement efforts. However, if measures of both quality and cost are used for these programs, the metrics used must be explicitly stated. This transparency is necessary so that patients can understand that access to care may be limited when such programs impose restrictions without regard to quality. Entities should partner with physician stakeholders if they are interested in developing reliable resource-use measures that do not run the risk of denying patients access to quality care.
One surgeon’s principles

by Henry Buchwald, MD, PhD, FACS, FRCSEng(Hon)

I am in my 80s, and I know myself most fortunate to be able to make that statement. I have been a surgeon for nearly 50 years. I am grateful for those years of doing what I believe I was meant to do while enjoying almost every moment of that time. I am an academic who holds a dual appointment in surgery and biomedical engineering. In that role, I have attempted to be a mentor to residents in terms of surgical care, technique, and the attributes of practice that govern our discipline.

Over the years, based on my experience, I have formulated certain principles regarding the provision of care that have guided my career. I offer these 10 principles in the hope that they may be of interest to others.

It’s always your fault
Except for liability litigation, this precept is a good way to approach the acceptance of responsibility for the well-being and the life that a patient entrusts to you. Anticipate exigencies and attempt to prevent untoward events. Acknowledge bad decisions, even if they appeared to be the most rational choices when they were made. When assessing a bad outcome, recognize that there are no acts of God. I tell residents that if a patient falls out of bed, it’s their fault.

Postoperative complications can be solved intraoperatively
Carefully plan your contemplated procedure beforehand. Do every dissection, every anastomosis, and every operative step in your imagination before you enter the operating room. Intraoperative care and thought, careful technique, refusal to compromise for convenience, redoing a repair if in doubt, and constant reflection often will prevent the agonies of complications for your patient. Further, no matter how often I have done a particular procedure, before the patient is closed or the instruments removed, I replay the entire operation in my mind. If I am not satisfied with my mental video, I go back and try to remedy my concerns.

Gentleness, not speed, is the cardinal surgical virtue
Paraphrasing a surgical maxim from the 15th century, Harvey Cushing, MD, FACS, allegedly told aspiring surgeons: “The surgeon should have the eye of the eagle, the heart of the lion, and the hand of the woman.” Unfortunately, some surgeons have gotten these precepts confused and exhibit the “hand” of the lion or the eagle. Fortunately, we now have many outstanding women surgeons who quite naturally exhibit the hand of the woman. In Europe, speed is sometimes valued for its own sake. Continental surgeons often boast about how quickly they can do a procedure, as if they lived in the 19th century. However, in the age of advanced anesthesia and respiratory control, speed is a poor second to gentleness. Tissues are delicate; handle them carefully. Bleeding can almost always be avoided. Adhesions can be teased apart. The proper wrist posture when sewing with a curved needle will avoid suture cut marks. The finer the anastomotic suture material, the less likely a leak or stenosis will occur.

A learning curve can take time but should not take lives
It revolts me to hear surgeons boast of lowering their mortality rates during their learning curve. When a surgeon emerges from training, the surgeon should expect no mortality or significant morbidity because of a lack of skill. A learning curve should never be measured in patient mortality, but should rather be determined by time involved in performing a procedure and improvement in technical skills.
Intraoperative care and thought, careful technique, refusal to compromise for convenience, redoing a repair if in doubt, and constant reflection often will prevent the agonies of complications for your patient.

**Venerate life**
The employment of care conferences in intensive care units, wherein every person who has had contact with the patient—as well as an exogenous ethicist, in some cases—recommend life or death to a patient’s family has become ubiquitous. Reinhold Niebuhr, a 20th century American theologian, abhorred decision making by a committee and put his trust in the individual. For a surgical patient, that individual should be the surgeon. If the patient does not have untreatable cancer, dementia, or a terminal diagnosis, the surgeon should, in my opinion, be the advocate for life, even if limited, and not for death. Further, with respect to ageism in making surgical decisions, I have known a surgeon who in case discussions commonly expressed the opinion that attempting an operation or providing all-out care should be tempered and possibly not offered when the patient was more than 65 years old. I have always believed (even before I reached that age) that people older than age 65 deserve to live and should have any surgical procedure deemed necessary.

**Be proud of your craft**
I attended medical school on the East Coast, where, as a rule in those long-gone days, surgeons were considered dummies, the cast-offs of medical training. Many years later, I was invited to consider a job offer as chief of surgery at a prestigious northeastern university. I was told that the internists would work-up my patients and decide for or against a procedure; that the anesthesiologists would take care of them during and immediately after an operation; and that the internists, with the help of their specialists in cardiology, would then again take over their care. I asked, “What is left for me to do?” My escort was surprised by my question and responded, “You operate, of course.” In other words, the surgeon was still viewed by some as a technician. I have always denied that conception of our role. I believe the surgeon is an internist who can use his/her hands to follow through on what the mind dictates. In other words, competence in manual dexterity does not preclude cognitive ability.

**Think creatively**
Laboratory or clinical research leads to invention, and invention is the product of imagination. The imaginative process can be stunted by over-reading or over-analyzing at the beginning of the process. An idea should be dissected, contemplated, and relished by its originator before it is subjected to critical examination. After indulging the initial thought, however, it is time to explore the literature and re-examine the concept for originality and feasibility. If others have not previously and definitively conducted the experiment, or there are no strong data indicating that the concept cannot be made a reality, then it is time to plan the investigation and, if the search for funding is successful, to initiate the study. Thus, my research advice is this: think first, then read, then think again, but perhaps don’t read voluminously at first, for that may inhibit a good thought.

**Be of service to the community**
Sooner or later, we should emerge from the shelter of our working and personal time and engage in community activities, such as joining service organizations or initiating a novel contribution to society. In my case, I chose, together with Arthur J. Roberts, MD, FACS, a former cardiovascular surgeon and professional football quarterback, and with the endorsement of the National Football League (NFL) Players Association, to start the Living Heart Foundation-Heart, Obesity, Prevention & Education (LHF-HOPE) program. This activity screens former NFL players.
players throughout the country for obesity, diabetes, heart disease, hypertension, and other ailments, and refers them for further diagnostics and therapy to a regional center of excellence. In phase two of the LHF-HOPE program, lectures are scheduled featuring former players who have reclaimed their good health. They speak on the hazards of obesity and other health care problems to professional organizations and industry groups. They also participate in public forums and presentations to the media. Since the public doesn’t typically pay a great deal of attention to suggestions by members of the medical profession and by most lay advisory groups, it is our hope that they might listen to some of the country’s most admired athletes—football players.

Know where we are in our professional time continuum

Surgery has moved from incisional (such as draining abscesses) to centuries of excisional procedures (primarily for cancer), to reparative cardiac, transplantation, and implantation operations. We maintain this heritage, but we must also move forward into the next phase of our discipline, namely, metabolic surgery. We are focusing on technology—laparoscopic, robotic, single orifice, natural orifice transluminal endoscopic surgery. But, no matter how beguiling technologic change is, we need to embrace the paradigm shift to metabolic surgery, which the late Richard L. Varco, MD, FACS, and I defined in 1978 as “the operative manipulation of a normal organ or organ system to achieve a biological result for a potential health gain.”

There are myriad examples of metabolic surgery, starting with surgery for peptic ulcer disease, where surgeons operated on normal stomachs and vagal nerves without touching yet healed the pathologic lesion—the duodenal ulcer. Presently, metabolic surgery is best represented by bariatric surgery, where surgeons operate on the gastrointestinal tract to achieve a neurohormonal shift in metabolism in order to engender weight loss and ameliorate obesity comorbidities. The ultimate goal of metabolic surgery research is knowledge of the mechanisms and etiology of the diseases we treat (for example, diabetes).

Joy is in the process

Successful outcomes are satisfying and awards are gratifying, but the joy of surgery is in the process—the daily events of caring for patients, thinking about a new problem and thinking anew about an old one, the unpredictability and ever-changing novelty of events, and the physical pleasure of working with your hands.

The word “surgery” is derived from the Greek words “cheiros,” a hand, and “ergon,” work. In essence, we are defined as hand laborers. Thus, as surgeons we live a continuous adventure, are physically active, and litera- bly able to shape events not only with our minds, but with our hands. It is only fitting that my 10 principles conclude with the fact that a surgeon will spend the majority of his or her life in the practice of this chosen vocation. Therefore, take joy in the process. ♦

Note

This column is based on the graduation address that Dr. Buchwald delivered when he was accorded Honorary Fellowship in the Royal College of Surgeons of England in March 2014.

*I believe the surgeon is an internist who can use his/her hands to follow through on what the mind dictates. In other words, competence in manual dexterity does not preclude cognitive ability.
Limited resection as a cure for early lung cancer: Time to challenge the gold standard?

by Nasser Altorki, MD, FACS; Leslie J. Kohman, MD, FACS; Linda J. Veit, MPH; Y. Nancy You, MD, MHSc, FACS; and Judy C. Boughey, MD, FACS

Lung cancer remains the leading cause of cancer-related death in the U.S. With increased use of diagnostic and screening computed tomography (CT) scans, many lung cancers are discovered when they are small (≤ 2 cm). Do these small cancers require a standard lobectomy, or can a more limited resection, such as wedge resection or segmentectomy along with identical lymph node dissection, provide a similar oncologic outcome?

An active North American Phase III trial, Cancer and Leukemia Group B (CALGB) 140503, is expected to help determine whether small cancers require a standard lobectomy. The clinical trial is designed to reveal whether limited resection (wedge resection or segmentectomy) provides equivalent survival to a lobectomy for treatment of early-stage non-small cell lung cancer (NSCLC). The current “gold standard” of lobectomy for NSCLC was established by the 1995 Lung Cancer Study Group (LCSG) trial that randomized patients with peripheral stage 1 (up to 3 cm) NSCLC to lobectomy versus limited resection in 267 patients. Survival results were not statistically different between the two groups, but lobectomy was favored because of fewer loco-regional recurrences.¹

Ongoing advances

It has been 20 years since the results of the LCSG trial were published in the Annals of Thoracic Surgery.¹ Over the course of these two decades, significant advances have occurred in screening, staging, and treatment of early-stage lung cancer. CT scanning, which can detect much smaller nodules, is now universally used for both diagnosis and screening. New generation CT and positron emission tomography scans provide more accurate noninvasive assessment and staging, including the ability to distinguish between solid, part-solid, and slow-growing non-solid lesions, which have a more indolent course.

Japanese oncologists were the first to identify a group of patients who could achieve high survival rates with limited resection.²-⁴ Many surgeons now have experience with segmentectomy, both open and video-assisted, making sublobar resection feasible and applicable for more of these patients. In addition, single institution studies have shown that limited lung resection provides similar local control and survival to lobectomy in well-selected patients.⁵ ⁷ The timing is right to challenge the gold standard of lobectomy for early-stage NSCLC in a multicenter trial.

CALGB 140503

CALGB 140503 is a Phase III randomized trial of lobectomy versus sublobar resection for small (≤ 2 cm) peripheral NSCLC. Since 2007, 533 patients have been randomized, making this the largest multicenter trial evaluating this question. Target accrual is 692, more than twice the LCSG accrual.

Eligible patients include those who are older than 18 years of age with a peripheral lung nodule measuring ≤ 2 cm on a CT scan and suspected or proven lung cancer. The nodule must be peripherally located (defined as in the outer one-third of the lung) and the patient physiologically suited for either lobectomy or limited resection. Patients must not have had a previous malignancy within three years (with the exception of non-melanoma skin cancer, superficial bladder cancer, or cervical carcinoma in situ). Excluded from this trial are patients who have previously undergone chemotherapy and/or radiotherapy, as well as...
patients with locally advanced or metastatic disease. Patients are registered before surgery. During surgery, the cancer diagnosis is confirmed, if not previously determined by preoperative biopsy, and the required regional nodes are determined to be negative by frozen section (levels 4, 7, and 10 on the right; levels 5 or 6, 7, and 10 on the left) (see figure, this page). The patient is then intraoperatively randomized to either limited resection or lobectomy. Patients are followed for five years to determine disease-free and overall survival rate.

The results of CALGB 140503 are vital for evaluating the surgical management of patients with early stage lung cancer (T1aN0), a population that is under-represented in clinical trials. The implementation of CT screening for lung cancer, now approved by the Centers for Medicare & Medicaid Services, will result in the diagnosis of even more small peripheral lung cancers for which surgical treatment will be indicated. Many of these patients have poor lung function related to prior smoking behavior. Preservation of lung function by limited resection, if equal to lobectomy in cancer control, will result in a better quality of life for these individuals and maximize options for treatment of future second primaries.

Surgeons are urged to contribute to these research efforts by recommending this trial for their eligible patients to help determine the optimal extent of surgical resection for oncologic control of early-stage lung cancer, and decide whether it’s time to change the gold standard of lobectomy for early-stage NSCLC.

REFERENCES

Among the prized holdings in the American College of Surgeons (ACS) Archives are the papers of ACS founder Franklin H. Martin, MD, FACS, and his wife, Isabelle H. Martin. Within that collection are the four record books of Dr. Martin’s gynecology practice. One labeled “Laparotomy” was used from 1891 to 1900, and the other three record books highlight Dr. Martin’s practice from 1896 to 1917.

Renowned gynecologist
Dr. Martin received his medical degree in 1880 from the Chicago Medical College (now Northwestern University’s Feinberg School of Medicine, Chicago, IL), and from 1886 to 1888, he was a professor of gynecology at a postgraduate medical school called the Chicago Policlinic. Dr. Martin read his first authored paper, “Treatment of fibroid tumors of the uterus by electrolysis, with a description of Apostoli’s Method,” at a meeting of the American Medical Association in 1886. The following year, he began his long tenure as a gynecologist at the Women’s Hospital of Chicago. During that time, he authored A Treatise on Gynecology.
Patients traveled long distances, even by today’s standards, to see Dr. Martin. In addition to Chicago, there are many patient addresses from Indiana, Michigan, Missouri, and Iowa recorded in the practice records. Interestingly, the names of married patients were entered using the husband’s name (for example, Mrs. John Jones, rather than Mrs. Jane Jones).

Records survive improper storage
For many decades, these practice records books were kept next to the boiler room in the basement of the John B. Murphy Memorial Auditorium, Chicago, and were subject to sporadic heating and air conditioning. In 2002, the books were transferred to the Archives located in the College’s headquarters in Chicago, but their leather bindings had already deteriorated with age (“red rot”) and are in need of conservation treatment. The pages, however, are in very good condition. Laid within the pages are hand-drawn illustrations, various notes on loose sheets, and completed test result forms. One sheet of instructions to a patient advises, “All undergarments should consist exclusively of wool.... No cotton, silk, or linen fabric should be permitted in contact with the skin.”

A full listing of the 96 boxes of Dr. Martin’s papers can be found in the Archives section of the College’s website at www.facs.org/about-acs/archives. We welcome your suggestions for any other artifacts from the ACS Archives that you would like to see featured in this column.
When you see smoke in the operating room (OR), do you consider it a surgical fire? Under The Joint Commission’s updated definition, “fire, flame, or unanticipated smoke, heat, or flashes occurring during an episode of patient care” is considered a sentinel event, even if the source is extinguished and the patient is unharmed.*

The revised sentinel event definition became effective January 1 and was developed in an effort to encourage OR staff to investigate and take action whenever a fire occurs. Even though fires are not subject to mandatory reporting to The Joint Commission, under the sentinel event policy a comprehensive systematic analysis (such as a root-cause analysis) must be conducted in all instances of fire. The analysis is required to determine how an event happened and what can be done to prevent it from occurring again. The purpose of this activity is to establish a series of preventative steps that should be followed to avoid a recurrence. The process is meant to be non-punitive and is intended to help health care institutions improve patient safety.

Analysis of close calls or events where the patient is unharmed is important because the potential for patient injury exists every time there is a spark or smoke in the OR. An institution that is perpetually aware of opportunities for error and investigates these situations is exhibiting the characteristics of a high-reliability organization—one in which the goal is zero incidents of patient harm.

The Joint Commission and the American College of Surgeons both participate in the U.S. Food and Drug Administration’s (FDA) partnership, Preventing Surgical Fires. According to the FDA, an estimated 550 to 650 surgical fires occur in the U.S. annually, and despite the fact that the root causes of surgical fires are well understood, OR fires still occur.

The goals of the Preventing Surgical Fires initiative are to:

• Increase awareness of factors that contribute to surgical fires
• Disseminate surgical fire prevention tools
• Promote adoption of risk-reduction practices

Health care professionals who are involved in a surgical fire are encouraged to report the event to The Joint Commission and to MedWatch, the FDA Safety Information and Adverse Event Reporting Program (accessible at www.accessdata.fda.gov/scripts/medwatch). Surgeons employed by institutions that are subject to the FDA’s user facility reporting requirements should follow the reporting procedures established by their facilities.

Reporting surgical fires
To help the FDA learn as much as possible about a surgical fire incident, the following information should be included in the reports:

• Make and model of devices thought to be ignition sources (such as electrosurgical units, lasers, and fiberoptic cables)

• Make and model of devices or drugs that were fuel sources (such as drapes or antiseptic skin preparation agents)

• Whether supplemental oxygen was used and at what concentration

• Delivery system used to supply supplemental oxygen (such as an endotracheal tube)

• Any additional identifying information, including catalog and serial number

• A complete description of the event, including patient outcome

• The health care provider’s description of the event and thoughts on how the device contributed to the event

• Device design or labeling that may have contributed to the event

• Whether the device has been evaluated, including the evaluation results, if available

For more information, go to www.fda.gov/preventingsurgicalfires.

According to the American Burn Association (ABA) National Burn Repository 2010 Report, scald burns accounted for 54 percent of all burns in children younger than five years old. More than 90 percent of hot water scalds are due to hot cooking or drinking liquids.

Fortunately, most pediatric scald burns are not fatal and are minor enough that the victim can avoid admission to the hospital. For young children especially, the kitchen may be regarded as the most dangerous room in the entire household. Adults often fail to recognize a child’s ability to access hazardous objects in the kitchen and the subsequent likelihood of injury. Ultimately, negligence on the part of the caregiver is the key issue.

Pediatric scald injuries
The severity of a scald injury depends on the temperature of the liquid and the duration of exposure. Younger children have thinner skin, resulting in deeper injuries compared with adults who are exposed to the same temperature and contact time. Coffee, tea, hot chocolate, and other hot beverages can be served to adults at temperatures of 160–180°F/71–82°C. Water at a temperature of 50°C will take approximately 10 minutes to cause a full thickness injury in an adult, while taking only half that time to create an injury of similar depth in a child. The relationship, however, is not linear. Water at a temperature of 58°C will take approximately five seconds to cause a full thickness injury in an adult, but only one second in a child.

Furthermore, liquid volumes that may appear small, whether they are in a cup or saucepan, can actually affect a large portion of a child’s body. The “rule of nines” is a quick and easy way to estimate total body surface area (TBSA) involvement in an adult, but the rule does not uniformly apply to children. Because children have proportionally larger heads, Lund-Browder charts estimate the extent of burns that allow for the varying proportion of body surface in different ages. While a burn involving the entire head in an adult may be only 9 percent of the TBSA, it would be 19 percent in a one-year-old toddler. This proportional increase in TBSA is exacerbated by the fact that toddlers tend to reach up to pull hot liquid containers down, which make their heads and faces more prone to significant injury.

Causes and effects
To examine the occurrence of pediatric scald injuries in the National Trauma Data Bank® (NTDB®) research dataset for 2013, admissions medical records were searched using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) diagnoses codes. Specifically searched were records for children age 12 or younger with place of injury codes (E-code) E849.0 (home) and an external cause of injury code E924.0 (burns from hot liquids and vapors, including steam). A total of 3,183 records were found; 3,033 records contained a discharge status, including 2,912 patients discharged to home, 78 to acute care/rehab, and 43 sent to skilled nursing facilities; none died. These patients were 52.8 percent male, on average 5.4 years of age, had an average hospital length of stay of 3.8 days, an average intensive care unit length of stay of 5.1 days, an average injury severity score of 3.0, and were on the ventilator for an average of 9.4 days. Almost 60 percent of all injuries occurred in children five years of age or younger. (See Figures 1 and 2, page 63.)

Prevention
Children are creative and resourceful; therefore, identifying all the potential hazards that may lead to serious injury is paramount. A study at a major burn center involving scalded children younger than age five
found that microwave-related injury was an unaddressed mechanism not found in major prevention resources. This type of finding opens an avenue for awareness, education, and possible engineering safeguards. It may also underscore that the mechanisms for scalds and other cooking-related pediatric injuries need further investigation to develop targeted and effective preventive strategies. A kitchen with tantalizing smells may lead to curiosity regarding what’s cookin’; when it comes to preventing injury, though, it is who’s lookin’ that counts.

Throughout the year, we will be highlighting these data through brief reports in the Bulletin. The NTDB Annual Report 2014 is available on the ACS website at www.facs.org/quality-programs/trauma/ntdb. In addition, information is available on the website about how to obtain NTDB data for more detailed study. If you are interested in submitting your trauma center’s data, contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

Acknowledgment
Statistical support for this article has been provided by Chrystal Caden-Price, Data Analyst, and Alice Rollins, NTDB Coordinator.

REFERENCES
Most hospitals participating in the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®) improve surgical outcomes over time, and improvement continues with each year that hospitals participate in the program, according to a study recently published online in *Annals of Surgery.*

The study by the American College of Surgeons (ACS) research team found that among hospitals currently participating in the program for at least three years, 69 percent reduced their mortality rate, 79 percent reduced their complications rate, and 71 percent reduced their surgical site infection (SSI) rate. It was estimated that, on average, these hospitals reduced their death rate by 0.8 percent per year, their complications rate by 3.1 percent per year, and their SSI rate by 2.6 percent per year, based on comparisons with rates from the previous year.

The study is based on ACS NSQIP data collected between 2006 and 2013. Complications included in morbidity were superficial, deep, or organ space SSI; failure to wean; pneumonia; renal complications; urinary tract infection; cardiac complications; and vein thrombosis/pulmonary embolism. Annual reductions allow hospitals committed to participation in the program to see significant improvements accumulate over time, according to the study authors. For example, by year five of participation, an average-size hospital is likely to prevent at least seven deaths, 150 complications, and 66 SSIs per 10,000 surgical procedures. A large hospital with 800 to 1,000 beds could prevent twice as many instances of patient harm, study authors noted. The estimates likely underestimate the actual benefits of the program as some complications were excluded from the study because they could not be counted consistently over time and because multiple complications in the same patient were omitted.

“These results show that hospitals committed to measuring and acting on their clinical data, implementing steps to improve, and establishing a culture for continuous quality improvement can achieve significant reductions in patient harm,” said Clifford Y. Ko, MD, MS, MSHS, FACS, Director, ACS NSQIP and ACS Division of Research and Optimal Patient Care.

“Studies have consistently shown that reliance on clinical data is necessary for hospitals to get an accurate picture of their outcomes and to identify areas for improvement. Because of inaccuracies, it is often inappropriate to use administrative data to make quality improvement assessments,” Dr. Ko added. “We now have enough evidence to know that the best approach to quality improvement requires clinical outcomes data. Then, once hospitals have an accurate measure of their quality, they must act on that data to improve.”

At press time, the study was scheduled to be published later this year in the print edition of *Annals of Surgery.*

The Leadership Group of the newly formed Military Health System Strategic Partnership American College of Surgeons (MHSSPACS) held its inaugural meeting March 31 at the College’s headquarters in Chicago, IL. ACS Executive Director David B. Hoyt, MD, FACS, and Captain Eric Elster, MD, FACS, chair, department of surgery, Uniformed Services University of the Health Services, and U.S. Navy staff transplant surgeon, Walter Reed National Military Medical Center, Bethesda, MD, co-chaired the meeting.

M. Margaret Knudson, MD, FACS, the new Medical Director for the MHSSPACS, organized the meeting, which was attended by leaders from the U.S. Army, Navy, and Air Force, as well as representatives of key divisions of the ACS that are involved in this new partnership. The group considered four major topics that will be jointly addressed by the partnership, including quality of care in the military health system, education and training in combat care for military surgeons, trauma and combat casualty research, and the military’s Joint Trauma System.

In addition, the group discussed plans for a new military surgical society, called the Excelsior Society, which will meet for the first time at the ACS Clinical Congress in 2015.

MHSSPACS LEADERSHIP GROUP

Sameera Ali, Administrative Director, Continuous Quality Improvement, ACS Division of Research and Optimal Patient Care
Jeffrey Bailey, MD, FACS, Director, Institute for Surgical Research, U.S. Air Force, San Antonio, TX
Patrick Bailey, MD, FACS, Medical Director, ACS Division of Advocacy and Health Policy
Patrice Gabler Blair, MPH, Associate Director, ACS Division of Education
Admiral Raquel Bono, MD, FACS, ACS Governor, U.S. Navy
Connie Bura, Associate Director, ACS Division of Member Services
Jean Clemency, Administrative Director, ACS Trauma Programs
Paul Cordts, MD, FACS, Department of Defense, Health Affairs
Captain Eric Elster, MD, FACS, Chair, Department of Surgery, Uniformed Services University of the Health Services, and U.S. Navy staff transplant surgeon, Walter Reed National Military Medical Center, Bethesda, MD
Col. Kirby Gross, MD, FACS, U.S. Army, Director, Military Joint Trauma System
David B. Hoyt, MD, FACS, ACS Executive Director
Donald Jenkins, MD, FACS, Executive Committee, ACS Committee on Trauma
Garrett Kirk, MPH, Program Administrator, MHSSPACS
M. Margaret Knudson, MD, FACS, Medical Director, MHSSPACS
Colonel Matthew Martin, MD, FACS, Trauma Medical Director and Chief, Surgical Critical Care, Madigan Army Medical Center, Joint Base Lewis-McChord, WA
Colonel Todd Rasmussen, MD, FACS, Director, U.S. Combat Casualty Research Program, U.S. Air Force
Michael Rotondo, MD, FACS, Director, ACS Trauma Programs
Ajit Sachdeva, MD, FACS, FRCS, Director, ACS Division of Education
C. William Schwab, MD, FACS, Captain (Retired), U.S. Navy
Lieutenant Colonel Thomas Stamp, MD, FACS, ACS Governor, U.S. Air Force Academy, CO
Girma Tefera, MD, FACS, Medical Director, ACS Operation Giving Back
Patricia L. Turner, MD, FACS, Director, ACS Division of Member Services
David P. Winchester, MD, FACS, Medical Director, ACS Cancer Programs

At the MHSSPACS meeting (from left): Drs. Tefera, Winchester, Turner, Elster, and Cordts; Colonel Martin; Dr. Knudson; Colonel Gross; Admiral Bono; Mr. Kirk; Dr. Hoyt; Ms. Bura and Ms. Blair.
Dr. Michelassi honored with National Physician of the Year Award

Fabrizio Michelassi, MD, FACS, Chair of the American College of Surgeons (ACS) Board of Governors, was awarded the Castle Connolly 2015 National Physician of the Year Award for Clinical Excellence on March 23 in New York, NY, at the 10th annual National Physician of the Year Awards, sponsored by Castle Connolly Medical Ltd. Dr. Michelassi is the Lewis Atterbury Stimson Professor and Chairman, department of surgery, Weill Cornell Medical College, and surgeon-in-chief at New York-Presbyterian/Weill Cornell Medical Center, New York.

Dr. Michelassi is a renowned gastrointestinal surgeon and an expert in the surgical treatment of gastrointestinal and pancreatic cancers, as well as inflammatory bowel disease. A prolific author of more than 270 papers, book chapters, and abstracts, Dr. Michelassi has made significant contributions to surgical treatment of pancreatic and colorectal cancers, ulcerative colitis, and Crohn’s disease. He has pioneered the development of techniques that improve the quality of life for patients with rectal cancer and ulcerative colitis. His experience and expertise in treating Crohn’s disease led him to develop a novel bowel-sparing procedure, now known as the Michelassi strictureplasty, which obviates chronic intestinal obstruction in extensive Crohn’s disease without sacrificing the intestine.

“I am truly humbled to receive this award,” Dr. Michelassi said. “It is amazing to me that someone could receive an award like this just for doing something that has been such a pleasure to do: taking care of patients in a compassionate, expert, professional way.”

Dr. Michelassi is a clinician, researcher, and teacher who has served as a visiting professor at nearly 50 national and international institutions. He has delivered more than 40 named lectures and keynote addresses. He is associate editor of the *Annals of Surgical Oncology* and serves on the editorial board of five prestigious medical journals: *Journal of Gastrointestinal Surgery, Surgery, British Journal of Surgery, Annals of Surgery*, and the *World Journal of Surgery*. He has been the recipient of many awards, including the Andrew W. Mellon Foundation Award, the American Cancer Society Cancer Development Award, and the Distinguished Leadership Award from the Crohn’s and Colitis Foundation of America.

John B. Mulliken, MD, FACS, professor of surgery, Harvard Medical School and co-director, Vascular Anomalies Center and director, Cranofacial Centre, Boston Children’s Hospital, received a Lifetime Achievement Award at the 2015 Castle Connolly National Physician of the Year Awards. In addition, Henry Brem, MD, FACS, Harvey Cushing Professor of Neurosurgery, ophthalmology, oncology and biomedical engineering, and director, department of neurosurgery, Johns Hopkins University School of Medicine, Baltimore, MD, was recognized for Clinical Excellence.

Find more information regarding the Castle Connolly awards and a list of all 2015 honorees at www.castleconnollyawards.com.
The Board of Regents of the American College of Surgeons (ACS) took the following disciplinary actions at its February 6–7 meeting in Chicago, IL:

• A senior Fellow, a general surgeon from Kula, HI, was censured. This action was taken following disciplinary action by the State of Washington Department of Health, Medical Quality Assurance Commission. The surgeon was ordered to permanently surrender his license to practice medicine in the state following a finding of unprofessional conduct.

• Robert A. Weiss, MD, an ophthalmic surgeon from Chicago, IL, was expelled from the College. This action was taken following disciplinary action by the Illinois Department of Financial and Professional Regulation, which suspended his license to practice medicine for unprofessional and immoral conduct following his arrest on four felony charges of unauthorized videotaping.

• Christopher J. Kovanda, MD, FACS, a plastic surgeon from Maple Grove, MN, had his full Fellowship privileges restored following a period of probation. Dr. Kovanda fulfilled the condition for reinstatement that the ACS Board of Regents imposed on his Fellowship in June 2012. ♦

DEFINITION OF TERMS
Following are the disciplinary actions that may be imposed for violations of the principles of the College:

• **Admonition**: A written notification, warning, or serious rebuke.

• **Censure**: A written judgment, condemning the Fellow or Member's actions as wrong. This is a firm reprimand.

• **Probation**: A punitive action for a stated period of time, during which the Member: (a) loses the rights to hold office and to participate as a leader in College programs; (b) retains other privileges and obligations of membership; (c) will be reconsidered by the Central Judiciary Committee periodically and at the end of the stated term.

• **Suspension**: A severe punitive action for a period of time, during which the Fellow or Member, according to the membership status: (a) loses the rights to attend and vote at College meetings, to hold office, and to participate as a leader, speaker, or panelist in College programs; (b) is subject to the removal of the Member's name from the public listing and mailing list of the College; (c) surrenders his or her Fellowship certificate to the College, and no longer explicitly or implicitly claims to be a Fellow of the American College of Surgeons; (d) pays the visitor's registration fee when attending College programs; (e) is not subject to the payment of annual dues. When the suspension is lifted, the Fellow or Member is returned to full privileges and obligations of Fellowship.

• **Expulsion**: The certificate of Fellowship and all other indicia of Fellowship or membership previously issued by the College must be forthwith returned to the College. The surgeon thereafter shall not explicitly or implicitly claim to be a Fellow or Member of the American College of Surgeons and may not participate as a leader, speaker, or panelist in College programs.
The Board of Directors of the American College of Surgeons Professional Association (ACSPA) and the Board of Regents (B/R) of the American College of Surgeons (ACS) met February 6–7 at the College’s headquarters in Chicago, IL. The following is a summary of their discussions and actions.

**ACSPA**

In 2014, the ACSPA political action committee (ACSPA-SurgeonsPAC) raised more than $589,997 (including both personal and corporate funds) from 1,974 ACS members and staff. Of this amount, more than $529,422 is personal (hard) dollars and $60,575 is corporate (soft) dollars.

In the 2014 election cycle, the ACSPA-SurgeonsPAC contributed $1,053,500 to 151 candidates, leadership PACs, and party committees. Of this amount, 60 percent was distributed to Republicans and 40 percent to Democrats; 92 percent of SurgeonsPAC dollars were spent on candidates/incumbents who won their seats.

The primary areas of focus for the ACSPA in 2015 include increasing the following:

- The number of SurgeonsPAC members
- Peer-to-peer solicitation through the ACSPA-SurgeonsPAC’s Captain Program and the Resident Leadership Council
- Leadership engagement
- Leadership giving

**ACS**

**Division of Advocacy and Health Policy**

The past year saw an increase in the frequency of communications to members on advocacy and policy-related topics. Besides the monthly e-newsletter, *The ACS Advocate*, and regular submissions to *NewsScope* and the *Bulletin*, Patrick V. Bailey, MD, FACS, Medical Director of Advocacy, is writing a regular column for *ACS Surgery News*.

The Health Policy and Advocacy Group (HPAG) met at the ACS Washington office, January 11–12, to discuss and set the division’s 2015 agenda and activities. In addition, the annual Commission on Cancer Advocacy Committee planning meeting took place October 25, 2014. The focus of the 2015 agenda will be on funding for survivorship care plan creation and delivery, reimbursement for helping patients navigate cancer care, clinical research, access to oncology drugs, funding for the National Institutes of Health, and cancer quality measurement. Planning is under way for the second annual legislative briefing. The topic will be Accreditation Makes a Difference.

**2015 Leadership & Advocacy Summit**

At the time of the Board meeting, the 2015 Leadership & Advocacy Summit was scheduled to take place April 18–21 at the JW Marriott, Washington, DC. General Stanley McChrystal was scheduled to deliver the keynote address on tools for successful leadership. Other speakers on the agenda were planning to discuss the current political environment in Washington, DC, and across the country, as well as the status of important health care issues.

The ACSPA-SurgeonsPAC was preparing to sponsor a luncheon talk by *Washington Post* political reporter Chris Cillizza. The ACSPA-SurgeonsPAC also was scheduled to hold a fundraising event and raffle. Once again, Resident Scholarship grants were made available to help encourage the participation of a new generation of surgeon advocates.

**AMA House of Delegates**

The ACS delegation participated in the Interim Meeting of the American Medical Association (AMA) House of Delegates,
November 7–11, 2014, in Dallas, TX. ACS representatives at the meeting included John Armstrong, MD, FACS (Delegation Chair); Jacob Moalem, MD, FACS (Young Physicians Section delegate); ACS Regent Leigh Neumayer, MD, FACS; Naveen Sangji, MD, member, ACS Resident and Associate Society (RAS-ACS); and Patricia L. Turner, MD, FACS, Director, ACS Division of Member Services. Many resolutions and reports were discussed and adopted at the meeting. One of the most significant issues discussed was a Council on Medical Service report focused on Medicaid primary care payment increases. The ACS and other surgical specialty societies were able to amend the report language to emphasize that any payment increases for one group should have a neutral or positive affect on payment for other specialties.

**ACS State Advocacy Strategy**

The State Affairs team provided the HPAG with a state legislative action agenda for 2015. Issues suggested for primary focus include the following:

- **Uniform Emergency Volunteer Health Practitioners Act:** States targeted for grassroots advocacy include Florida, Georgia, Mississippi, Pennsylvania, and South Carolina.

- **Medical liability reform:** A state Supreme Court case in California has the potential to overturn the state’s Medical Injury Compensation and Reform Act and will be closely monitored. In addition, provider shield legislation, which would ban the use of public/private payor guidelines as evidence in a liability lawsuit, may gain some traction in 2015.

- **Bariatric surgery coverage:** Numerous state exchanges do not require coverage for bariatric surgery, and advocates continue to work with state insurance commissioners to include bariatric surgery in the essential benefits package. Efforts are also under way to address instances of benefit discrimination in those states where bariatric surgery is part of the essential benefits package.

- **Trauma:** The Committee on Trauma (COT) is working on its advocacy agenda for 2015, with preliminary interest focused on injury prevention and trauma systems funding. In addition, there may be attempts in Texas to repeal the Driver Responsibility Program, which adds an extra fee for automobile violations to support the state’s trauma system. Should a bill be introduced, a strong response will be generated against repeal.

- **Affordable Care Act implementation:** Narrow/tiered networks have gained prominence with regard to state regulatory activity. The AMA released four model bills relating to these issues, and the National Association of Insurance Commissioners is updating its model legislation. In addition, Medicaid expansion efforts are expected in Indiana, Texas, Utah, Virginia, and Wyoming.

- **Scope of practice:** Emboldened by victories in 2014, optometrists are expected to aggressively seek the permission to perform surgery, and advanced practice nurses will push for independent practice. The possibility of implementing a definition of surgery in Connecticut and Massachusetts will continue in 2015.

**Position statement**

The B/R approved the ACS Statement on Physician Tiering and Narrow Network Programs (see page 52).

**Division of Education**

The Division of Education recently received re-accreditation and a commendation for innovation and compliance from
the Accreditation Council for Continuing Medical Education. In addition, the ACS is now on a six-year cycle for accreditation of continuing medical education programs, instead of the usual four-year cycle.

Committee on Ethics
The Committee on Ethics continues to move forward with projects identified at a strategic planning meeting, which convened in April 2014. Alberto R. Ferreres, MD, PhD, MPH, FACS, has been selected to serve as editor of a book that will define the framework for the field of surgical ethics as it has evolved during the last 10 years. The book will be used to define the important domains and essential components of surgical ethics.

At the time of the B/R meeting, discussions were continuing with regard to the development of activities for surgeons committed to advanced study in surgical ethics. Efforts discussed at the time included establishment of a collaborative program with the MacLean Center at the University of Chicago, IL, that would establish a summer-long fellowship in surgical ethics or a more extended certificate-based program. Soon after the Board meeting, that fellowship was approved.

Committee on Ethics membership is being expanded to allow better integration of ethics throughout the organization. Several individuals with specific expertise and experience in ethics are slated to join the committee this year.

Division of Integrated Communications

Online properties
In December 2014, monthly analytics for the College's public website, facs.org, revealed the following:

- 545,787 monthly page views
- 207,502 sessions
- 142,524 users who viewed 2.63 pages per session

Most website visitors used desktop devices (78.19 percent), followed by mobile devices (14.99 percent), and then tablets (6.82 percent).

As of January 2015, the College had 92 active online Communities covering a variety of member interest areas. The site has already received more than 388,000 page views since the first community launched in late July 2014.

Ebola resources
Last October, the College assembled a variety of resources and news stories to keep members informed of recommended strategies to protect themselves from contracting the Ebola virus and to guide them through the process of recognizing symptoms in patients. This information was disseminated through the ACS website and the ACS Communities. Featured content includes a Surgical Protocol for Ebola developed by Past-ACS Governor Sherry M. Wren, MD, FACS, and Adam L. Kushner, MD, MPH, FACS. Pragmatic information for surgeons also was presented during a 2014 Clinical Congress Panel Session.

Surgeons-at-work photos
In November, all members were invited to submit candid photos of themselves at work for inclusion on the ACS website. Photos began appearing online in February 2015.

Clinical Congress newsletter
A daily electronic newsletter, Clinical Congress Daily Highlights, was sent to all members of the ACS during Clinical Congress. The newsletter contained 34 complex articles and three videos on key scientific sessions. Full-length articles were posted on the ACS Clinical Congress website.

In the inaugural year of distribution, results included:

- Daily distribution to nearly 51,000 people
- Click-through rates to the full articles housed on the Clinical
Congress site were 11 percent higher than industry averages.

At the 2015 Clinical Congress, the Program Committee will appoint a single Medical Editor for the newsletter who will coordinate the entire review process on all days of the conference, assign reviewers for each day, and provide unified oversight for the reviews.

Division of Member Services

Marketing campaign

The ACS has launched the Realize the Potential of Your Profession campaign focused on recruiting more young surgeons to become Fellows by leveraging peer-to-peer connections and social media. Campaign buttons were distributed at the 2014 Clinical Congress, and a recruitment video was shown on the Clinical Congress shuttle buses, encouraging non-Fellows to realize the potential of their profession through involvement in the College.

An engaging video based on the theme “100 Years, 100 Reasons to Join” was widely distributed through ACS communication and social media channels, and the goal is for it to be continually shared among young surgeons with their colleagues and peers to drive interest in the ACS.

Chapters

The College approved the formation of a Jordan Chapter, the College’s 40th international chapter. Abdalla Y. Bashir, MB, BCh, FRCSEd, FACS, serves as the ACS Governor for the Jordan Chapter. With the formation of the Jordan Chapter, the total number of chapters is 107—67 domestic (including two Canadian chapters) and 40 international.

Membership

The B/R accepted a change in status from Active (dues-paying) to Retired for 180 Fellows, and from Senior (non-dues paying) to Retired for 19 Fellows for a total of 199 Fellows. The B/R also accepted the resignation of 10 Fellows.

The effort to promote ACS membership will continue in 2015 with networking events in select communities around the country and activities at the Leadership & Advocacy Summit.

Division of Research and Optimal Patient Care

ACS NSQIP

A total of 610 hospitals participate in the College’s National Surgical Quality Improvement Program (ACS NSQIP®), 547 of which participate in adult NSQIP.

The Essentials option has the highest enrollment of all the Adult participation options, with 262 sites; however, the Procedure Targeted option, with 225 hospitals, is experiencing the greatest growth. The Pediatric option represents slightly more than 10 percent of overall participation.

Enrollment in ACS NSQIP grew by 16 percent in the 12 months leading up to the B/R meeting. Of the 610 enrolled hospitals, 48 are international sites, and continued international growth is expected with significant interest from Canada, Australia, New Zealand, Saudi Arabia, South Korea, and Oman.

Additional reporting improvements have been made to help participants more efficiently access and analyze data. New Case Details and Custom Fields Reports were scheduled for release in the first quarter of 2015. These reports will provide participants with the ability to run reports for case data, data captured in custom fields, or case and custom fields data efficiently combined into one report for site-specific research.

A full suite of reports also was developed for all ACS NSQIP Collaboratives to facilitate the collection and analysis of data across multiple sites in a Collaborative, or Collaborative performance benchmarked against all of ACS NSQIP.
Information is available across 34 models, which were selected based on the recommendations of the ACS NSQIP Clinical Team given current focal areas of quality improvement across ACS NSQIP sites.

The 2015 ACS NSQIP National Conference is scheduled for July 25–28 in Chicago, IL. A major theme on the 10th anniversary of the conference will be to recognize and celebrate ACS NSQIP hospitals and their dedication to improving the care of the surgical patient.

**MBSAQIP**

At present, 773 surgery centers are participating in the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP). Of these centers, 608 are fully accredited, 66 are data collection-only centers that have not yet applied for accreditation, and 99 are initial applicants for accreditation. By expanding the accreditation options to include varying levels and surgical volume expectations (comprehensive, band, low acuity, and comprehensive with adolescent qualifications), the ACS is opening participation in the MBSAQIP to a broader range of bariatric centers.

**Surgeon Specific Registry**

The ACS has continued to develop the Surgeon Specific Registry (SSR) as a tool for individual surgeon data capture. Approximately 6,000 surgeons participate in the SSR and have submitted at least 20 cases and nearly 6 million records. Surgeons continue to use the registry as a case log system.

The overarching aim of the SSR is to fulfill the regulatory requirements being used to assess individual surgeons. Three of the regulatory items being addressed include:

- The Centers for Medicare & Medicaid Services Physician Quality Reporting System
- Maintenance of Certification (MOC) Part 4 by the American Board of Surgery (ABS) and the American Board of Colon and Rectal Surgery
- Submission of cases to the ABS during the MOC exam

**Educational programs**

The Clinical Trials Methods Course will again be chaired by Kamal M. F. Itani, MD, FACS, and will take place this fall at the ACS headquarters. This five-day, intensive course is based on four successfully conducted and published clinical trials that are used to teach the methodology of design and implementation of a controlled clinical trial.

The Outcomes Research Course, chaired by David R. Flum, MD, FACS, took place December 4–6, 2014, at ACS headquarters. The three-day course is designed for clinical and health services researchers with varying degrees of experience in the field. The course included 13 faculty members who led didactic lectures as well as breakout sessions.

The ACS Clinical Scholars in Residence program is a two-year, on-site fellowship in applied surgical outcomes research, health services research, and health care policy. This program offers surgery residents a unique opportunity to work with the College. The clinical scholars become embedded with the College’s ongoing quality improvement initiatives, such as the ACS NSQIP, the National Cancer Data Base, the Trauma Quality Improvement Program (TQIP), guideline development, and accreditation programs. The application processes for 2016–2018 appointments closed April 3.

Two new ACS Clinical Scholars in Residence will be starting their fellowship at the ACS in July 2015:

- Kristen Ban, MD, a surgery resident at Loyola University Medical Center, Maywood, IL
- Jason Liu, MD, a resident at the University of Chicago Hospital
**Correction**

The Residency to Retirement column, “The ACS motto: What does it really mean?” on page 32 of the March 2015 Bulletin, provides the incorrect case for the Latin word *omnibus*. The word is used in the dative case. ✧

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**TQIP**

A total of 278 hospitals participate in TQIP. There are 257 Adult TQIP participants:

- 147 Level I, 121 state-designated, and 92 ACS-verified
- 114 Level II, 90 state-designated, and 77 ACS-verified
- Four hospitals are both ACS Level II and State Level I
- 41 centers in the process of joining adult TQIP

There are 45 hospitals enrolled in Pediatric TQIP:

- 24 combined adult and pediatric centers and 21 standalone pediatric facilities
- 31 hospitals are in the process of joining Pediatric TQIP

**Position statement**

The B/R approved the update Statement in Support of Motorcycle Helmet Laws (see page 51).

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**American College of Surgeons Foundation**

The ACS Foundation has received a proposal from Rahul K. Shah, MD, FACS, and David J. Brown, MD, who trained as fellows under the direction of ACS Past-President Gerald B. Healy, MD, FACS, FRCSEng(Hon), FRCSI(Hon), to establish a traveling fellowship in Dr. Healy’s name. A steering committee, led by Drs. Shah and Brown, will be established to lead the outreach effort toward a goal of $200,000. ACS President Andrew L. Warshaw, MD, FACS, FRCSEd(Hon), has agreed to join the steering committee. The ACS Foundation will provide operational oversight and management of the effort to seek donations from trainees, colleagues, family, and friends of Dr. Healy. The steering committee and the Foundation will identify and engage potential “founding donors.” A public announcement was made in April to seek gifts from a broader audience.

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**Journal of the American College of Surgeons**

The *Journal of the American College of Surgeons (JACS)* now has two biostatisticians who thoroughly review papers submitted for possible publication.

More than 3,500 Fellows earned Maintenance of Certification credit through the JACS continuing medical education (CME) program in 2014, with 79,806 CME credits granted.

*JACS* has more than 600 followers on Twitter (@JAmCollSurg), and plans are in place to expand the journal’s social media presence. Lillian S. Kao, MD, FACS, *JACS* Social Media Editor, is working with the RAS-ACS to involve and reach out to younger members and to increase readership among this crucial cohort.

*JACS* articles are being picked up by national media, as a result of the journal’s collaboration with the ACS Public Information team. ✧
75 cancer care facilities receive ACS CoC Outstanding Achievement Award

The Commission on Cancer (CoC) of the American College of Surgeons (ACS) has granted its 2014 Outstanding Achievement Award to 75 accredited cancer programs throughout the U.S. Award criteria were based on qualitative and quantitative surveys conducted last year.

Go to the ACS website to view a complete list of the award-winning cancer programs at www.facs.org/quality-programs/cancer/accredited/about/outstanding/2014.

The award increases awareness of the quality of cancer care and the choices available for cancer patients and their loved ones. In addition, the awards do the following:

• Recognize cancer programs that achieve excellence in providing quality care to cancer patients
• Motivate other cancer programs to work toward improving their level of care
• Facilitate dialogue between award recipients and health care professionals to share best practices
• Encourage honorees to serve as quality-care resources to other cancer programs

The 75 award-winning cancer programs represent approximately 15 percent of programs surveyed by the CoC in 2014. “These 75 cancer programs currently represent the best of the best when it comes to cancer care,” said Daniel P. McKellar, MD, FACS, Chair of the CoC. “Each of these facilities is not just meeting nationally recognized standards for the delivery of quality cancer care; they are exceeding them.”

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<td>Charm</td>
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<td>Miniature Charm</td>
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<td>Sterling Silver w/ 18&quot; Chain</td>
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<td>Sterling Silver Charm</td>
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<td>10K Gold</td>
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<td>Gold-Filled (Indicate finger size)</td>
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<td>Tie Bar</td>
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<tr>
<td>Necktie</td>
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<td></td>
<td>$16B Light Blue</td>
<td>$35</td>
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<tr>
<td></td>
<td>$17 Maroon</td>
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<td></td>
<td>Extra long add $5.00</td>
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<tr>
<td>Diploma Plaques*</td>
<td>Satin Gold Finish</td>
<td>$380</td>
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<td></td>
<td>Satin Silver Finish</td>
<td>$380</td>
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<tr>
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<td>8-1/2&quot; x 12&quot; metal plaque on 11x14 1/2&quot; walnut. Specify name, day, month, year elected.</td>
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<td>Men’s Bow Tie (Untied)</td>
<td>Gold-Filled Emblem</td>
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<td></td>
<td>$22 Dark Blue</td>
<td>$35</td>
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<td></td>
<td>$23 Maroon</td>
<td>$35</td>
</tr>
<tr>
<td>Women’s Scarf - Silk</td>
<td>36&quot; x 36&quot; cream w/ dark blue and maroon border</td>
<td>$35</td>
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<tr>
<td>Rollerball Pen - Chrome</td>
<td>Cross Townsend Medalist with 23K Gold Plated Emblem</td>
<td>$135</td>
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<tr>
<td>Money Clip (Not Shown)</td>
<td>Gold-Filled Emblem</td>
<td>$75</td>
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<tr>
<td>Desk Set (Not Shown)</td>
<td>$27 Solid Walnut with Cross Gold-Filled Pen &amp; Pencil/Gold-Filled emblem; name and year elected a Fellow engraved on gold polished plate</td>
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<td>Wallet (Not Shown)</td>
<td>Gold-Filled emblem</td>
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<td>Blazer Buttons (Not Shown)</td>
<td>$29 Gold Electroplated (set of 9)</td>
<td>$35</td>
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<tr>
<td>Blazer Patch</td>
<td>$30 Hand embroidered</td>
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<td>Domestic (4 contiguous states)</td>
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<td></td>
<td>Alaska, Hawaii, Puerto Rico</td>
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<tr>
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<td>Foreign (Diploma Plaques)</td>
<td>$40</td>
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V100 No 5 BULLETIN American College of Surgeons
Editor’s note: Media around the world, including social media, frequently report on American College of Surgeons (ACS) activities. Following are brief excerpts from news stories published from October 2014 through March 2015 that mention key ACS programs and initiatives, including research findings that appear in the Journal of the American College of Surgeons. To access the news items in their entirety, visit the online ACS Newsroom at www.facs.org/media/acs-in-the-news.

Canadian-born surgeon
Susan Mackinnon pioneered nerve transfer surgery
Ottawa Citizen, March 13, 2015
“Nerve transfer surgery reconnects a working nerve to a healthy muscle by rerouting it down another nerve’s pathway to the hand. Two years ago, [Susan] Mackinnon [MD, FACS] received the prestigious Jacobson Innovation Award of the American College of Surgeons for her pioneering work…. During her trailblazing career, [Dr.] Mackinnon has developed a series of new treatments for patients with serious peripheral nerve injuries.”

Whole peanuts dangerous for kids under 5
Health eNews Daily, March 11, 2015
“A new study finds that children who are exposed to food containing peanuts early in life may avoid being allergic to the popular food. This sounds like good news, but the American College of Surgeons (ACS), as well as the American Academy of Pediatrics section for Otolaryngology, advise against babies and young children eating whole peanuts or even smaller pieces as they are a choking hazard.”

Study: Participating in ACS NSQIP provides surgical outcome improvements over time
Surgical Products, March 2, 2015
“The majority of hospitals participating in the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®) improve surgical outcomes over time, and improvement continues with each year that hospitals participate in the program, according to a new study published online today in Annals of Surgery.”

Too few breast cancer patients getting radiation after mastectomy: Study
US News & World Report, February 17, 2015
“If women with locally advanced breast cancer plan to have a mastectomy but are not offered follow-up radiation therapy, they should ask their doctor why, [Dr. Quyen Chu, professor of surgery at Louisiana State University]."
University Health Sciences Center] recommended.
"The study was published online recently in the Journal of the American College of Surgeons."

**How to make surgery safer**
Wall Street Journal, February 16, 2015

"Little wonder that hospitals are searching for new ways to get their safety numbers up. One such effort involves helping hospitals pinpoint their own problems. Many hospitals are participating in the National Surgical Quality Improvement Program, or NSQIP, overseen by the American College of Surgeons and adapted from an effort at Veterans Administration hospitals that helped decrease postoperative death rates by 47% from 1991 to 2006. 'All too often, patients are being harmed by preventable complications,' says Clifford Ko [MD, FACS], a colorectal surgeon at UCLA and director of NSQIP. Many hospitals don't collect reliable data on their own adverse events, and 'you can't improve a hospital's surgical quality if you can't measure it.'"

**Is da Vinci robotic surgery a revolution or a ripoff?**
Healthline, February 12, 2015

"'The exploratory laparotomy in general is a relatively straightforward procedure for which mortality or morbidity are very low,' said Pellegrini, who wasn't involved in the study."

**Infections most common cause of readmissions after surgery**

"The researchers analyzed 2012 data from 346 hospitals involved in an American College of Surgeons quality improvement program. Results were published Tuesday in the Journal of the American Medical Association.

The study notes that hospital readmissions are a focus of nationwide efforts to control hospital costs and improve quality of patient care."

**Trauma surgery may not be riskier at night**
Reuters, February 6, 2015

"The findings also might not be relevant for more complex surgeries, said Dr. Carlos Pellegrini [MD, FACS, FRCSI(Hon)], chair of the surgery department at the University of Washington in Seattle and a [P]ast-[P]resident of the American College of Surgeons.

'‘The exploratory laparotomy in general is a relatively straightforward procedure for which mortality or morbidity are very low,’ said Pellegrini, who wasn’t involved in the study.”

**Studies find tracking surgical complications doesn’t improve outcomes**
Wall Street Journal, February 3, 2015

"Clifford Ko [MD, FACS], [D]irector of the American College of Surgeons’ [D]ivision of [R]esearch and [O]ptimal [P]atient [C]are, said the data the two studies relied on, based on billing codes, aren't accurate gauges of patient outcomes. He also said that most hospitals use the registry data individually, to target specific areas of care for improvement, not for broad comparisons. 'Hospitals need data, and it has to be good data,' Dr. Ko said.”
Trauma kits help police control severe bleeding, saving lives
Washington Post, January 26, 2015
“In 2012, the FBI and the American College of Surgeons gathered medical and law enforcement leaders from around the country to review such incidents and come up with ways to improve victim survival rates. They took inspiration from the emergency medical training and supplies soldiers receive for combat situations.”

Saving blood, dollars and lives
Wall Street Journal, January 15, 2015
“Following the right guidelines on blood transfusion could reverse these disturbing trends. Analyzing data on transfusions from the National Surgical Quality Improvement Program, we estimate that reducing blood usage by 30%—a fairly conservative target for eliminating waste—could result in a repurposing of 12 million nursing hours, annual reductions of 200,000 wound complications and eight million fewer patient days in the hospital; as many as 50,000 lives could be saved.”

Doc groups pan meaningful use penalties
MedPage Today, December 19, 2014
“Frank Opelka, MD [FACS, Medical Director for Quality and Health Policy], at the Washington office of the American College of Surgeons, said he also found the penalty disappointing. ‘It’s extremely discouraging when a large number of physicians are not able to comply with the program when all of them would wish to perform exceedingly well,’ he said in a phone interview. ‘That leaves us deeply concerned about the program’s education and implementation—is it too much, too fast, too soon? Is it that practices aren’t ready, and now we’re penalizing them?’”

Work hour limits for doctors in training don’t improve patient safety
Los Angeles Times, December 9, 2014
“The other study, led by researchers from the American College of Surgeons and Northwestern University, focused on 535,499 patients who had surgeries in 131 hospitals. These researchers came to pretty much the same conclusion: ‘Reform was not associated with a change in the likelihood of death or serious morbidity,’ they wrote.”

Doctors stumped as more breast cancer patients remove healthy breasts
Los Angeles Times, November 19, 2014
“Although there is no ideal mastectomy rate for early-stage breast cancers, the 2011 rate of 38.1% may be too high, the authors warn. The National Accreditation Program for Breast Centers from the American College of Surgeons recommends that no more than 50% of patients with early-stage breast cancer have mastectomies, while the recommended cap in Europe is only 30%.

“That leaves us deeply concerned about the program’s education and implementation—is it too much, too fast, too soon? Is it that practices aren’t ready, and now we’re penalizing them?”

End to global payments a “nightmare,” surgeons say
HealthLeaders Media, November 12, 2014
“A new Medicare rule that unbundles global surgeons’ fees for thousands of procedures not only bucks a national trend toward episode-based pay, it will confuse millions of beneficiaries who will receive a dozen or more bills instead of one, each requiring a 20% co-payment.

“That’s the concern of the American College of Surgeons, whose [Medical Director of Quality and Health Policy]
ACS Surgical History Group accepting poster abstracts until May 29

The American College of Surgeons Surgical History Group (ACS SHG) has issued a call for abstracts for the inaugural ACS SHG Poster Presentation at Clinical Congress 2015, October 4–8 at McCormick Place, Chicago, IL. The College encourages submissions from ACS Fellows, Retired and Senior Members, International Fellows, Resident and Associate Society Members, and Medical Student Members with an ACS sponsor. The deadline for abstract submissions is 5:00 pm CDT, Friday, May 29.

The posters should examine the historical impact on the development of today’s surgeon. The authors of all posters chosen for display will receive continuing medical education credit and will be notified by July 15. View the ACS website at www.facs.org/about-acs/archives for set-up and presentation guidelines as well as answers to frequently asked questions.

Submit abstracts and additional questions to Adam Carey, MA, ACS Archivist and SHG Coordinator, at acarey@facs.org. Abstracts must be limited to 250 words. Late submissions will not be accepted.

More women having reconstruction surgery after breast cancer treatment

US News & World Report, October 3, 2014

“Breast reconstruction can be done with saline or silicone implants, or the patient’s own abdominal tissue. Among high-risk patients, breast reconstruction with implants rose 14 percent and the use of a patient’s own abdominal tissue rose 10 percent over 15 years. That’s according to the study from the October issue of the Journal of the American College of Surgeons.”

Wall Street Journal, October 12, 2014

“Some organizations have programs to instruct patients in skills they will need after surgery. The American College of Surgeons offers a video-based tutorial to help ostomy patients—those who will have a surgically created opening in the abdomen to allow waste to leave the body—manage the condition and empty their bag at home. Another video guide helps patients prepare for recovery from a lung procedure, including pneumonia prevention.”

Why you can’t rely on cancer center ads

Consumer Reports, October 10, 2014

“‘The more than 1,500 centers accredited by the Commission on Cancer, a program of the American College of Surgeons, are required to meet standards for quality, follow treatment guidelines, and track performance to improve care. You can find accredited centers on the commission’s website.’”

Frank Opelka, MD, [FACS,] says the policy, announced last month, will be ‘an administrative burden for surgeons…a nightmare to track,’ and ultimately, ‘pennywise and pound-foolish.’

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The following is a summary of my experience as the American College of Surgeons (ACS) International Guest Scholar (IGS) in 2014. Specific topics discussed include my rotations at U.S. medical centers and at the ACS Clinical Congress. This report also provides some insights into the challenges women surgeons continue to face in balancing their work and personal lives.

**Rotation at UCSF Medical Center**
I began my adventure as an ACS IGS at the University of California, San Francisco (UCSF) Medical Center under the mentorship of Maxwell V. Meng, MD, FACS, professor and chief of uro-oncology. I was able to observe multiple uro-oncologic procedures at the hospital in Mount Zion and the Moffitt Long Hospital, allowing me good exposure to rare and common cases managed both with traditional open surgery and laparoscopic and robotic surgery.

Unexpectedly, the key lesson I took away from this rotation pertained to the format of informed consent forms (ICFs). The UCSF ICF included not only the customary consent for the procedure, but also a section detailing and/or defining each patient’s willingness to have his or her removed tissue used for research. Although this type of document may already be widely used in U.S. hospitals, it was my first exposure to this type of ICF.

Coming from my own country’s national referral center and teaching hospital, I thought adapting such a format would greatly advance research for academic purposes and save time and resources in securing ethics clearance for retrospective studies. At the same time, each patient can discuss directly with his or her physician what most research activities entail, thus placing the power of the informed decision directly in the patients’ hands.

This experience demonstrated that the International Guest Scholarship has the potential not only to enrich the clinical skills and knowledge of its recipients, but also their abilities as researchers and academicians.

**Rotation at Stanford**
At Stanford University Medical Center (SUMC), CA, I had the privilege of observing my mentor, Benjamin I. Chung, MD, FACS, assistant professor of surgery and chief, robotic surgery. Working with Dr. Chung, I directly observed the superb surgical skills of a colleague who was young, yet was adept at managing even the most complex cases through robotic surgery.

I also collaborated with James D. Brooks, MD, FACS, professor and vice-chair, department of urology, on a research project. This experience was invaluable in completing a research paper on prostate cancer screening while I was at SUMC. Dr. Brooks’ alternate view on the controversial subject provided a broader perspective on the matter, leading to a more well-rounded and robust manuscript. We are proud that our review paper, “Prostate...
cancer and the Filipino: An updated review of publications,” has been accepted for publication in the Journal of Urology and Research. At press time, a final publication had not yet been set. This rotation reinforced my growth both as a clinician and as a researcher through my interactions with leaders in the field of uro-oncology. It also has provided me and my home university with a valuable network for future collaboration.

2014 Clinical Congress
The 2014 Clinical Congress of the ACS took place October 26–30 in San Francisco, CA. My experience at the Clinical Congress began with the Opening Ceremony, where each of the scholars was introduced to the attendees. I was pleased that officers from the Philippine College of Surgeons were on stage, as well. It added meaning to see these leaders from my country beaming with pride that one of their junior colleagues had been chosen as a scholar for this year.

After the ceremony, Jesus V. Valencia, MD, MHPEd, and Arturo E. Mendoza, Jr., MD, FACS, president and vice-president, respectively, of the Philippine College of Surgeons, approached me. They offered their congratulations and encouraged me to share my experiences with other young surgeons when I returned home to encourage more Filipinos to apply for this scholarship in the future. It was likewise inspiring to meet Rose Marie Liquete, MD, a Philippine College of Surgeons regent, during the International Scholars and Travelers dinner, as she was the first Filipino woman surgeon to serve as an ACS IGS.

Although a limited number of sessions were specific to urology, I learned a great deal at the Clinical Congress, and several sessions will be important in my research work on prostate and other urologic cancers. I also attended other sessions that would aid me in my role as an educator to residents and medical students at my university.

Perhaps the best experience of the entire Clinical Congress was having the opportunity to meet the other scholars, as well as the Officers and Staff Liaison of the ACS International Relations Committee. The reception and luncheon provided us with a more relaxed environment where we could discuss our experience with fellow scholars and share our thoughts with committee members. This aspect of the meeting allowed me to compare and contrast my work and practice in the Philippines with theirs.

All scholars at the 2014 Clinical Congress had a chance to showcase their chosen research work, providing a rich learning environment for all of us. It was a more formal and organized setting, in which we learned from contemporaries how surgeons in their respective countries practice and hone their craft. From more developed countries, I learned details on research involving new technology and its practical applications in developing countries, such as the Philippines. Presentations by surgeons from other developing nations helped me see how other young surgeons deal with challenges and problems that are similar to those situations that I encounter, and how they have been able to achieve lasting progress in resource-poor academic scenarios.

Indeed, after the Congress, I felt I had grown immensely as a surgeon, educator, and researcher, confidently able to take on the role of a leader when I returned to my home country.
Challenges
I was originally granted the scholarship for use in 2013, but complications in my pregnancy precluded me from traveling to the U.S. that year. Fortunately, the ACS graciously allowed me to postpone my rotations and attendance at the Clinical Congress until the following year.

The challenges of starting a family greatly affected my 2014 experience, as well. Decisions had to be made regarding whether to bring my baby with me or leave him with my family in the Philippines, as my husband lives and works abroad. Once I decided to bring my son with me, finding adequate child care became an obstacle. It created time limitations, hindering my ability to participate in early morning or evening conferences and lectures at my host institutions, as I had to work around the hours that day care was available.

Lessons learned
My five months of rotations at two top-notch U.S. hospitals and my attendance at the 2014 Clinical Congress were instrumental in my enrichment as a surgeon and clinician, as a researcher and academician, and as a teacher and mentor to my junior colleagues.

My personal difficulties as a new mother also made me realize the unique challenges that still exist for women in most surgical fields, especially in the corridors of academic institutions. I was fortunate to have met Dr. Liquete at the Clinical Congress luncheon, allowing us to establish an informal mentor-mentee relationship between a leading surgeon from my own country who has successfully raised children while fostering a thriving career, and a junior physician just beginning her family and surgical career.

Strong mentorship from a female colleague and family support were enumerated by multiple published studies as key in breaking through the glass ceiling for many women in surgery. Many successful female surgeons have also relayed how heightened visibility through public speaking and conference presentations are important to recruit more women into our ranks. With more women in surgery, the possibility of women advancing into leadership positions likewise increases. I would like to use this experience as an impetus to be more visible, beginning with sharing my experience as an ACS IGS through this report.

Because of the role that mentorship plays in the success of a woman surgeon, I would encourage the IRC to provide more women role models as mentors to future scholars. I also would encourage scholars to seek out women leaders in their host institutions to enrich their experience and provide a fertile learning environment for their professional growth as surgeons and academicians, as well as their personal growth not only as wives and mothers but as women in general. ♦

Dr. Raymundo (second from left) with other urologic surgeon scholars, left to right: Benjamin Turney, DPhil, MSc, MA, FRCS, Oxford, U.K.; Rajeev Kumar, MB, BS, MS, MCh, New Delhi, India; and Luke Harper, MD, Réunion, France.
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**Florida Chapter**  
**May 22–23**  
Gainesville, FL  
Contact: Jennifer Starkey, jennifer@executive-office.org, www.floridaacs.org

**Jamaica Chapter**  
**May 23–24**  
Kingston, Jamaica  
Contact: David Hunter, davhunter@hotmail.com

**Southwest Missouri Chapter**  
**May 29**  
Joplin, MO  
Contact: Cathy Leiboult, director@gcms.us

**Mexico Federal District Chapter**  
**May 29–30**  
Sonora, Mexico  
Contact: Rosa Aurora Ruiseco, colegioamericanodecirujanos@yahoo.com.mx

**Maine Chapter & New Hampshire Chapter**  
**May 29–31**  
Bar Harbor, ME  
Contact: Jennifer Starkey, jennifer@acschapters.org, www.mainefacs.org and www.nhfacsc.org

**Missouri Chapter**  
**May 29–31**  
Lake Ozark, MO  
Contact: John Kirby, kirbyj@wudosis.wustl.edu, www.moacs.org

**Illinois Chapter**  
**June 18–20**  
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Contact: Luann White, lhwhite26@gmail.com, www.ilchapteracs.org

### JUNE

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**June 3–5**  
Linz, Austria  
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**Brooklyn-Long Island Chapter**  
**June 9**  
Garden City, NY  
Contact: Teresa Barzyz, acsteresa@aol.com, www.bliacs.org

**Lebanon Chapter**  
**June 11–13**  
Beirut, Lebanon  
Contact: Muhammad Younis, drmhy@yahoo.com, www.facs-lebanon.org

**Northeast Mexico Chapter**  
**June 11–13**  
Nuevo León, Mexico  
Contact: Raul Lozano-Quiroga, facsnoreste@gmail.com

**Washington Chapter & Oregon Chapter**  
**June 11–14**  
Cle Elum, WA  
Contact: Harvey Gail, harvey@spiremanagement.com, www.wachapteracs.org and www.oregonchapteracs.org

### JULY

**North Carolina & South Carolina Chapter**  
**July 17–19**  
Pinehurst, NC  
Contact: Jennifer Starkey, nc@ncfacs.org, www.ncfacs.org and www.scfacs.org

**Tennessee Chapter**  
**July 31–August 2**  
Knoxville, TN  
Contact: Wanda McKnight, wanda@tnacs.org, www.tnacs.org

### FUTURE CLINICAL CONGRESSES

2015  
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Chicago, IL

2016  
**October 16–20**  
Washington, DC

2017  
**October 22–26**  
San Diego, CA