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For 35 years, the American College of Surgeons (ACS) has had a growing presence in Washington, DC. This spring, the College’s ability to speak for surgeons and surgical patients and to influence health policy got an added boost with the successful recruitment of two Medical Directors to help lead the Division of Advocacy and Health Policy (DAHP). Frank G. Opelka, MD, FACS, will serve as Medical Director of Quality and Health Policy, and Patrick V. Bailey, MD, FACS, will serve as Medical Director of Advocacy. Christian Shalgian continues to serve as Director of the Washington, DC, legislative, regulatory/quality, and state affairs teams.

The College’s Washington presence

Since the establishment of the Medicare and Medicaid programs in 1965, the federal government has had a significant impact on how surgery is practiced in the U.S. In response to this trend and with the belief that surgery needed an independent voice and presence in Washington, DC, then-ACS Director C. Rollins Hanlon, MD, FACS, and the Board of Regents opened the College’s Washington Office in March 1979.

Initially, the Washington Office was viewed as a branch of the College’s Department of Surgical Practice, which was established in 1974 and based at the ACS headquarters in Chicago, IL. The Washington Office originally had a two-person staff, no lobbyists, and a budget of less than that of many small specialty societies.* The focus at the time was on regulatory issues, rather than legislation, although the College did respond to requests to offer testimony before congressional committees, which was presented by ACS Fellows, Officers, and Executive Staff.

Shortly after the Washington Office’s establishment, Dr. Hanlon wrote, “...the importance of our Washington presence, as a part of our enforced interest in socioeconomics, can be expected to increase significantly in the future.”† He was absolutely right. The Washington Office now has six regulatory staff, six congressional affairs staff, three state affairs staff, and three administrative staff, in addition to Mr. Shalgian. Most of these individuals are registered lobbyists.

Furthermore, in 2002 and under the leadership of then-ACS Executive Director Thomas R. Russell, MD, FACS, the College established the American College of Surgeons Professional Association (ACSPA). The ACSPA is an arm of the College, which, because it has a different tax-exempt status than the ACS, was able to form a political action committee (ACSPA-SurgeonsPAC). The PAC disburses campaign contributions to political candidates who are supportive of surgery’s legislative agenda.

A dynamic duo

To help the College’s advocacy and regulatory affairs staff speak with greater gravitas on how legislation and regulation affect surgical patient care, the organization’s leadership determined three years ago that surgeons should be on staff in Washington. On March 25, 2011, we hired Don E. Detmer, MD, FACS, to serve as Medical Director of the ACS DAHP. Dr. Detmer has a strong background in health policy leadership and was an important member of the ACS leadership team. However, approximately a year ago, he left the College to pursue his academic interests.

During Dr. Detmer’s term as Medical Director, Dr. Opelka served as Associate Medical Director for Quality, a role that has helped him become eminently qualified to assume the position of ACS Medical Director of Quality and Health Policy. In addition, Dr. Opelka chairs the Surgical Quality Alliance, established by the ACS, and the American Medical Association Physician Consortium for Performance Improvement. He also plays a leading role on the National Quality Forum’s Consensus Standards Approval Committee and Measure Applications Partnership.

He has served for a number of years as the executive vice-president of health care and medical redesign at the Louisiana State University (LSU) Health System, Baton Rouge. Dr. Opelka spearheaded the redesign of Louisiana’s health care delivery system in the aftermath of Hurricane Katrina, an effort that involved the privatization of a large public hospital system. Furthermore, he fostered the development of

a clinical data warehouse at LSU, which expanded service to a range of national specialty society registries. Dr. Bailey comes to the position of ACS Medical Director of Advocacy armed with the experience he has gained as Vice-Chair of the ACSPA-SurgeonsPAC and as a member of the ACS Health Policy and Advocacy Group. He has served as chief of pediatric surgery at Maricopa Medical Center, Phoenix, AZ, and is completing his work toward a master of legal studies degree at Arizona State University’s Sandra Day O’Connor College of Law. He is a Captain in the U.S. Navy Reserve.

I believe the addition of these two individuals to our Advocacy and Health Policy leadership team will strengthen our presence and influence in Washington, DC. I look forward to working with them as we work to confront the challenges ahead on the changing landscape of health care delivery in the U.S. and around the globe.

Piece of the puzzle
I would also like to remind the Fellows as a whole that if the College is going to successfully build upon its legacy and become a more prominent contributor to the future of surgical practice, we need you to get involved as well. A strong, full-time team in the Washington Office is just part of the puzzle. Your talents, knowledge, and commitment to quality patient care are the true keys to our level of influence in Washington.

I encourage you to reach out to Dr. Opelka and Dr. Bailey to let them know how you can help them be effective in their new roles at the College. Working together, we can have a profound impact on the quality of care and ensure that all surgeons have the tools, training, and compensation needed to best serve their patients. ♦

If you have comments or suggestions about this or other issues, please send them to Dr. Hoyt at lookingforward@facs.org.
Surgeons see future applications for Google Glass

by Tony Peregrin
Google Glass—a Web-connected, wearable computer—could change the way you provide surgical care in the operating room (OR), according to Glass Explorers, a group of beta testers who initially numbered approximately 8,000 across the U.S., including members of the American College of Surgeons (ACS). For example, if a surgeon wearing the Glass encountered an unexpected condition in the OR, he or she could issue a voice command, such as “record video,” and send real-time video to an expert in a remote location. The device, which resembles a pair of glasses without the lenses, not only has the potential to enhance intraoperative consultations, but may improve efficiency in other ways by allowing the surgeon to view X-ray or magnetic resonance imaging (MRI) images without leaving the operating table.

Surgeons also are finding Google Glass to be a practical and advantageous supplementary tool—albeit one that requires technological and compliance-related improvements before the device can become part of a surgeon’s daily routine. “Technology is key, but it is not just about technology—it is about the idea behind the technology,” explained Rafael Grossmann, MD, FACS, a general and trauma surgeon, Eastern Maine Medical Center, Bangor. “As the users, physicians and patients should embrace this technology in order to make this happen. The best is yet to come,” said Dr. Grossmann, who reportedly conducted the first Google Glass-equipped operation—a percutaneous endoscopic gastrostomy—in June 2013.

A tool for surgeons
A Google Glass demonstration at the 2013 Clinical Congress in Washington, DC, led by Heather Evans, MD, MS, FACS, assistant professor of surgery, University of Washington, Seattle, attracted the interest of attendees who were curious to learn how surgeons could use Glass in their practices. “The people who were horseshoed around me at the Social Media booth thought it was incredible, and they had a lot of great questions about how they could potentially integrate the device into their practice,” said Dr. Evans, who was invited to share the device at the meeting by the ACS Health Information Technology Committee. The device could potentially be used in several ways: integrated imaging, checklist enhancement, improved communication, and as a training tool for medical students and surgical residents.
With Google Glass, surgeons may no longer have to step away from the operating table to view an X-ray or MRI image on a viewing screen or office computer, allowing the surgeon to stay focused on the patient.

“I showed Google Glass at our local ACS Washington/Oregon combined annual chapter meeting in June 2013, and it just so happened that Dr. [Carlos] Pellegrini [ACS President] and Dr. [David] Hoyt [ACS Executive Director] were both at the meeting,” said Dr. Evans. “The demo got them very excited about the device. I think they immediately realized the power of this device and the implications for what we could do with it in surgery.”

According to Dr. Evans, the ACS Health Information Technology Committee is developing a postgraduate course on surgical telementoring for this year’s Clinical Congress in San Francisco, CA, which will include live demonstrations of a number of devices and technologies, including Google Glass.

Considering that the device is similar to a smartphone in that it can run apps, has photographic and audio capabilities, and can facilitate live transmission of data via wireless access to the Internet, Google Glass may have multiple benefits when used in the OR.

Integrated imaging
With Google Glass, surgeons may no longer have to step away from the operating table to view an X-ray or MRI image on a viewing screen or office computer, allowing the surgeon to stay focused on the patient. “One of the ways I have used Google Glass is by taking images, uploading them into the device, and then allowing these images, such as [computed tomography] scans, to be available,” said Joseph Sakran, MD, MPH, assistant professor of surgery and director of global health and disaster preparedness, Medical University of South Carolina, Charleston. “Google Glass is beneficial in this way because I don’t have to move my concentration away from the patient. During resection of a mass, preoperative CT scan imaging can be uploaded into the Glass, allowing the surgeon to reference the images in a real-time fashion intraoperatively without having to step away from the table.”

Anil Shah, MD, FACS, a facial plastic surgeon and clinical instructor with the University of Chicago Medical Center, IL, used the device in December 2013 to perform a rhinoplasty on a patient who broke her nose in a fall at an amusement park. “I have an image of what the nose looks like, and I have a simulated image of what I want it to look like,” explained Dr. Shah. “Instead of having to look up from the patient and at the wall, I am able to overlap the before and after image and view them in the upper right-hand corner of my eye.”

Checklists
A number of developers are currently working on patient safety checklist apps for Google Glass that could be used intraoperatively, taking advantage of the device’s voice- and gesture-activated menu navigation. “Rather than the surgeon check-marking a checklist, Glass can help surgical teams implement checklists that are hands-free and voice-driven,” explained Dr. Grossmann. “Some checklists available in the simulation setting are activated by a simple wink to check off an item.”

In a November 2013 TEDx talk on Google Glass, Dr. Grossmann described wrong site surgery as a “never event” because it is something that should never happen. As most health care providers know, checklists have proven to be one of the most consistent tools available to prevent wrong site surgery. According to Dr. Grossmann, wrong site surgeries occur as frequently as 40 times per week in the U.S., but using a wearable computer that displays images right onto the wearer’s retina may be a way to reduce medical errors in the OR.

Communication
Google Glass—with its video camera lens perched just above the right eye of the wearer—allows for real-time transmission of exactly what the surgeon is seeing. Although Skype or a video conference call
Google Glass

“Technology is key, but it is not just about technology—it is about the idea behind the technology.”

—Dr. Grossmann

does provide an opportunity for a dialogue between parties, it is not truly an interactive experience, according to some industry experts.7

“Over the past decade, health care professionals have begun to address the global burden of noncommunicable diseases, and, in fact, the future of global health demands that attention be placed on those diseases,” said Dr. Sakran. “The reality of it is that we cannot be in every place at all times. The better approach is to implement long-term solutions that are sustainable long after health care providers leave an area. Clinical officers—who are individuals other than physicians that provide clinical care in low- and middle-income countries—could utilize the Glass during an unfamiliar situation to obtain assistance. For example, if a patient presents after a motor vehicle crash and ends up needing a splenectomy, the clinical officer wearing the device could bring in the expertise required from another surgeon 20 miles away or perhaps thousands of miles away.”

The difference between Google Glass and other forms of telemedicine is that the wearable computer gives the expert the same perspective as that of the clinical officer in the field.8 “My surgeon colleagues in Rwanda can have the Glass on while they are operating, and if they have a problem, I can view the situation and suggest the optimal approach in that situation,” said Dr. Sakran. “Skyping and video conferencing are used outside the OR, but the Glass is used inside the OR from the surgeon’s perspective. We’re still in the beginning phases of this [technology] becoming a reality due to some Wi-Fi connectivity issues, but I do see this becoming a reality in the future,” he said.

Teaching/training

Dr. Grossmann live-streamed the first Google Glass-equipped surgery in the U.S., which, along with his real-time commentary, was transmitted to an iPad and viewed by two students, who were able to virtually interact with Dr. Grossmann.9 The live transmission was conveyed through a Google Hangout—an instant messaging and video chat platform. “They were viewing the surgery through my eyes and seeing the same view that I had—not a tangential perspective, which is how we teach it now, with someone recording the procedure from a side view,” explained Dr. Grossmann. “Head-mounted cameras do, in fact, record the procedure from a viewer’s perspective, but those devices are not live, and you cannot interact with the viewer. The students were able to ask me questions, and I was able to show them, not just the patient’s abdomen, but also the endoscopic view. They were almost inside me—that is the power of Google Glass,” added Dr. Grossmann, who obtained consent from the patient and the family to record and stream the operation in a dedicated, person-to-person transmission.

“The Holy Grail of the OR, when you are teaching something, is to show students what you are doing,” said Dr. Shah. The Google Glass-assisted rhinoplasty described earlier in this article is an example of how the device could enhance surgical training, particularly in Dr. Shah’s field. “You are looking at a 1 cm opening, so it can be hard to teach that procedure,” explained Dr. Shah. “Allowing medical students to see exactly what I am seeing as I narrate what I am doing during the procedure is a game-changer [for medical education],” he said.

“Many of the operations we perform include a number of surgeons and surgical staff and can make it difficult for the trainee across the table to see anything,” added Dr. Sakran. “With Glass they can clearly see what you are doing and the steps you are taking to perform and complete an operation. You can also have the trainee wear the Glass and, as the attending, gain a better understanding of the situation from their perspective, while providing them with advice for how to safely complete the procedure. With Google Glass you are more empowered to walk trainees through the procedure,” said Dr. Sakran.
“Typically, after the initial ‘Wow—this is so cool’ reaction to Glass, surgeons will quickly ask what is being done regarding patient privacy and security.”
—Dr. Evans

The first-person view that Google Glass provides could have training implications beyond medical school. According to Dr. Evans, “Glass has taken the idea of real-time communication a whole step further. What if paramedics [for example] could wear Glass? It could be interesting to another paramedic team to see, from the emergency worker’s perspective, what worked, what didn’t work, and what they would do differently next time to ensure better results.”

In an effort to secure one of the Google Glass explorer positions available last year, Dr. Evans tweeted a link to a YouTube video featuring a heart attack and resuscitation. An emergency helicopter service had just landed at its home base when the dispatcher slumped over. A BBC crew filming a documentary on the emergency workers just happened to be there and kept the cameras going while the crew performed CPR and shocked him with a defibrillator, saving his life. “#ifihadglass,” tweeted Dr. Evans, “I would capture more events like this to learn how we can take better care of patients.” Dr. Evans’ tweet won her the opportunity to pay $1,500 for the Google Glass device and become a surgeon-explorer beta tester.

HIPAA compliance and patient consent
Because Google Glass affords many opportunities to share the most intimate details of a patient’s care, its use has raised concerns about possible infringement on the patient confidentiality provisions in the Health Insurance Portability and Accountability Act (HIPAA). “HIPAA is on everyone’s mind regarding Google Glass,” Dr. Evans said. “Typically, after the initial ‘Wow—this is so cool’ reaction to Glass, surgeons will quickly ask what is being done regarding patient privacy and security. It is important to remember that the device is like a traditional camera or any other recording device. As Dr. Grossmann stated in a recent blog post, users might assume the device has connectivity on its own, but it doesn’t.” Google Glass needs an open Wi-Fi network or a Bluetooth connection to a tethered cellular phone to connect to the Internet. As long as you are not pushing content from the device to the Cloud, there is no difference using Google Glass from using a digital camera. Like any camera, you have control where the data goes. If you upload all of the data you are seeing into the Cloud without encryption or security measures in place—that may be in violation of your facility’s security protocols, and if you don’t have permission from the patient, that is definitely a HIPAA violation,” explained Dr. Evans.

Before using Glass to record any photos or video during an operation, Dr. Evans obtains a separate media consent form to document that the patient gives permission for the images to be used for educational purposes. The patient’s face is never shown nor is the patient’s name or identity revealed, according to Dr. Evans, who has received permission from about a dozen patients thus far.

“I have not had a single patient say ‘no’ to signing a media consent form,” said Dr. Evans. “Patients seem to recognize the power of social media and the role of technology to improve what we do.”

Despite the positive reaction of some of her patients, Dr. Evans is cautious in using the device on hospital grounds. “I have approached this in a very slow, very deliberate way. I do not wear Google Glass in the hospital when I am walking down the hall. I only use it in the OR, when we have obtained permission. Our intent is to improve the care we are able to deliver, [but] you must always keep your patient’s security and privacy in mind—that is a core principle I have tried to be faithful to since the beginning.”

It is only a matter of time before this technology achieves HIPAA compliance, but this may be contingent, at least in part, on Google’s release of software developer kits, Dr. Grossman said. “Applications that ensure HIPAA compliance have already been developed. Once Google releases the software developer kits, these apps can be uploaded in Glass,” he said.
“When we started doing telemedicine on smartphones, Skype was the application of choice because it was encrypted,” added Dr. Grossmann. “In the beginning, we couldn’t use Skype because we didn’t have the software, but in a few months, three to four apps for live A/V connection on a smartphone became available that were HIPAA-compliant: ClearSea, Vidyo, and Jabber were all developed and made available to consumers. The same will happen with Google Glass.”

Although bringing Google Glass into compliance with HIPAA may have its challenges, gaining patient support is predicted to be less problematic. Researchers at Augmedix, a company based in San Francisco, CA, that is developing Glass applications for physicians, observed 200 patient-physician interactions and discovered that virtually all of the patients, when given the option to refuse Glass use during the consultation, opted to allow the physician to wear the device.12 Dr. Sakran, who is familiar with the Augmedix study, said, “I think that, overall, patients see [Google Glass] being utilized in a positive manner. Patients, understandably, may be skeptical at first, which makes it extremely important to engage them in this process. When I sit down with the patient, I am very honest and open with them. I explain that this is uncharted territory, and that any media data utilized on the Glass will be deleted upon completion of the procedure. You must build trust with your patients—you are going to need that if this [technology] is going to be successful. I have not yet had a patient refuse me,” noted Dr. Sakran, who said he has used the device with approximately 15 patients.

Although patient reaction to Google Glass has been largely supportive, concerns regarding the device’s potential to distract a physician are a challenge health care providers should be ready to face. “Have the patient use the Glass for a few minutes and see how it goes,” advised Dr. Grossmann. “I think patients are, perhaps, more willing to accept new technology than many surgeons. To me, [Google Glass] is not more distracting than a rear view mirror while driving if it is used with common sense. It is less distracting than looking sideways to review an image or EMR data,” said Dr. Grossmann.

“The integrity of surgeons overall is tremendous, and those that are testing the Glass are not using it to check e-mail or text while actively operating,” added Dr. Sakran. “I do agree there is some sort of distraction factor with using the device. Is it less than stepping away from the [operating] table? Yes. The benefit probably outweighs the risk.”

**Google Glass—a tool for patients**

A month after making Google Glass available to the general public for purchase (the promotion lasted a single day), Google announced the device was once again for sale while supplies last. In a Google+ post dated May 13, 2014, the company said Google Glass—which was still in the beta testing phase at press time—would be available for purchase to anyone in the U.S. via the company’s online store. While a launch date for a wider consumer release of the product has yet to be established, industry experts predict hardware and software updates to the device could be ready by the end of 2014.

According to Dr. Evans, the device has the potential to serve several key functions for the patient, including the following:

- Maintain an electronic health record by recording interactions with health care providers
- Navigate a preoperative program to prepare for surgery
- Enhance post-discharge communication and recovery

“The best use of Google Glass for patients may be their ability to record an encounter with their provider. That could be a preoperative visit, where they learn the risks of the operation and preoperative recommenda-
“Skyping and video conferencing are used outside the OR, but the Glass is used inside the OR from the surgeon’s perspective.”
—Dr. Sakran

Google Glass limitations
Although Google Glass is groundbreaking in many ways, the surgeons interviewed for this article said some necessary enhancements need to be made before the device can be used to its fullest potential, including increased battery life, sharper resolution, improved Wi-Fi connectivity, and improved voice-recognition capability.

“It is not as fluid as it could be, or as it will be in the future,” observed Dr. Grossmann. “With continued use, the battery will last no more than a couple of hours, and you will need an external battery if you go longer—but this will improve, and the next version will likely have an extended battery grade. As for the resolution—it is good, but it is not high-definition yet,” he said, comparing the resolution quality to viewing a YouTube video on a laptop.

“Sometimes the image can be a bit unclear, especially depending on lighting, and I find that sometimes the Wi-Fi connectivity is suboptimal,” added Dr. Sakran, who also pointed to the low battery life. “Depending on how you are using the Glass, the battery will typically last an hour, although I’ve gone as long as two hours before I go to a backup battery. As technology gets better, and the input from beta testers comes back, Google will work on developing solutions to these issues,” he said.

“The battery is depleted in less than an hour, depending on what you are using it for,” said Dr. Evans, echoing the observations of other health care providers. “We use external battery packs to power the device for longer cases, and admittedly, it can be a little inconvenient to have the cord hanging from the device,” she said, noting the external battery pack is typically housed in a user’s back pocket. “And 50 percent of the time you have significant connection problems,” she said. “[The connectivity] isn’t stable enough to rely upon yet,” added Dr. Evans. Nonetheless, Dr. Evans successfully conducted a Google Hangout session with the device, demonstrating remote coaching of a surgical resident placing a central venous catheter in the simulation lab.

In the latest firmware update to Glass, however, Google has acknowledged the problems with the quality and reliability of video calls and has temporarily removed the Hangout capability from the device. According to Dr. Evans, surgeons looking to use Glass for live video conferencing may have to turn to third-party developer solutions, such as those marketed by startup companies Pristine, Wearable Intelligence, and Remedy.

Regarding the device’s voice recognition capability, Dr. Grossmann said Google Glass was “good, but not ideal,” especially considering the high level of noise that can be present in an OR or emergency department.

“I think [Google Glass] has a lot of potential,” Dr. Shah said. “I would like to see the optics and zoom function improved, and a preview mode would be great.”

Although industry experts seem to agree the device could have a beneficial role in providing quality health
The difference between Google Glass and other forms of telemedicine is that the wearable computer gives the expert the same perspective as that of the clinical officer in the field.

care, functionality enhancements are necessary before the tool can become part of a surgeon’s day-to-day experience. “In its current format, it is not necessary for surgeons to buy Google Glass, as it is not actively changing the way we are doing surgery—but in two years, it could be,” said Dr. Shah.

Culture change
Exploring innovative technology, according to Dr. Sakran, is part of the College’s commitment to improving quality care. He suggested colleagues establish a “body of evidence” to show best practices for Google Glass use and how to integrate the tool into patient care, surgical education, and global health while being cognizant of the need to maintain patient confidentiality.

“A true culture change takes time, but it is important to remember that we have to be at the forefront of this technology and that we must continue to be innovative in our approach to health care,” said Dr. Sakran. “Take a look at what the College has done under the Inspiring Quality Campaign with Dr. Hoyt’s leadership. The message to both patients and the public is an emphasis on how the surgical community can provide quality care for surgical patients throughout the country.”

“The da Vinci robot was initially used more predominantly by urologists and gynecologists, and now general surgeons are beginning to use it,” added Dr. Sakran. “Who knows what other technological developments will happen over the next 40 years? Surgeons have to figure out how they can integrate this type of technology to bring about the best possible care to the patient.”

“Google Glass, or wearable devices like it, present the next step in computer technology,” observed Dr. Grossmann. “We used to rely on big computers that filled up an entire room, and then we went to the desktop computer, to tablets, and now computers in watches. Google Glass is the next step.”

REFERENCES
10. @heatherevansmd. #ifihadglass I would capture more events like this to learn how we can take better care of patients. https://twitter.com/heatherevansmd/status/305345135724597250. Posted February 23, 2013.
The surgical education landscape is ever-changing, driven by restricted work hours, rapid development of health care technologies, patient safety initiatives, rising health care costs, and the Affordable Care Act. These factors, combined with the digital native generation of learners who are now entering health care training programs, have compelled surgeons who trained in more traditional apprenticeship programs to take an introspective look at what it means to be a modern-day surgical educator. Gone are the days of “see one, do one, teach one.”

The use of a technology-based educational assessment, such as simulation, has been alluring to some educators and students. However, its application in health care has met with resistance from other educators and institutions that demand evidence of the efficacy of simulation from a learning and cost standpoint—and rightly so. Those of us at the forefront of simulation science in surgical education have realized that our training programs have not adequately prepared us to be effective educators, administrators, or simulation scientists, and, as a result, we have turned to our colleagues in related fields for help. Education psychologists, psychometricians, computer scientists, material scientists, medical device manufacturers, health care administrators, human factors scientists, engineers, graphic artists, sculptors, and even patients have heeded the call to help us in this important and altruistic endeavor.

This diversity of expertise, however, comes with a varied set of backgrounds, standards, theories, motivating factors, cultures, values, working styles, and nomenclature. Although physicians interact with individuals every day in the hierarchical setting of patient care, collegial work with such a diverse group presents many challenges, which, again, we were not formally trained to address.

The American College of Surgeons (ACS) began to address the use of simulation to enhance surgical education in 2004 with the development of the Accred-
To launch the AEI Program, through which the fellowship was born, the ACS brought together thought leaders in the field of surgical-based simulation education and training to form a committee with the goal of examining the concept of accrediting institutions that provide simulation education.

The AEI Program

To launch the AEI Program, through which the fellowship was born, the ACS brought together thought leaders in the field of surgical-based simulation education and training to form a committee with the goal of examining the concept of accrediting institutions that provide simulation education. The committee made several on-site visits to various “skills labs,” as they were initially called, to examine the depth and breadth of the types of facilities already in place. By visiting these facilities, the committee was able to undertake a benchmarking process to determine the requirements an institution would need to meet in order to apply for accreditation.

As a result of those visits and subsequent discussions, the committee decided that the accreditation model should be criterion-referenced and that institutions applying for accreditation must be able to demonstrate how they meet each criterion. These criteria served as a catalyst for innovative, front line surgical educators and their colleagues to develop centers of excellence that deliver quality surgical education using simulation to enhance patient safety.

The program was formally launched at the 2005 Clinical Congress in San Francisco, CA. The first set of accreditation decisions was made in June 2006, when six institutions were granted AEI accreditation. Since then, the AEI Program has accredited 79 institutions worldwide. Currently there are 13 international AEIs, including four in Canada, two in Sweden, and one in each of the following countries: the U.K., France, Greece, Italy, Saudi Arabia, Spain, and, most recently, Argentina.

The AEI Program was established as an interdisciplinary endeavor. Although surgeons may have championed and led the development of these centers, many found themselves in the position of enlisting colleagues in related fields to help build the educational, technical, and evaluative foundation of these facilities, as well as to expand or consolidate myriad health care simulation-based training initiatives at their institutions. While some of these initiatives served surgical departments, others served medical schools, academic health centers, hospitals, and health systems. Some were privately run institutions; others were military or government-run centers. Despite their different constituencies, the strong basis for the AEI’s criteria for excellence remained the common bond that united these programs.

Establishment of the Fellowship Program

Recognizing the need to train individuals to carry out the mission of the ACS AEI Program and spread the benefits of the AEI worldwide, the program known as SimPORTAL (Simulation PeriOperative Resource for Training and Learning), at the University of Minnesota, Minneapolis, became a Level 1 Comprehensive Education Institute in 2007. By achieving this accreditation, SimPORTAL was able to secure funding and developed a series of one-year surgical simulation fellowships with a comprehensive curriculum to train international leaders to be facile in the emerging field of simulation science. The goal of this program
was to provide a foundation for creating international leaders in the development, evaluation, and delivery of medical education curricula enhanced through the use of simulation technologies. Once this one-year fellowship was completed, the Surgical Simulation Fellow would be knowledgeable about simulation education theory, competent in its practice, and interested in further developing his or her own technical skills through an array of simulation activities. The fellow’s “thesis” project was to create a blueprint for developing the center in their home country.

Between 2007 and 2012, the ACS took the concept under consideration. In 2012, renewed interest in technology-based education combined with a definite need for leadership and collaboration led to the development of a committee to create a fellowship in simulation-centered education based within the accredited AEIs.

Mitchell Goldman, MD, FACS, chair, department of surgery, University of Tennessee-Knoxville, was selected to serve as committee Chair, and Robert Sweet, MD, FACS, was chosen to serve as Vice-Chair. (Both physicians are co-authors of this article.) Committee members included the following individuals: Raj Aggarwal, MD, PhD, FRCS, Imperial College of London; Karim Qayumi, MD, PhD, FRCSC, University of British Columbia; Carla Pugh, MD, PhD, FACS, University of Wisconsin-Madison; and John Paige, MD, FACS, Louisiana State University, New Orleans. Under their leadership and with the hard work of the ACS AEI staff, a new fellowship program was created. Development of the standards and criteria for the fellowship program was a committee-wide effort. Each member provided unique experiences and views, which resulted in the creation of a strong and rigorous fellowship program.

Perspectives on the following topics were shared in the development phase: components of the curriculum that a fellow would undertake during the year-long fellowship; templates and documents to capture the processes involved in training the fellow; examples to be included in the application to demonstrate compliance; and policies and procedures that would guide not only the overall program, but also the leadership of the individual program and fellow.

**Goals of the program**

The collective mission of the committee is to improve the quality of surgical care by developing future leaders and scholars in the area of surgical education, simulation, and training. The specific goals of the ACS AEI Fellowship Program are:

- To train scholars in the field of simulation-based surgical education and training
- To ensure that fellows possess the requisite knowledge and skills to serve as local and national resources in the field of simulation-based surgical education and training
- To ensure the development of surgeons with a thorough understanding of education theory in simulation and practice
- To train fellows to serve as future leaders of simulation centers and to run an AEI
- To enable fellows, through the use of their own resources, to enhance the efficacy of their own programs
- To have fellows develop expertise in simulation-based surgical education and training activities
- To ensure fellows are trained in the creation and implementation of major research and development projects involving simulation-based surgical education and training, including the management of research grants

For an institution to qualify for application to the Fellowship program, it must demonstrate compliance with a series of requirements aimed at ensuring a strong curriculum, including the presence of assessment, operational, resource, and governance procedures, and evidence that the sites are advancing the field of simulation-based surgical education. Candidates should have at least a master’s degree in a related field and have demonstrated leadership capabilities in previous roles to benefit from the program. The ACS AEI sponsoring the Fellowship Program must have
There are many benefits for surgeons who participate in the Fellowship Program, including the opportunity to be groomed for leadership positions at simulation centers.

achieved the status of full accreditation with no areas of partial or noncompliance identified.

Much like the ACS AEI Program, the Fellowship Program has six governing standards and criteria, which are as follows:

- Standard I: Curriculum Requirements
- Standard II: Assessment Requirements
- Standard III: Operational Requirements
- Standard IV: Resource Requirements
- Standard V: Governance Requirements
- Standard VI: Advancement of the Field Requirements

Benefits of participation

Sanket Chauhan, MD, was in the SimPORTAL Fellowship Program when it was accredited and became the first graduate of an AEI-sponsored Fellowship. Consistent with the primary objective, Dr. Chauhan has assumed a leadership position with the Focused Education Institute at Baylor University Medical Center, Dallas, TX. Dr. Chauhan said that “the fellowship helped me understand the educational foundations for the development of curriculum and assessment tools and the science behind the validation of simulations. It also gave me insight into building and running a simulation program from scratch.”

Dr. Chauhan has been appointed to the Fellowship Committee along with David Farley, MD, FACS. Both physicians will be invaluable members of the committee because of their unique points of view—one a fellow who completed the fellowship and the other the director of an AEI Program that submitted an application for the fellowship accreditation.

There are many benefits for surgeons who participate in the Fellowship Program, including the opportunity to be groomed for leadership positions at simulation centers. The fellows also benefit from being immersed in a stimulating environment by working side-by-side with the leaders and staff, along with the faculty and learners that use their AEI every day for simulation training and education. One of the ongoing benefits of the program is that it brings together all ACS AEI fellows annually to present individual research and initiate opportunities to develop multi-institution studies and educational projects. This investment in these innovative young men and women and in the future of surgery will pay dividends for the members of the College and the patients they serve.

For information about the program or to receive a copy of the standards and criteria document, contact Kathleen Johnson, EdM, Senior Manager, ACS Program for AEI at kjohnson@facs.org.
Since the 2000 publication of the Institute of Medicine’s report To Err Is Human: Building a Safer Health Care System and the 2001 report Crossing the Quality Chasm: A New Health System for the 21st Century, the focus on improving the quality of health care in the U.S. has grown sharper. This trend continued with the release of the U.S. Department of Health and Human Services’ 2011 Report to Congress: National Strategy for Quality Improvement in Health Care.

The emphasis on quality improvement has affected surgery, specifically with national attention on process measures, such as the Centers for Medicare & Medicaid Services’ (CMS) Surgical Care Improvement Project (SCIP), and rigorous outcome measurement initiatives, such as the American College of Surgeons National Surgical Quality Improvement Program® (ACS NSQIP®). The momentum and focus on quality improvement (QI) continues to grow, and QI is now recognized as a major force shaping health care.

Perhaps the greatest strides toward improving the quality of surgical care are occurring at the institutional level, epitomizing the axiom to “think globally, but act locally.” For surgeons and surgical trainees on the front lines...
of patient care and involved in many QI projects, being well-versed in the language, methods, and tools of QI has become essential. Many institutions have initiated formal didactic and hands-on surgical QI projects as a part of postgraduate training. The Accreditation Council for Graduate Medical Education (ACGME) acknowledges that its core competencies, such as practice-based learning and improvement and systems-based practice, are well-aligned with participation in QI efforts at the local level. The ACGME has formally outlined a Clinical Learning Environment Review (CLER) program that encourages residencies to increase the emphasis on patient safety.

Public demand is driving these changes, which provide opportunities for sponsoring institutions to demonstrate leadership in patient safety, quality improvement, and reduction in health care disparities (see table, this page). The ACS has also recognized the value of formal quality improvement education. The College’s Quality In-Training Initiative (QITI) adapts ACS NSQIP methods and data for use in graduate surgical education, develops a national quality improvement curriculum, and creates a culture in surgical education that emphasizes quality consciousness.

These efforts have fostered a large number of QI projects and tremendous research opportunities for students, residents, and practicing clinicians. It is difficult to find a contemporary surgical meeting agenda or surgical journal table of contents that does not have a significant portion dedicated to QI. A search of the U.S. National Library of Medicine’s National Institute of Health PubMed.org website demonstrates a dramatic rise in the number of QI studies published over the last decade (see Figure 1, page 23). With more projects being designed, performed, and published, the line separating QI efforts from human subjects research (HSR) is often blurred. The role of institutional review boards (IRB) in QI efforts is, at times, unclear. Each project should be individually assessed, and if any questions arise, liaisons and experts from local groups—such as the IRB, QI officers, and experienced researchers—should be engaged for advice and review.

The purpose of this article is to help surgical investigators navigate the process of distinguishing between QI and HSR initiatives. It also serves as a guide for initial project design.

Development of the QI endeavor
Protecting safety and confidentiality of human subjects who participate in research activities is of paramount importance. The many policies and procedures currently designed to protect human subjects sometimes may seem at odds with the ability of researchers and institutions to rapidly develop and institute QI projects. Potentially tenuous distinctions are further challenged because many QI efforts have a control group, and the QI intervention is often disruptive, with minor changes in clinical practice potentially altering risks faced by the patient, especially in a high-stakes situation such as surgical care.

Yet the overlap of QI projects with direct patient care is often precisely why many clinicians find QI projects rewarding. The impetus for many QI projects is typically a clinical observation that spawns a query into contemporary management options or other aspects
of practice, which, in turn, generates the concept that a small intervention or modification of the current treatment algorithm might improve the outcome for the patient. Navigating the process of QI takes various forms, involving different philosophies and methodologies, many of which have emerged from the manufacturing industry.11

One example is the Six Sigma approach to QI, which calls for defining, measuring, analyzing, improving, controlling, and then repeating the cycle. Other examples include plan-do-study-act cycles, statistical process control, chart tracking, and Lean methodology principles. Typically, an institution chooses from these available QI tools and uses them across multiple departments and disciplines. A cadre of quality officers, comprising members of various management teams, is usually available to assist in the QI effort. Guidelines have been developed for reporting QI studies known as the Standards for Quality Improvement Reporting Excellence (SQUIRE).12 These guidelines consist of a checklist of 19 items that address areas common to all scientific reporting but are modified to reflect the unique nature of medical quality improvement efforts. Checklist items include sections on methods, results, and discussion and are reported in terms of the lessons learned from the intervention in addition to the outcomes being measured. As the QI endeavor is formulated, the clinician is often left wondering where QI ends and HSR begins.

Defining research and human subjects
Some QI activities have both a research purpose and a QI goal, and in these cases, HSR regulations may apply. The first question to address is whether the QI endeavor is legitimate research. The Code of Federal Regulations (32 CFR 219.102[d]) defines research as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge."13 Research is carried out to add to the profession’s understanding of surgical conditions and disease in contrast to altering or comparing established or already validated treatment options. The Code of Federal Regulations (32 CFR 219.102[f]) defines a human subject as "a living individual about whom an investigator conducting research obtains either data through intervention or interaction with the individual or identifiable private information."13 QI is more often designed to study whether an accepted norm or behavior is being conducted locally and, if not, to modify the actions of the personnel involved so as to approach these norms. In general, QI is not designed to develop generalizable knowledge or to investigate items or approaches that are not considered a recognizable norm, but this situation is not always black and white.

Several key terms defining QI include the following:
- Interventions include both physical procedures by which data are gathered, such as blood draws or tumor sam-
plings, as well as manipulation of the subject or the subject’s environment for research purposes.

• Interactions include communication or interpersonal contact between investigator and subject.

• Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is occurring, and information that has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical history). Private information must be individually identifiable (for example, the identity of the subject is, or may readily be ascertained, by the investigator or may be associated with the information) to obtain the information to constitute research involving human subjects.13

Exemptions from HSR
Based on the information provided in this article, it is hard to imagine that many QI projects would qualify as anything other than HSR. However, there are several exemptions from full IRB evaluation. An example of a study that would be exempt from IRB review is an investigation designed to study the public benefit of a service program in terms of its efficacy or efficiency, possibly in the context of available alternatives. Another example is research designed to evaluate the taste and quality of food. More pertinent to projects within the patient-centered health sciences, research studies that use purely de-identified, preexisting data fall outside the regulatory definition of HSR. A key distinction is that this research does not include assembling a dataset that contains identified data and then stripping the database of the identifiers. Independent of the Code of Federal Regulations, investigators must also factor in compliance with the Health Insurance Portability and Accountability Act (HIPAA). HIPAA provides two avenues for de-identifying data:

• The safe-harbor method, which involves stripping specific data elements from datasets

• Removal of identifiers to the extent that a statistician concludes that the data cannot be reasonably re-associated with any particular individual

Certain national datasets, including information from the Agency for Healthcare Research and Quality’s Healthcare Costs and Utilization Project, the ACS NSQIP participant use file (PUF), and Medicare billing data are distributed in a de-identified manner. Therefore, studies using these preexisting and de-identified sources are typically exempt from formal IRB review. Institutions have developed individual policies and procedures that apply to intramural QI projects. If there is any question about whether IRB review is needed, local experts and IRB liaisons should be enlisted to review the protocol in question. Often, if the study involves minimal risk, the IRB may grant an expedited review.

Ethical considerations
Health care research requires that investigators maintain and abide by the highest ethical standards. The war crimes of World War II prompted development of the Nuremberg Code, which provides guiding principles for HSR, such as voluntary consent, beneficence, and properly formulated scientific inquiry.14 Subsequently, the Belmont Report, published by the U.S. Department of Health & Human Services, summarized ethical principles and expanded upon guidelines pertaining to respect for persons, beneficence, and justice.15 In 2013, the World Medical Association provided an update of the Declaration of Helsinki, which outlines guiding principles for medical research involving human subjects, including the following statement:

Physicians who combine medical research with medical care should involve their patients in research only to the extent that this is justified by its potential preventive, diagnostic or therapeutic value and if the physician has good reason to believe that participation in the research study will not adversely affect the health of the patients who serve as research subjects.16

With these guidelines in mind, similarities between QI and HSR must be acknowledged. Both are funda-
mentally generated by observation and an inquiry that generates a query, pursued in the form of data collection. Both initiatives often involve testing various solutions and identifying key interventions that merit further investigation and thought. Both QI and HSR should be conducted in a manner that shows respect for patients and minimizes patient risk. Some QI projects are similar to HSR in terms of providing informed participation or options for treatment pathways, and thus need to be reviewed by an IRB. The question of informed consent for participation in QI projects remains a topic of ongoing debate. Informed consent can be waived after review if the research in question:

- Poses “no more than minimal risk to the subjects.”
- “Will not adversely affect the rights and welfare of the subject.”
- “Could not practicably be carried out” otherwise.
- “Whenever appropriate, the subjects will be provided with additional pertinent information after participation.”

Some institutions now have blanket hospital-wide admission consent forms that not only serve as permission for treatment, but also include QI activities as part of the consent.

**Fundamental differences between QI and HSR**

Although QI and HSR often overlap, there are several fundamental differences between the two. First, as already noted, HSR involves generating or contributing to generalizable knowledge, whereas QI attempts to improve a program or service or align current treatment with established best practices and evidence-based medicine. HSR often involves randomization of patients, whereas QI projects typically do not randomize to various treatment arms and more often subject the entire population to a system or policy change, often tracked over time. Whereas HSR generates
findings that might affect future policies, QI findings intentionally address current standards or protocols and attempt to change the policies and standards for subsequent patients or encounters. HSR is rooted in identifying a subset of patients to study in the most controlled manner, often using strict inclusion and exclusion criteria to define the population of interest. Conversely, QI is typically all-encompassing for all patients who may have a disease, undergo a procedure, or interact with a specific aspect of the health care system. Exclusion of specific populations or creating exceptions from the algorithm may subvert the QI effort.

Patients participating in HSR are not guaranteed that they will benefit from participation. Significant efforts are made to minimize risk and harm; the benefits, however, are unknown and may be the impetus behind the study design. QI efforts are typically designed with a clear benefit in terms of safety, quality, efficiency, satisfaction, cost, or some other measurable outcome for the patient at hand or subsequent patients in the near-term.

Most HSR has a clearly defined study protocol with start and end dates and minimal alteration to study design. On the other hand, QI can be continuous and tracked over long periods of time, with organized response to trends, clear identification of outliers, and an expected evolution of the QI algorithm. Finally, with the intention of HSR being the development of generalizable knowledge, publication of findings is the norm and often expected regardless of study results.

QI efforts are often conducted for a health care system’s internal use and often do not result in external publication or presentation. However, when appropriate, QI projects can yield publications and presentations that disseminate protocols and pathways as well as share lessons that may benefit other institutions or programs interested in similar QI projects. Similarly, QI projects may provide benchmarks for care within one medical system or medical center that can be used to guide efforts in a larger scale or at other institutions.

The SQUIRE guidelines provide a format to report QI projects in a standard fashion with attention paid to key principles that are beneficial in the dissemination of QI findings. While some institutions view potential publication as grounds for formal protocol review, others do not; therefore, researchers and practitioners should become familiar with their own institutional approach.
QI projects that address safety, effectiveness, efficiency, costs, and patient-centered outcomes are necessary as continuous QI has become an essential part of modern-day surgical practice.

to this distinction. A 2002 survey provided various scenarios to help distinguish QI from HSR and enlisted 100 quality officers, 94 institutional review board chairs, and 38 journal editors to aid in that goal. The work found some disagreement not only between the various categories of experts, but also between quality officers and IRB chairs from the same institutions. One proposed option at the institutional level is to create a separate board outside the typical local IRB to review QI projects to determine if IRB review is needed. A survey of 34 academic medical centers found that only 50 percent of the centers had formal policies related to the review and approval of QI projects.

Figure 2, page 25, provides a decision tree for distinguishing QI from HSR. The disclaimers for this tool are that each project must be considered individually, each institution may have a philosophy or even formal policies to address this exact issue, and local experts on IRB panels and QI leadership should be sought out for assistance in making this distinction. There have been several algorithms proposed by various organizations and institutions; the information provided here is not all-encompassing and is intended only to serve as a guide.

Conclusion

As surgeons continue to strive to improve the lives of their patients, and as health care reform requires us to demonstrate the value of the health care we deliver, QI efforts that address systemic issues will be an integral part of future inquiry and investigation. QI projects that address safety, effectiveness, efficiency, costs, and patient-centered outcomes are necessary as continuous QI has become an essential part of modern-day surgical practice.

Though there is often a distinction between HSR and QI, there is also significant overlap. This brief review highlights pertinent issues while providing a framework to help determine when a QI project should be considered HSR. This is an ongoing area of discussion for which the authors ultimately recommend that the surgeon’s moral compass be supported by timely and frequent discussions with institutional experts and QI personnel.

REFERENCES (CONTINUED)


It is nearly impossible to open a newspaper or turn on the television without being inundated with stories of partisan gridlock and political pandering in our nation’s capital. Americans are surely left with the impression that the days of negotiated compromise born of the blood, sweat, and tears of conscientious lawmakers and their staffs are a vestige of “the way things used to be.” Every day on Capitol Hill lawmakers make decisions—or, as it more often seems, avoid making decisions—that directly affect a surgeon’s ability to treat patients. Although the American College of Surgeons (ACS) leadership and Division of Advocacy and Health Policy (DAHP) staff work tirelessly on behalf of Fellows to influence and shape health care policy, the real power to drive surgery’s advocacy agenda lies with you, the elected official’s constituent. It is through your involvement that the ACS can advance surgery’s health policy agenda.

Developing a pillar for progress
The College has developed SurgeonsVoice, www.SurgeonsVoice.org, an advocacy platform for members of the ACS to help move the needle in Washington. This new grassroots advocacy program aims to create a groundswell of activism that will motivate elected officials to act as champions for the issues of critical importance to surgery, such as Medicare physician payment, surgical workforce issues, and medical liability reform, to help ensure optimal outcomes and access for the surgical patient.

A surgeon’s responsibility to protect his or her patients and practice now extends beyond the operating room. SurgeonsVoice provides the necessary tools to empower members of the College to be effective advocates for these issues. Past grassroots efforts demonstrate that members of Congress want to hear from you, as the expert on surgical care and practice and as a constituent. Legislators need to know how a specific issue will affect the people in their districts and they look to constituents for answers. You vote for your representatives, and it is your voice and experiences that can help guide their decisions.

What is SurgeonsVoice?
SurgeonsVoice is a nationwide, interactive advocacy program created in conjunction with the ACS Professional Association (ACSPA). (All ACS Fellows are also members of the ACSPA.) This program has been engineered to educate, advocate, and motivate members of Congress and influence their decisions. It provides surgeons with the tools—described later in this article—to become surgeon advocates in every congressional district nationwide, establishing professional and personal relationships with decision makers, both on and off Capitol Hill. This program allows surgeons to become constituents who their legislators know and trust to provide them with
valuable, meaningful information regarding health care issues.

SurgeonsVoice also empowers surgeons to strengthen the College’s impact in Congress and around the country. While Fellows may seek assistance and coordinate efforts through the ACS DAHP, SurgeonsVoice is designed to be a self-service tool kit, allowing Fellows to carry out advocacy activities at any time and often without setting foot in Washington.

**SurgeonsVoice online**

You can engage in a number of advocacy-related activities online when you visit www.SurgeonsVoice.org, such as:

- Take action on key issues by participating in town hall meetings, reaching out to members of Congress, encouraging colleagues to get involved, and more
- Learn about your legislators
- Become a key contact
- Share personal stories regarding the effects of health care legislation on your practice
- Learn the fundamentals of serving as a surgeon advocate

An advocacy tool kit and a comprehensive advocacy guidebook also are available, which provide the education to be a grassroots expert. Learn how Washington works, what is going on in surgical advocacy, different ways to get involved, and how to take your advocacy efforts to the next level. Also posted are many useful how-to guides focused on arranging meetings with elected officials, the do’s and don’ts of a successful meeting, and more.

**Meet with elected officials at home**

Meeting with policymakers and/or their staff is a valuable part of advancing the overall surgical advocacy agenda and provides an opportunity to develop key contacts with legislators.

All U.S. representatives and senators have at least one office in their home district or state. District offices serve as a readily accessible meeting point for constituents to visit when their elected officials are home. In fact, meeting in-district often means that the member has more time to dedicate to the meeting, with fewer distractions than when in Washington, where on any given day he or she may have 10 constituent meetings, two political fundraisers, a congressional hearing, and meetings with a party caucus.

Another advantage of an in-district meeting is that the staff in the legislator’s home office is often less overwhelmed, with fewer people seeking their attention, and will work to ensure that the constituent’s request (or “ask”) is properly addressed. The more interactive and involved a constituent becomes with a particular legislator and his or her staff, the more likely the constituent is to become a trusted resource on issues of the day.
This program allows surgeons to become constituents who their legislators know and trust to provide them with valuable, meaningful information regarding health care issues.

DISTRICT OFFICE CONTACTS BY SURGEONS (DOCS)

Participants in the DOCS program routinely meet with representatives and senators in their district offices during congressional recesses, also known as “in-district work periods,” and advocate on issues critical to surgery. DOCS participants also have the opportunity to invite legislators and their staff to visit the surgeons’ practices or hospitals and participate in grand rounds or other meetings. These interactions foster lasting relationships between participating surgeons and members of Congress and promote the image of surgeons as knowledgeable and trusted resources on health care policy.

The goal is to form a DOCS team in each U.S. congressional district, which will forge relationships with representatives and senators in that district. Each DOCS team will have an experienced surgeon advocate taking the lead to organize the meetings with elected officials and their staff in home district offices three or four times per year. DOCS participants can find all the health policy materials, logistics information, and meeting how-to’s in the advocacy tool kit on the SurgeonsVoice website. Each group will report to the ACS DAHP on the results of the meeting and coordinate any necessary follow-up by the federal lobbying team in Washington. Engaged Fellows of all specialties will become the key surgeon advocates leading the advancement of surgery’s health policy agenda.

If you are interested in becoming an advocacy leader in your state, join the DOCS team and begin working to develop substantive relationships with your elected state officials.

Constituents can augment efforts by participating in myriad other activities, such as political fundraisers and town hall meetings. Come campaign season, nothing is more appreciated than the help of volunteers who are respected members of the community, such as surgeons. Surgeon advocates seeking an ongoing, at-home experience are encouraged to join the SurgeonsVoice District Office Contacts by Surgeons (DOCS) program. To learn more about DOCS, see the sidebar on this page.

Become a Chapter Councilor

The Health Policy Advisory Council (HPAC) is the grassroots advocacy committee for the College, and is based on the theory that “all politics is local.” In addition to an executive Regional Coordinating Committee (consisting of Region Chiefs), there is one councilor from every ACS chapter who is responsible for fostering an extensive grassroots advocacy network throughout their chapter. In doing so, councilors must develop an expertise on regulatory and health care policy issues, promote grassroots and political advocacy among their chapter members, and communicate feedback on legislative and regulatory policy and implementation from surgeons on the ground in their chapters back to the ACS DAHP. The Chair of HPAC is Charles Mabry, MD, FACS, a general surgeon from Pine Bluff, AR, and the Vice-Chair is Howard Snyder, MD, FACS, a pediatric urologist from Philadelphia, PA.

Learn more about the PAC

The ACSPA political action committee (ACSPA-SurgeonsPAC) provides nonpartisan financial support to the campaigns of members of Congress and candidates who support and are positioned to influence surgery’s legislative goals. Visit www.SurgeonsPAC.org to learn more.

Grassroots is a marathon, not a sprint

It is important to remember that advocacy is an ongoing process and that first encounters with legislators and their staffs may be brief and introductory. As an advocate, it is important to continue to cultivate each relationship and elevate the importance of each issue. The goal is to become a trusted resource for advice on how specific legislation will affect practicing surgeons and surgical patients. SurgeonsVoice will capitalize on this nationwide network of grassroots advocates to advance surgery’s health policy agenda.

To learn more about SurgeonsVoice, or to get involved, visit www.SurgeonsVoice.org or contact Sara Morse, Manager, Political Affairs and Grassroots, DAHP, at 202-672-1512 or smorse@facs.org.

30 | SURGEONSVOICE
The Best Surgical Education
All in One Place

The Surgeon of the Future
Innovation | Science | Moral Values
Introduction

Dear Colleagues,

I hereby invite you to attend the American College of Surgeons (ACS) Clinical Congress, October 26–30, in San Francisco, CA. The Clinical Congress will once again provide a variety of sessions and courses designed to meet the highest possible standards of education and training for our surgeons with the overall goal of improving the safety and well-being of our surgical patients.

The Program Committee, chaired by Valerie W. Rusch, MD, FACS, together with the ACS Division of Education, under the leadership of Ajit K. Sachdeva, MD, FACS, FRCSC, has organized an outstanding Scientific Program for 2014. Our President, Carlos A. Pellegrini, MD, FACS, FRCSI(Hon), has articulated his theme for this year, “The Surgeon of the Future: Anchoring Innovation and Science with Moral Values.” In keeping with this theme, a number of sessions will address cutting-edge technology, evidence-based surgery, surgical education, professionalism, ethics, and social responsibility. Additionally, we are excited to bring several historically popular sessions back in 2014, due to continued high demand.

The educational program will include timely and critical topics presented in a variety of engaging formats. Diverse Panel Sessions presented by experts from across surgical specialties and nonsurgical disciplines are included. We also have an exciting series of Named Lectures to be delivered by some of the most recognized leaders in their respective fields. Didactic Courses and Skills Courses will focus on advanced knowledge and skill acquisition in the most relevant domains through focused, applied learning.

The Scientific Program will include presentations of innovative research and surgical practices delivered orally as Paper and Surgical Forum Sessions in addition to Poster Presentations. The Video-Based Education Presentations will include interesting topic-oriented symposiums from all over the world. These sessions will be complemented by the more intimate setting of Meet-the-Expert Luncheons and Town Hall Meetings. In addition to these valuable educational and scientific sessions, supplemental activities focusing on our profession will be highlighted.

Attendees will again be able to obtain certificates of verification following their participation in Postgraduate Courses, and additional certificates will be provided for participation in specific sessions to help meet various regulatory mandates. The majority of our sessions and courses will now provide, in addition to AMA PRA Category 1 Credits™, self-assessment credits toward Part 2 of the American Board of Surgery Maintenance of Certification Program.

The Clinical Congress Program has been arranged in key thematic tracks, addressing content of interest to the surgical specialties as well as specialty-based tracks that address the learning needs of various specialty groups. The stimulating educational and scientific content, along with abundant professional networking opportunities, make the 2014 Clinical Congress an essential meeting for practicing surgeons, surgery residents, and members of surgical teams. On behalf of the American College of Surgeons, I look forward to welcoming you to San Francisco for Clinical Congress 2014.

With best regards,
Julie A. Freischlag, MD, FACS
Chair, Board of Regents
**What's New in 2014?**

- This year's Clinical Congress will be held in San Francisco, CA, at the Moscone Center.
- The Hilton San Francisco Union Square will be the headquarters hotel.
- The Hilton San Francisco Union Square will be the headquarters hotel.

**Didactic Courses**

- How to Use ACS NSQIP®, TQIP®, CQIP, and SQR in Your Institution
- Reorganizing Care to Optimize Outcomes: How to Start an Enhanced Recovery after Surgery Program at Your Hospital
- Robotic Surgery for Gastrointestinal Operations: Program Planning, Approaches, and Applications
- Additional Sessions on General Surgery, Colon and Rectal Surgery, and Hepatobiliary Surgery
- Evening Video Sessions Showcasing the ACS Video Library
- Ten Hot Topics in General Surgery
- What’s New in Advocacy and Health Policy: Top 10 Advances in the Past Year
- Standard of Care for Breast Cancer: A Moving Target
- The Toughest Trauma Case I Ever Had
- Telemedicine: The Rapidly Expanding Field of Video-Based Telemedicine Health Care
- You can purchase your daily individual ACS Bistro tickets at the time of registration.
- Use our improved app for planning and scheduling.
- HIPAA-, copyright-, and permission-compliant presentation slides from all nonticketed sessions will be made available electronically to all registrants.

**Cancellation of Sessions**

The American College of Surgeons reserves the right to cancel any of the scientific sessions listed in this Program Planner. The information in this Program Planner is preliminary. Check the College’s website for updates.

**Goal**

The Clinical Congress is designed to provide individuals with a wide range of learning opportunities, activities, and experiences that will match their educational and professional development needs.

**Objective**

By the conclusion of the Clinical Congress, participants should gain and be able to apply the knowledge needed to improve their current practice, research, and care of surgical patients.

**Accreditation**

The American College of Surgeons is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

**CME Credit**

The American College of Surgeons designates this live activity for a maximum of 29 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. On-site claiming of CME for nonticketed sessions (NL, PS, SF, SP and VE) will be available at the My CME booth and kiosks located throughout the buildings located within the Moscone Center, October 27–30, 2014. Claims for CME credit will only be accepted until December 1, 2014.

*A maximum of 19 AMA PRA Category 1 Credits™ can also be earned through completion of Meet-the-Expert Luncheons and weekend Postgraduate Courses.*

**Self-Assessment Credit**

This year, self-assessment credit will be available for all Panel Sessions, Didactic Courses, Skills Courses, and Video-Based Education Sessions. The process of earning Self-Assessment Credit is voluntary and is not a prerequisite to claiming CME credit.

**CME Certificates**

CME credit for specially designated session content such as Ethics, Trauma, and Patient Safety will automatically appear on the Clinical Congress CME Certificate. Note: CME Certificate printing is not available at the My CME booth.

**Scientific Poster Presentations and Technical Exhibits**

The Scientific Poster Presentations is a forum of more than 300 posters showcasing timely, innovative information and findings on original scientific research, surgical procedures, practices, and approaches.

The Scientific Poster Presentations will be located in the Moscone Center. Hours are 9:00 am to 4:30 pm, Monday through Wednesday.

The Technical Exhibition comprises more than 200 companies displaying their products and services. The exhibition provides an excellent opportunity to explore the surgical marketplace by comparing products firsthand and planning purchases.

**Conference Hours**

- The Technical Exhibit hours are 9:00 am to 4:30 pm, Monday through Wednesday.
- The exhibits are located in the Moscone Center, South Hall.

**Friends of Bill W.**

Friends of Bill W. will meet Monday, October 27, through Wednesday, October 29, 7:00 to 8:30 pm, at the Hilton San Francisco Union Square.

**Clinical Congress News**

The official newspaper of the annual meeting, the Clinical Congress News, will be distributed at the Hilton San Francisco Hotel and Moscone Center each morning during Clinical Congress.

**Convocation Ceremony**

Sunday, October 26, 6:00–8:00 pm
Moscone Center, West Building Ballroom

The Convocation Ceremony confers Fellowship upon those surgeons who have successfully met ACS requirements to provide optimal care to the surgical patient. The ceremony also includes recognition of the Honorary Fellows, presentation of the Distinguished Service Award, installation of the ACS Officers, and the Presidential Address.

All Initiates must register for the Clinical Congress if planning to participate in the Convocation. All Initiates will be granted Fellowship in the College during the ceremony regardless of their attendance at the event and may begin using the FACs designation upon the conclusion of the ceremony.

Family members of Initiates are not required to register for the Clinical Congress program to attend the Convocation Ceremony.

**Opening Ceremony**

Monday, October 27, 8:30–9:00 am
Moscone Center, West Building Ballroom

The Canadian and American national anthems are presented, along with a short video highlighting the new President’s theme for the year. The President presides and introduces the College Officers and Regents, Honorary Fellows, Past-Presidents, the recipient of the Distinguished Philanthropist Award, special invited guests from national and international health care organizations, the past recipients of the Joan L. and Julius H. Jacobson II Promising Investigator Award, the Resident Research Scholars, the International Guest Scholars, and the Franklin Martin, C. James Carrico, and Louis C. Argenta Faculty Research Fellows. The Martin Memorial Lecture, sponsored by the American Urological Association, follows immediately.

**Annual Business Meeting of Members**

Wednesday, October 29, 4:15–5:15 pm
Moscone Center

- Reports from the Chair of the Board of Regents, the Chair of the Board of Governors, the Executive Director, and the ACS-SPA-Surgeons/PAC Board Chair
- Presentation of the Resident Award for Exemplary Teaching and the Joan L. and Julius H. Jacobson II Promising Investigator Award
- Reports of the Nominating Committee of the Board of Governors and the Nominating Committee of the Fellows, and introduction of the President-Elect
### SATURDAY, OCTOBER 25

<table>
<thead>
<tr>
<th>Time</th>
<th>Designated Tracks</th>
<th>Track Code</th>
<th>Track Name</th>
<th>Status</th>
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<tbody>
<tr>
<td>8:00-3:30</td>
<td>DC12</td>
<td></td>
<td>High-Risk Breast Cancer Management from A to Z</td>
<td>GEN-ONC</td>
</tr>
<tr>
<td>8:30-5:30</td>
<td>SC01</td>
<td></td>
<td>Skills for Rural Surgeons: Advanced Endoscopic Techniques and Resource Utilization</td>
<td>RUS-GEN</td>
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<tr>
<td>9:00-4:30</td>
<td>DC13</td>
<td></td>
<td>Robotic Surgery for Gastrointestinal Operations: Program Planning, Approaches, and Applications</td>
<td>ORT-GEN</td>
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### SUNDAY, OCTOBER 26

<table>
<thead>
<tr>
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<td>8:00-4:00</td>
<td>DC14</td>
<td></td>
<td>Emergency General Surgery Update</td>
<td>TRA-GEN-RUS</td>
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<tr>
<td>8:00-5:30</td>
<td>SC02</td>
<td></td>
<td>Flexible Endoscopy for General Surgeons</td>
<td>GEN</td>
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<tr>
<td>8:30-4:00</td>
<td>DC15</td>
<td></td>
<td>Introduction to CPT, ICD-10-CM, and Evaluation and Management Coding: 2014 Basic Coding Workshop</td>
<td>HP</td>
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<tr>
<td>8:30-5:15</td>
<td>SC03</td>
<td></td>
<td>Practical Applications of Ultrasonography in the Intensive Care Unit</td>
<td>EDU-TRA</td>
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<tr>
<td>9:00-4:30</td>
<td>DC16</td>
<td></td>
<td>Surgical Education: Principles and Practice</td>
<td>EDU</td>
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<tr>
<td>11:30-6:00</td>
<td>ME101</td>
<td></td>
<td>Medical Student Program, Session I</td>
<td>RES/MED</td>
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<tr>
<td>1:00-5:15</td>
<td>SC04A</td>
<td></td>
<td>Measurement and Analysis to Transform Surgical Care Part A</td>
<td>GEN</td>
</tr>
<tr>
<td>9:45-5:15</td>
<td>DC17</td>
<td></td>
<td>Mastering General Surgery Coding: Advanced Coding Workshop</td>
<td>HP</td>
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### MONDAY, OCTOBER 27

<table>
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<th>Time</th>
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<tbody>
<tr>
<td>8:30-9:30</td>
<td>NL01</td>
<td></td>
<td>Opening Ceremony/Martin Memorial Lecture</td>
<td>URO</td>
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<tr>
<td>9:45-10:45</td>
<td>NL02</td>
<td></td>
<td>John H. Gibbon, Jr., Lecture</td>
<td>CTS</td>
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<tr>
<td>9:45-11:15</td>
<td>PS100</td>
<td></td>
<td>Laparoscopic Cholecystectomy: A Nickel and Dime Operation with a Million Dollar Complication</td>
<td>GEN</td>
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<tr>
<td>9:45-11:15</td>
<td>PS101</td>
<td></td>
<td>Innovative Approaches of Anastomotic Leaks after Bowel Resection: Dealing with Disaster</td>
<td>CRS</td>
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<tr>
<td>9:45-11:15</td>
<td>PS103</td>
<td></td>
<td>Free-Flap Surgery: The Revolution of Reconstruction</td>
<td>OTO-PLA-CTS</td>
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<tr>
<td>9:45-11:15</td>
<td>PS104</td>
<td></td>
<td>Image-Guided Surgery: Progress and Promise</td>
<td>GEN-RES/MED</td>
</tr>
<tr>
<td>9:45-11:15</td>
<td>PS105</td>
<td></td>
<td>The Surgeon's Role in Reducing Health Care Costs</td>
<td>HP-EDU</td>
</tr>
<tr>
<td>9:45-11:15</td>
<td>PS106</td>
<td></td>
<td>My Cup Runneth Over: Surgeon Suffering and Burnout</td>
<td>GER-EDU</td>
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<tr>
<td>9:45-11:15</td>
<td>VE01</td>
<td></td>
<td>Controversies in General Surgery</td>
<td>GEN</td>
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<tr>
<td>9:45-1:00</td>
<td>SF01</td>
<td></td>
<td>Alimentary Tract I</td>
<td>GEN</td>
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<tr>
<td>9:45-1:00</td>
<td>SF02</td>
<td></td>
<td>Quality, Safety, and Outcomes I</td>
<td>HP-EDU</td>
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<tr>
<td>9:45-1:00</td>
<td>SF03</td>
<td></td>
<td>Targeted and Cell-Based Therapies</td>
<td>BTR</td>
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<tr>
<td>9:45-1:00</td>
<td>PS107</td>
<td></td>
<td>Humanitarian Surgical Outreach at Home and Abroad: Reports of the 2014 Volunteerism and Humanitarian Award Winners</td>
<td>HUM-INT</td>
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<tr>
<td>9:45-1:00</td>
<td>VE02</td>
<td></td>
<td>Cardiothoracic Surgery</td>
<td>CTS</td>
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<tr>
<td>9:45-1:00</td>
<td>VE03</td>
<td></td>
<td>Colon and Rectal Surgery I</td>
<td>CRS</td>
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<tr>
<td>9:45-1:00</td>
<td>VE04</td>
<td></td>
<td>General Surgery I</td>
<td>GEN</td>
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<tr>
<td>9:45-2:00</td>
<td>SC05</td>
<td></td>
<td>Ultrasound for Pediatric Surgeons</td>
<td>PED-GEN</td>
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<tr>
<td>9:45-5:15</td>
<td>DC17</td>
<td></td>
<td>Mastering General Surgery Coding: Advanced Coding Workshop</td>
<td>HP</td>
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</table>

Indicates that additional fees and registration apply
Indicates a Webcast session (Webcast package available for purchase)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
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<tbody>
<tr>
<td>12:45–4:00</td>
<td>VE13</td>
<td>General Surgery II</td>
</tr>
<tr>
<td>12:45–5:00</td>
<td>DC22</td>
<td>Team-Based Care: Integrating Health Care Professionals into Surgical Practice</td>
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<tr>
<td>1:00–5:00</td>
<td>PS220</td>
<td>Association of Program Directors in Surgery Panels: The Future of Graduate Medical Education Funding: Assessment of Intraoperative Skills</td>
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<tr>
<td>1:00–6:00</td>
<td>NL08</td>
<td>Medical Student Program, Session III</td>
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<tr>
<td>2:30–3:30</td>
<td>PS221</td>
<td>Status of Nipple-Sparing Mastectomy: Evidence and Controversies</td>
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<tr>
<td>2:30–4:00</td>
<td>PS222</td>
<td>Fournier’s Gangrene</td>
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<tr>
<td>2:30–4:00</td>
<td>PS223</td>
<td>The Environmentally Responsible Surgical Practice</td>
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<tr>
<td>2:30–4:00</td>
<td>PS224</td>
<td>Contemporary Issues with Access for Hemodialysis</td>
</tr>
<tr>
<td>2:30–4:00</td>
<td>PS225</td>
<td>Factors Shaping Surgery during the 20th Century: The Inaugural Session of the ACS Surgical History Group</td>
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<tr>
<td>2:30–5:45</td>
<td>PS226</td>
<td>Ethics Colloquium: Ethical Allocation of Health Care Resources</td>
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<tr>
<td>2:30–5:45</td>
<td>SF16</td>
<td>2014 Surgical Forum Dedication Excellence in Research Awards Distribution (2:30–3:00); NS/OB-GYN/ORt-Scientific Presentations (3:00–5:45)</td>
</tr>
<tr>
<td>2:30–5:45</td>
<td>SF17</td>
<td>Alimentary Tract II</td>
</tr>
<tr>
<td>2:30–5:45</td>
<td>SF18</td>
<td>Pediatric Surgery II</td>
</tr>
<tr>
<td>2:30–5:45</td>
<td>SF19</td>
<td>Urology and Reproductive Surgery II (Robotics)</td>
</tr>
<tr>
<td>3:00–5:00</td>
<td></td>
<td>Setting Conditions for Chapter Success</td>
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<tr>
<td>4:15–5:45</td>
<td>PS228</td>
<td>Management of Common Thoracic Trauma</td>
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<tr>
<td>4:15–5:45</td>
<td>PS229</td>
<td>Burn Update for the General Surgeon</td>
</tr>
<tr>
<td>4:15–5:45</td>
<td>PS230</td>
<td>Contemporary Management of Rectal Cancer: Where Are We Now and Where Might We Be Going?</td>
</tr>
<tr>
<td>4:15–5:45</td>
<td>PS231</td>
<td>Zoning in on Neck Injury: The Multimodality Treatment of Penetrating and Blunt Trauma to the Neck</td>
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<tr>
<td>4:15–5:45</td>
<td>PS232</td>
<td>Patients in the Know: Impact on Recovery</td>
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<tr>
<td>4:15–5:45</td>
<td>PS233</td>
<td>Emergency Surgery Around the World</td>
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<td>4:15–5:45</td>
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<td>Rural Surgeons Open Forum and Ouida Scholarship Presentation</td>
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<tr>
<td>4:15–5:45</td>
<td>VE14</td>
<td>Hepatobiliary Surgery I</td>
</tr>
<tr>
<td>6:30–8:30</td>
<td>VE15</td>
<td>Best Videos from the Past</td>
</tr>
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</table>

**SESSIONS-AT-A-GLANCE BY DAY**

**WEDNESDAY, OCTOBER 29**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
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<tbody>
<tr>
<td>7:00–7:45</td>
<td>TH06</td>
<td>Optimal Resources for Children's Surgical Care: What It Means to Surgeons Who Operate on Children</td>
</tr>
<tr>
<td>7:00–7:45</td>
<td>TH07</td>
<td>Personal Finances and Risk Mitigation for Residents and Fellows</td>
</tr>
<tr>
<td>7:00–7:45</td>
<td>TH08</td>
<td>Prehospital Emergency Medical Systems</td>
</tr>
<tr>
<td>7:00–7:45</td>
<td>TH09</td>
<td>Surgical Advocacy: Why It Is Important and How to Be Effective</td>
</tr>
<tr>
<td>7:00–7:45</td>
<td>TH10</td>
<td>The Precarious State of GME Funding: What Is the Future?</td>
</tr>
<tr>
<td>7:00–7:45</td>
<td>TH11</td>
<td>An Update on ACS NSQIP®</td>
</tr>
<tr>
<td>7:00–7:45</td>
<td>TH12</td>
<td>Ensuring Continuity of Care in the Era of the 80-Hour Workweek</td>
</tr>
<tr>
<td>8:00–9:00</td>
<td>NL09</td>
<td>Distinguished Lecture of the International Society of Surgery</td>
</tr>
<tr>
<td>8:00–9:30</td>
<td>PS300</td>
<td>The Toughest Trauma Case I Ever Had: Learn from the Experts</td>
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<tr>
<td>8:00–9:30</td>
<td>PS301</td>
<td>Surgical Management of Adrenal Masses in Children and Adults</td>
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<tr>
<td>8:00–9:30</td>
<td>PS302</td>
<td>Sports Hernia: Fantasy or Reality?</td>
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<td>8:00–9:30</td>
<td>PS303</td>
<td>The Tyranny of Distance: Interhospital Transfers—A Worldwide Issue for Quality Patient Care</td>
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<tr>
<td>8:00–9:30</td>
<td>PS304</td>
<td>Vascularized Composite Allotransplantation: From Faces to Hands</td>
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<tr>
<td>8:00–9:30</td>
<td>PS305</td>
<td>Medicare's Approach to Value-Based Purchasing: Aligning E-Rx, PQRS, and EHR with the New Medicare Value-Based Payment Modifier</td>
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<tr>
<td>8:00–9:30</td>
<td>VE16</td>
<td>Subject-Oriented Symposium IV: Complications in General Surgery</td>
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<tr>
<td>8:00–9:30</td>
<td>VE17</td>
<td>Urological Surgery</td>
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<tr>
<td>8:00–11:15</td>
<td>PS306</td>
<td>Surgical Jeopardy</td>
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<tr>
<td>8:00–11:15</td>
<td>SF20</td>
<td>Alimentary Tract III</td>
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<td>8:00–11:15</td>
<td>SF21</td>
<td>Critical Care II</td>
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<td>8:00–11:15</td>
<td>SF22</td>
<td>Surgical Education II</td>
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<tr>
<td>8:00–11:15</td>
<td>VE18</td>
<td>Otolaryngology—Head and Neck Surgery</td>
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<tr>
<td>8:00–11:15</td>
<td>VE19</td>
<td>Subject-Oriented Symposium IV: Atlas Showcase—Pancreas Surgery Volume</td>
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<tr>
<td>8:00–3:30</td>
<td>DC23</td>
<td>Reorganizing Care to Optimize Outcomes: How to Start an Enhanced Recover-after-Surgery Program at Your Hospital</td>
</tr>
<tr>
<td>8:30–5:00</td>
<td>DC24</td>
<td>Non-technical Skills for Surgeons in the Operating Room: Behaviors in High-Performing Teams</td>
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<tr>
<td>8:30–6:00</td>
<td>DC25</td>
<td>Annual Update in Surgical Critical Care</td>
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<tr>
<td>9:00–4:30</td>
<td>DC26</td>
<td>Contemporary Management of Common Anorectal Problems</td>
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<tr>
<td>9:45–10:45</td>
<td>NL10</td>
<td>Ethics and Philosophy Lecture</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>PS307</td>
<td>Gastrointestinal Stomal Tumors: Update on Resection and Oncologic Management</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>PS308</td>
<td>The Toughest Emergency Case I Ever Had: Learn From the Experts</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>PS309</td>
<td>ACS NSQIP®: A Quality Improvement Program that Improves Outcome and Reduces Costs</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>PS310</td>
<td>Lumps, Bumps, and Sarcomas: The Aftermath of the Unplanned Sarcoma Excision and How to Avoid It</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>PS311</td>
<td>Childhood Surgical Conditions into Adulthood: The Surgeon's Role in Long-Term Care and Transitions</td>
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<tr>
<td>9:45–11:15</td>
<td>PS312</td>
<td>Transition from Medical School to Surgery Residency</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>PS313</td>
<td>Managing Debt While Starting a Practice</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>VE20</td>
<td>Endocrine Surgery</td>
</tr>
<tr>
<td>9:45–11:15</td>
<td>VE21</td>
<td>Vascular Surgery</td>
</tr>
<tr>
<td>11:30–12:30</td>
<td>ME301</td>
<td>Addressing Chronic Pain following Inguinal Hernia Repair</td>
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<tr>
<td>11:30–12:30</td>
<td>ME302</td>
<td>Anorectal Abscesses and Fistulae</td>
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<td>Approaches to Pancreatitis</td>
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<td>Complex Abdominal Trauma</td>
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<td>ME306</td>
<td>Fixation of Rib Fractures</td>
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<td>11:30–12:30</td>
<td>ME307</td>
<td>Gastric Cancer: Current Techniques and Controversies</td>
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<td>11:30–12:30</td>
<td>ME308</td>
<td>Gizmos and Gadgets in the ICU</td>
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<td>Laparoscopic and Robotic Surgery for the Pancreas: Is It For Me?</td>
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<td>11:30–12:30</td>
<td>ME310</td>
<td>Liver Resections: My Toughest Cases</td>
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<tr>
<td>11:30–12:30</td>
<td>ME311</td>
<td>Breast Cancer Management in 2014</td>
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<tr>
<td>11:30–12:30</td>
<td>ME312</td>
<td>Nonoperative Management of Appendicitis</td>
</tr>
<tr>
<td>11:30–12:30</td>
<td>ME313</td>
<td>Peri- and Postoperative Challenges of the Esophagectomy Patient</td>
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11:30–12:30 ME314 Practical Tips for Thyroidectomy OTO $  
11:30–12:30 ME315 Abdominal Compartment Syndrome GEN $  
12:45–1:45 NL11 Commission on Cancer Oncology Lecture ONC  
12:45–2:15 PS314 Contemporary Management of Vascular Trauma VAS-TRA  
12:45–2:15 PS315 Are We Doing Too Many Mastectomies? GEN  
12:45–2:15 PS317 Parathyroidectomy for Primary Hyperparathyroidism GEN-OTO  
12:45–2:15 PS318 Clinical Practice Guidelines for Postoperative Delirium GER-TRA-NEU  
12:45–2:15 PS319 Little Kids with Big Injuries TRA-PED  
12:45–2:15 SF23 Ethics ETH  
12:45–4:00 VE22 International Session INT-GEN  
12:45–4:00 PS320 The College's International Scholars and Travelers 2014 INT  
12:45–4:00 VE23 Colon and Rectal Surgery II CRS  
2:30–4:00 PS321 A Night on Call in the Surgical ICU: Case Panel TRA-GEN  
2:30–4:00 PS322 Preoperative Staging and Treatment of Resectable Pancreatic Adenocarcinoma GEN-ONC  
2:30–4:00 PS323 The Hospital Says You Are an ‘Expensive’ Surgeon: What’s Next? HP-GEN  
2:30–4:00 PS324 Head Injury in the Polytrauma Patient: How Can We Make It Better? NEU-TRA  
2:30–4:00 PS325 Preserving Reproductive Function in Adolescents and Young Adults after Cancer and Surgery URO-CRS-PED  
2:30–4:00 PS326 Gaming in Patient Care and Surgical Education EDU-RES/MED  
2:30–4:00 PS327 Cultural Competency GEN  
2:30–4:00 VE24 Trauma TRA-GEN  
2:30–5:45 VE25 Pediatric Surgery PED  
2:30–5:45 SF24 Cardiothoracic Surgery II CTS  
2:30–5:45 SF25 Geriatric Surgery and Palliative Care GER  
2:30–5:45 SF26 Plastic and Maxillofacial Surgery II PLA  
2:30–5:45 SF27 Quality, Safety, and Outcomes III HP-EDU  
2:30–5:45 SF28 Vascular Surgery II VAS  
2:30–5:45 VE26 General Surgery III GEN  
4:15–5:45 PS332 Family Planning Issues in Residency and Beyond RES/MED  
4:15–5:45 PS328 Melanoma in 2014: What Does the Surgeon Need to Know GEN-OTO  
4:15–5:45 PS329 Multi-Organ Pelvic Trauma: Current Management GEN-TRA-URO  
4:15–5:45 PS330 Airway Emergencies for the General Surgeon TRA-OTO-GEN  
4:15–5:45 PS331 Metabolic Surgery: Current State of the Role of Surgery in the Treatment of Type 2 Diabetes Mellitus GEN  
4:15–5:45 PS333 Innovation and Invention in Surgery: From Concept to Market EDU  
4:15–5:45 PS334 High-Risk Perioperative Patient Populations: Avoiding Adverse Events TRA-GEN-GER  
4:15–5:45 PS335 Controversies over the Extent of Surgery and Treatment for Well-Differentiated Thyroid Cancer GEN-ONC-OTO  
4:15–5:15 Annual Business Meeting of Members
### Postgraduate Courses

Register online at [www.facs.org/clincon2014/registration](http://www.facs.org/clincon2014/registration) for these Postgraduate Didactic Courses and Skills Courses.

#### DIDACTIC COURSES

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Fellow</th>
<th>Non-Fellow</th>
<th>RAS</th>
<th>Non-RAS</th>
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<tr>
<td>DC12</td>
<td>High-Risk Breast Cancer Management from A to Z</td>
<td>$500</td>
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<td>Robotic Surgery for Gastrointestinal Operations: Program Planning, Approaches, and Applications</td>
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<td>Introduction to CPT, ICD-10-CM, and Evaluation and Management Coding: 2014 Basic Coding Workshop</td>
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<td>Mastering General Surgery Coding: Advanced Coding Workshop</td>
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<td>DC19</td>
<td>MOC Review: Essentials for Surgical Specialties</td>
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<td>DC20</td>
<td>How to Use ACS NSQIP®, TQIP®, CQIP, and SSR in Your Institution</td>
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<td>DC21</td>
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<td>$525</td>
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<td>DC22</td>
<td>Team-Based Care: Integrating Health Care Professionals into Surgical Practice</td>
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<td>DC23</td>
<td>Reorganizing Care to Optimize Outcomes: How to Start an Enhanced Recover-after-Surgery Program at Your Hospital</td>
<td>$475</td>
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<td>Non-Technical Skills for Surgeons in the Operating Room: Behaviors in High-Performing Teams</td>
<td>$450</td>
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<td>Annual Update in Surgical Critical Care</td>
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<tr>
<td>DC26</td>
<td>Contemporary Management of Common Anorectal Problems</td>
<td>$500</td>
<td>$575</td>
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#### SKILLS COURSES

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<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>SC01</td>
<td>Skills for Rural Surgeons: Advanced Endoscopic Techniques and Resource Utilization</td>
<td>$975</td>
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<td>SC02A</td>
<td>Flexible Endoscopy for General Surgeons (Lecture Only)</td>
<td>$350</td>
<td>$405</td>
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<td>SC02B</td>
<td>Flexible Endoscopy for General Surgeons (Lecture and Lab)</td>
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<td>SC03**</td>
<td>Practical Applications of Ultrasonography in the Intensive Care Unit</td>
<td>$900</td>
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<td>SC04A</td>
<td>Measurement and Analysis to Transform Surgical Care (Part A)</td>
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<td>SC08</td>
<td>Social Media for Surgeons</td>
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<td>SC09A</td>
<td>Minimally Invasive Colorectal Surgery (Lecture Only)</td>
<td>$475</td>
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<tr>
<td>SC09B</td>
<td>Minimally Invasive Colorectal Surgery (Lecture and Lab)</td>
<td>$975</td>
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<td>SC10**</td>
<td>Thyroid and Parathyroid Ultrasound</td>
<td>$900</td>
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<td>SC11</td>
<td>Humanitarian Surgery: Surgical Skills Training for the International Volunteer Surgeon</td>
<td>$715</td>
<td>$825</td>
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</tr>
</tbody>
</table>

**Prerequisite course requirements, please review course descriptions for details.
Meet-the-Expert Luncheons provide an informal and more intimate venue for Clinical Congress attendees to converse with leading experts in a variety of surgical categories. These popular sessions encourage open, case-based discussions. Tickets cost $45 and are available for purchase by all registered attendees. Individual luncheons are limited to no more than 35 participants. Each day, 15 luncheons are scheduled simultaneously from 1:15 to 2:15 pm on Monday and from 11:30 am to 12:30 pm on Tuesday and Wednesday. One CME credit hour is provided.

**MONDAY, OCTOBER 27 | 1:15–2:15 PM**

| ME101 | Evidence-Based Treatment of Incisional Hernias Facilitated by: Jose Diaz, MD, FACS, Baltimore, MD |
| ME102 | Antireflux Gadgets and Gimmicks Facilitated by: Brant K. Oelschlagler, MD, FACS, Seattle, WA |
| ME103 | Best Approaches to Nipple-Sparing Mastectomy Facilitated by: Jay K. Harness, MD, FACS, Orange, CA |
| ME104 | Crohn’s Disease: Bring Your Toughest Cases Facilitated by: Fabrizio Michelassi, MD, FACS, New York, NY |
| ME105 | What Is Patient-Centered Outcomes Research, and What Does It Mean to Your Practice? Facilitated by: David R. Flum, MD, FACS, Seattle, WA |
| ME106 | Helping Surgeons Resolve Conflicts about End-of-Life Decisions Facilitated by: Eric A. Singer, MD, MA, New Brunswick, NJ, and Alexandra M. Easson, MD, FACS, Toronto, ON |
| ME107 | How to Use and Interpret Molecular Genetic Studies Done on Thyroid FNA Facilitated by: Sally E. Carty, MD, FACS, Pittsburgh, PA |
| ME108 | Lymphedema after Breast Surgery Facilitated by: Pat W. Whitworth, MD, FACS, Nashville, TN |
| ME109 | Medullary Thyroid Carcinoma 101: What Do You Need to Know? Facilitated by: Douglas B. Evans, MD, FACS, Milwaukee, WI |
| ME110 | Minimally Invasive Parathyroidectomy: How Do I Do It Facilitated by: Robert Udelsman, MD, FACS, New Haven, CT |
| ME111 | Surgical Management of Congenital Chest Wall Deformities Facilitated by: Gary W. Raff, MD, FACS, Sacramento, CA |
| ME112 | The Relationship and Role of the Surgeon in Designing and Implementing Accountable Care Organizations Facilitated by: Stephen T. Bartlett, MD, FACS, Baltimore, MD |
| ME113 | TNM Cancer Staging: Is It Still Relevant? Facilitated by: David R. Byrd, MD, FACS, Seattle, WA |
| ME114 | Total Mesorectal Excision: When and How Facilitated by: Steven D. Wexner, MD, PhD(Hon), FACS, FRCS, FRCSEd, Weston, FL |
| ME115 | Treatment Options for Anal Fissure Facilitated by: Amir L. Bastawrous, MD, FACS, Seattle, WA |

**TUESDAY, OCTOBER 28 | 11:30 AM–12:30 PM**

| ME201 | A Framework for Conducting Quality Improvement Projects in a Cancer Surgical Practice Facilitated by: Robert R. Cima, MD, FACS, FASCRS, Rochester, MN |
| ME202 | Anorectal Surgery Facilitated by: Herrand Abcarian, MD, FACS, Chicago, IL |
| ME203 | Management of the Axilla in T1 or T2 Breast Cancer Facilitated by: Monica Morrow, MD, FACS, New York, NY |
| ME204 | Bundling Payment in Surgical Services Facilitated by: Robert R. Lorenz, MD, FACS, Cleveland, OH |
| ME205 | Current Management of Thyroid Nodules Facilitated by: Carmen C. Solorzano, MD, FACS, Nashville, TN |
| ME206 | Diverticulitis Decision Making for the Acute Care Surgeon Facilitated by: Tonia M. Young-Fadok, MD, FACS, FASCRS, Phoenix, AZ |
| ME207 | Enteral Access for Nutrition: Tips and Tricks Facilitated by: Frederick A. Moore, MD, FACS, Gainesville, FL |
| ME208 | Evaluation and Management of Pancreatic Cysts Facilitated by: Peter J. Allen, MD, FACS, New York, NY |
| ME209 | Genitourinary Trauma Facilitated by: Hunter B. Wessells, MD, FACS, Seattle, WA |
| ME210 | Is My Patient Frail? Assessment and Clinical Implications for Cancer Surgery Facilitated by: Mark K. Ferguson, MD, FACS, Chicago, IL |
| ME211 | Laparoscopic Hernia Repair: My Tips and Techniques Facilitated by: Daniel M. Herron, MD, FACS, New York, NY |
| ME212 | Early Post-Laparoscopic Cholecystectomy Abdominal Pain Facilitated by: Keith D. Lillermoe, MD, FACS, Boston, MA |
| ME213 | Necrotizing Soft-Tissue Infections Facilitated by: Eileen M. Bulger, MD, FACS, Seattle, WA |
| ME214 | Neuroendocrine Tumors of the Pancreas 101: What Do I Need to Know? Facilitated by: Geoffrey B. Thompson, MD, FACS, Rochester, MN |
| ME215 | The Reality of Starting a New Line of Service: Keys to Success Facilitated by: Adnan A. Alseid, MD, FACS, Seattle, WA; S. Rob Todd, MD, FACS, New York, NY; and Samag M. Mattar, MD, FACS, Portland, OR |

**WEDNESDAY, OCTOBER 29 | 11:30 AM–12:30 PM**

| ME301 | Addressing Chronic Pain following Inguinal Hernia Repair Facilitated by: John B. Hanks, MD, FACS, Charlottesville, VA |
| ME302 | Anorectal Abscesses and Fistulae Facilitated by: Richard P. Billingham, MD, FACS, Seattle, WA |
| ME303 | Approaches to Acute Pancreatitis Facilitated by: Grant E. O’Keefe, MD, FACS, Seattle, WA |
| ME304 | Complex Abdominal Trauma Facilitated by: David V. Feliciano, MD, FACS, Indianapolis, IN |
| ME305 | Minimally Invasive Treatment for Pancreatic Debridement Facilitated by: Michael G. Sarr, MD, FACS, Rochester, MN |
| ME306 | Fixation of Rib Fractures Facilitated by: Thomas K. Varghese, Jr., MD, FACS, Seattle, WA |
| ME307 | Gastric Cancer: Current Techniques and Approaches Facilitated by: Carl R. Schmidt, MD, FACS, Columbus, OH |
| ME308 | Gizmos and Gadgets in the ICU Facilitated by: Peter M. Rhee, MD, MPH, FACS, FCCM, Tucson, AZ |
| ME309 | Laparoscopic and Robotic Surgery for the Pancreas: Is It For Me? Facilitated by: Steven J. Hughes, MD, FACS, Gainesville, FL |
| ME310 | Liver Resections: My Toughest Cases Facilitated by: Timothy M. Pawlik, MD, FACS, Baltimore, MD |
| ME311 | Breast Cancer Management in 2014 Facilitated by: Lee G. Wilke, MD, FACS, Madison, WI |
| ME312 | Nonoperative Management of Appendicitis Facilitated by: Michael J. Stamos, MD, FACS, Orange, CA |
| ME313 | Peri- and Postoperative Challenges of the Esophagectomy Patient Facilitated by: Rishindra M. Reddy, MD, FACS, Ann Arbor, MI |
| ME314 | Practical Tips for Thyroidectomy Facilitated by: Ashok R. Shaha, MD, FACS, New York, NY |
| ME315 | Abdominal Compartment Syndrome Facilitated by: Rao R. Ivatury, MD, FACS, Richmond, VA |
**SUNDAY, OCTOBER 26**

**Medical Student Program**

**Day I: 11:30 am–6:00 pm**

The Division of Education invites students from all four years of medical school to attend Clinical Congress and to participate in this program specially designed for those considering a career in surgery. Programming is varied from day to day, and students are welcome to attend all or selected portions of this three-day program. The program is free to ACS Medical Student Members who register in advance. Nonmembers will be charged a reduced registration fee.

Topics include exploring various lifestyle issues in surgery, learning new “out-of-the-box” ideas for surgery interest groups, and navigating the residency application process and interviewing successfully.

Speakers will include College leaders and surgical educators at both the medical student and resident levels. Students are able to hone their interviewing skills in interactive sessions with surgeons as well as network with specialty surgeons, surgical residents, residency program directors, and others.

Also incorporated in this program is the Medical Student Program Poster Session, during which 40 medical students present their research in one of two categories: clinical, outcomes, innovation, or educational research; or basic science research. There will be a first-, second-, and third-place award in each category.

Students enrolled in a U.S., Canadian, or international allopathic or osteopathic medical school are invited to attend this comprehensive program. For regularly updated information about the Medical Student Program and the Medical Student Program Poster Session, visit www.facs.org/clincon2014/special/medicalstudent.html. For additional information, contact Nicole Laroco at nlaroco@facs.org or 312-202-5404.

Sponsored by the Committee on Medical Student Education

**Resident and Associate Society Symposium**

**3:00–5:30 pm**

**Five-Year General Surgery Residency: Fix It or Flush It?**

This year’s RAS-ACS Symposium will feature a topic centered on the future of general surgical training. In the face of uncharted health care territory, questions, fears, and speculation are raised about postgraduate education. The Affordable Care Act and reimbursement and distribution of ACGME funds will have a lasting effect on surgical training. The Affordable Care Act and reimbursement and distribution of ACGME funds will have a lasting effect on surgical training. The question is how to keep up. Will residents be able to adapt or put up “blinders” and wait for things to return to the way they were?

This session will be followed by audience questions and interaction. For additional information, contact RASNews@facs.org

Refer to the registration section of the ACS website at www.facs.org/clincon2014/registration.

Sponsored by the Committee on Medical Student Education

**MONDAY, OCTOBER 27**

**Surgery Resident Program**

**10:00 am–6:00 pm**

**Starting Surgical Practice: Essentials for Success**

Surgery residents from all postgraduate levels are invited by the Division of Education to participate in a special program designed to assist surgical residents with essential nonclinical issues they face in residency training and the transition to their post-training career. The program is free to ACS Resident Members who register in advance. Nonmembers will be charged a reduced registration fee.

Featured topics will include personal financial planning and debt management, job-seeking strategies and negotiation skills, and reduction of liability risks. Additionally, interactive sessions will be offered, at which residents may explore different types of practice settings and other topics.

Speakers will include leaders from surgery, a certified financial planner, an attorney with extensive professional liability experience, and an expert in physician career development.

For additional information, contact Cheryl Lynn Sherman at 312-202-5424 or csherman@facs.org or go to www.facs.org/education/essentialskills.html.

Register online for this special program at www.facs.org/clincon2014/registration.

Sponsored by the American College of Surgeons and The Society of Thoracic Surgeons (STS)

**Cardiothoracic Surgery in the Future: Technology Overview for Residents and Medical Students**

**5:30–9:00 pm**

**Fee:** $25 (includes dinner)

**Course Directors:**

James I. Fann, MD, FACS, Stanford, CA
Thomas E. MacGillivray, MD, FACS, Boston, MA
Daniel L. Miller, MD, FACS, Atlanta, GA

This course will introduce surgery residents and medical students to conventional and complex procedures performed by cardiothoracic surgeons today and provide information about upcoming new technologies and the six-year integrated cardiothoracic surgery training program. The primary focus of the session will be hands-on experience with specific cardiothoracic surgical procedures. Participants will experience and have the opportunity to perform these surgical procedures using synthetic and tissue-based simulation models. The program will be taught by cardiothoracic surgeons who are leaders in their respective fields of cardiac and general thoracic surgery. A buffet dinner will be available at 5:30 pm.

For additional information, please contact the STS Education Manager, Michele Chao, at mchao@sts.org.

Please refer to the registration section of the ACS website at www.facs.org/clincon2014/registration.

Sponsored by the Committee on Medical Student Education
TUESDAY, OCTOBER 28

Posters of Exceptional Merit Presentation
11:30 am–12:30 pm

All attendees are invited to join in a lunchtime tour and discussion of the Posters of Exceptional Merit facilitated by Program Committee Chair Valerie W. Rusch, MD, FACS, and Craig S. Derkay, MD, FACS. More than 300 posters will be on display at the Clinical Congress but only a select few are designated Posters of Exceptional Merit. Come hear the authors of these distinguished works present their innovative research and answer questions prior to the judges awarding one poster the title of Best Scientific Poster.

Medical Student Program
Day III: 1:00–6:00 pm

For a full description of this program, please refer to the Sunday schedule. Note that programming varies from day to day, and students are welcome to attend all or selected portions of this three-day program.

For regularly updated information about the Medical Student Program, visit www.facs.org/clincon2014/special/medicalstudent.html.

Sponsored by the Committee on Medical Student Education

2014 Excellence in Research Awards Distribution/
Surgical Forum Dedication
2:30–3:00 pm

Neurosurgery/Obstetrics and Gynecology/
Orthopaedic Surgery
3:00–5:45 pm

Prior to the scientific presentations, the Committee for the Forum on Fundamental Surgical Problems will dedicate the 65th volume of the Owen H. Wangensteen Surgical Forum to Michael G. Sarr, MD, FACS, Minneapolis, MN. Introduction will be made by Mary T. Hawn, MD, FACS, with remarks from Dr. Sarr immediately following. After the dedication the committee will distribute approximately 10 awards for excellence in research. Surgical residents and their mentors are encouraged to attend the dedication and awards distribution.

Setting Conditions for Chapter Success: A Panel Presentation and Reception for Domestic and International Chapters
3:00–5:00 pm

This year’s chapter event at Clinical Congress will feature a panel presentation with panelists to include Governors from the Chapter Activities Domestic Workgroup as well as a featured presenter from an ACS International Chapter. Panel discussion will include Metrics for Chapter Success as well as other topics of current interest to chapters.

The second half of the event will be a reception for both domestic and international chapter officers and chapter executives/administrators where all will be able to network and share the news of recent chapter successes. Don’t miss this opportunity to relax a bit and share ideas between Clinical Congress sessions!

This event is being hosted by the Governors Chapter Activities Domestic and International Workgroups. For more information, contact Donna Tieberg, Chapter Services Manager, at dtieberg@facs.org or 312-202-5361.

Rural Surgeons Open Forum and Oweida Scholarship Presentation
4:15–5:45 pm

The session opens with the introduction of the 2014 Nizar N. Oweida Scholarship recipient, John M. McBee, MD, FACS, a general surgeon practicing in Pendleton, OR.

The Advisory Council for Rural Surgery (ACRS) sponsors this open forum to facilitate direct communication with rural surgeons and the ACRS. Following a brief description of the current projects of the ACRS will be an open forum with all in attendance. The ACRS encourages attendees to bring their concerns, thoughts on education needs, coverage, call, triumphs, and so on. The ACRS is committed to being a vehicle to make change, to be a voice to ACS leadership, and to make the ACS even more relevant to surgical practices. ACRS is committed to helping provide optimal surgical care to surgical patients in every community.

For additional information, contact Tyler Hughes, MD, FACS, ACRS Chair, at tylerh@mphersonhospital.org or David Borgstrom, MD, FACS, ACRS Committee on Education, at david.borgstrom@bassett.org.
Air Transportation
The ACS has arranged special meeting discounts on United Airlines. These special discounts are available by booking with United directly (independently or through a travel agent). Be sure to reference the ACS Z Code and Agreement Number below to obtain the special fares.
United Airlines
800/426-1122
7:00 am–9:00 pm CST; Monday–Friday
8:00 am–6:00 pm CST; Saturday–Sunday
Z Code: ZRAG
Authorization Number: 833768
Purchase your ticket online at www.united.com and receive a discount off the lowest applicable fares. When booking online, please enter ZRAG833768 to receive your discount.
www.united.com

Car Rental
Avis is designated as the official car rental company for Clinical Congress 2014. Special meeting rates and discounts are available on a wide selection of GM and other fine cars. To receive these special rates, be sure to mention your Avis Worldwide Discount (AWD) number when you call.
Avis Reservations
800-331-1600
www.avis.com
AWD Number: 8169699

Airport Shuttle
SuperShuttle is designated as the official airport shuttle company for Clinical Congress 2014. Special discounts are available on round-trip reservations made online. To receive these special discounts, be sure to use the online reservation link below.
Discount Code: FACS1
www.supershuttle.com/default.aspx?GC=FACS1

Reserved Parking
GottaPark online reservation service is offered as a way to find parking at reasonably priced garages during the Clinical Congress. Visit the GottaPark website to search and compare prices at participating garages near the Moscone Center or Clinical Congress hotels, and pre-pay to reserve a spot in advance of arrival. There is a small service fee for this convenience. Changes and cancellations can be made up to 24 hours in advance of arrival.
www.gottapark.com/parking/san-francisco?id=1f8a7b5dca7a7d1f066e5aa29c04b1e

Visa Information
International Fellows, guest physicians, and meeting attendees: The process of obtaining a visa to attend meetings in the U.S. now takes much longer. You are strongly urged to apply for a visa as early as possible, preferably at least 60 days before the start of the meeting. For detailed information regarding obtaining a visa, visit http://travel.state.gov/visa/temp/types/types_1262.html. For information regarding the Visa Waiver Program (VWP), visit http://travel.state.gov/visa/temp/without/without_1990.html. You may request a letter from the College welcoming you to the meeting when you register online or by going to www.facs.org/clinicon2014/attendees/visa.html.

Affiliate Group Functions
Groups planning a social function or business meeting to be held in conjunction with the Clinical Congress are required to obtain approval. If events are to be held at one of the participating venues/hotels, affiliate groups are required to secure event space through the ACS. For more information and to request function space, visit http://web2.facs.org/meetings/events for the online request form or contact Marisa Villalba, Senior Meeting Planner, ACS Convention and Meetings, at mvillalba@facs.org. Space assignments are made on a first-come, first-processed basis. Space is limited and is assigned on an availability basis.

Shuttle Bus Service
Complimentary shuttle bus service will be provided for registrants at regular intervals between the Moscone Center and most designated ACS Clinical Congress hotels. For a list of hotels on the shuttle route, please refer to the Housing Information section. Schedules and routes will be available at the Moscone Center and participating hotels.

Help and Information Center
Portable Help and Information Centers will be located throughout the Moscone Center and will be available during registration hours. Assistance with general information, travel, housing, and local information will be available.

Lost and Found
Lost and found areas will be located in the ACS Convention Office at the Hilton San Francisco Union Square and in the Convention and Exhibit Office at the Moscone Center, North Hall. Persons looking for or finding lost items should contact one of these offices.

Exhibit Hall
Technical Exhibits and Scientific Posters will be located at the Moscone Center, South Hall. Both will be open Monday–Wednesday, 9:00 am–4:30 pm.

Prayer Room
A prayer room will be available at Moscone Center during the meeting and open during registration hours. The room location will be indicated in the Program Book distributed at the meeting.

Nursing Mothers’ Room
A nursing mothers’ room will be available during the meeting. The room will be located at the Moscone Center, Room 203, South Building.

Child Policy
The ACS policy regarding children is as follows:
Under 12—Not permitted on Social Program tours
Under 16—Not permitted on exhibit floor or in scientific sessions
16 and over—Must have a badge to enter exhibit area or meeting rooms
This policy includes infants in strollers and arms.

Camp ACS
The American College of Surgeons is once again partnering with ACCENT on Children’s Arrangements, Inc. to provide an on-site children’s program in San Francisco, CA. ACCENT has prepared a program with activities such as arts and crafts and active games designed to entertain your children while you are attending meetings and sessions. The camp, which is offered to all children ages six months through 17 years, will be held at the San Francisco Marriott Marquis Hotel, conveniently located across from the Moscone Center. For more information on Camp ACS, please visit www.facs.org/clinicon2014/social/camps/camps.html.

Bistro ACS
The Best Way to Eat, Meet, and Network at Clinical Congress 2014
It can be difficult to find a well-balanced, healthy meal or a place to sit and meet during a convention. Bistro ACS provides a comforting setting for attendees and exhibitors to eat, meet, and network with colleagues and fellow attendees. Conveniently located in the Exhibit Hall at Moscone Center, South Hall, the Bistro’s all-inclusive, upscale, buffet-style lunch is the ideal dining destination during Clinical Congress 2014. Bistro ACS will be open Monday, October 27, through Wednesday, October 29.
Attendees may purchase individual bistro tickets at the time of registration for $26 per ticket. Those wishing to purchase group tickets in advance may visit www.bistroACS.com. Ticket sales will also be available on-site at the Bistro ACS booth located at the Moscone Center North Hall.

General Information
Who should attend and what's included?
Registration is open to all physicians and individuals in the health care field and includes a name badge, Program Book, and entrance to the exhibits and all sessions other than Postgraduate Courses and Meet-the-Expert Luncheons. To review the full registration policies and submit your Clinical Congress 2014 registration, visit www.facs.org/clincon2014/registration.

- Named Lectures
- Panel Sessions
- Scientific Posters
- Surgical Forum
- Town Hall Meetings
- Video-Based Sessions

Registration and Membership Questions
Should you have any questions regarding Clinical Congress registration, contact Registration Services. Phone registrations are not accepted.
E-mail: registration@facs.org
Phone: 312-202-5244
Fax: 312-202-5003

Should you have any questions regarding your ACS membership prior to registering for the Clinical Congress, contact Member Services at ms@facs.org or 800-621-4111.

For information on becoming a member of the College and to complete a membership application, please visit www.facs.org/memberservices/documents.html or contact Member Services at ms@facs.org or 800-621-4111.

*The following sessions are included with your Clinical Congress registration and are not ticketed. Registering for these sessions does not guarantee seating within the course. Seating is provided on a first-come, first-served basis until the meeting room is full.

- Video-Based Sessions
- Town Hall Meetings
- Surgical Forum
- Scientific Posters
- Panel Sessions
- Named Lectures

REGISTRATION FEES AND CREDENTIALS
All registrations must be received by 11:59 pm CT on the date indicated in order to receive the corresponding registration rate.

<table>
<thead>
<tr>
<th>CATEGORY</th>
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<td>Medical student nonmember (with verification letter)**†</td>
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<tr>
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<td>$420</td>
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REGISTRATION LOCATION AND HOURS
Moscone Center, North Hall

<table>
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<tr>
<td>Sunday, October 26</td>
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<tr>
<td>Monday, October 27</td>
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<tr>
<td>Tuesday, October 28</td>
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<tr>
<td>Wednesday, October 29</td>
<td>7:00 am–4:00 pm</td>
</tr>
<tr>
<td>Thursday, October 30</td>
<td>7:00–10:00 am</td>
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</tbody>
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Attendees must be members of the American College of Surgeons at the time of registration to receive the member rate. Refunds will not be provided to those who become members after registering.

Commercial representatives may obtain the commercial registration form by e-mailing a request to registration@facs.org.

*A Retired ACS Fellow is an individual who has notified the College, been granted Retired status, and is officially listed in the ACS database as Retired. The ACS definition of a Retired member is a surgeon who is not in the active practice of providing surgical or nonsurgical patient care, participating in funded research, or performing compensated teaching or administrative duties. Questions about Retired member status should be directed to ms@facs.org.

**All nonmembers who pay the applicable Clinical Congress registration fees will have their membership application fees waived if they apply for American College of Surgeons membership on-site at the Clinical Congress or by December 31, 2014. Additionally, the American College of Surgeons offers discounted registration fees for both member and nonmember residents and medical students. To take advantage of the discount, nonmember residents and medical students must submit a letter verifying their educational status at the time of registration. Residents should obtain a letter from their program director; students should contact their official medical school representative.

†Resident and Medical Student Membership—The College has membership opportunities for medical students and residents. Medical students must be attending a U.S., Canadian, or international allopathic or osteopathic medical school. There is a one-time fee of $20, which covers all four years of medical school. Membership will expire upon graduation from medical school.

Residents enrolled in a program accredited by the Accreditation Council for Graduate Medical Education (ACGME) or surgeons in surgical research or fellowship programs acceptable to the American College of Surgeons are eligible for Resident Membership. The application fee of $20 is waived for first-year residents. Annual dues thereafter are $20.
Guest Registration

Guests may register for the Clinical Congress by paying the applicable registration fee. All Guest registrants must be accompanied by a Scientific Program registrant of another category. Guest Registration is meant for nonmedical attendees only. Guests are not eligible for CME credits or Certificate of Attendance nor can they attend Postgraduate Courses or Meet-the-Expert Lunches.

The Guest Registration fee entitles you to attend scientific sessions, view the technical and scientific exhibits, purchase tour tickets, and use the shuttle bus service.

<table>
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<tr>
<td>Children 15 years and under</td>
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Tours and Events

Important Note: All tours will depart from and return to the Hilton San Francisco Union Square unless otherwise noted. Please meet in the lobby of the hotel unless otherwise indicated. We recommend that you arrive at least 15 minutes prior to the scheduled tour time and wear comfortable walking shoes for all tours. Unless otherwise indicated, all lunches and dinners referred to are included in the price of the tour. Tours will be held rain or shine, unless otherwise notified. Children under 12 years of age are not permitted on tours. All children 12 years and older must be accompanied by an adult.

Visit www.facs.org/clincon2014 for a complete description of all tours and events.

THE AMERICAN COLLEGE OF SURGEONS is the largest organization of surgeons in the world, uniquely positioned to lead the way in optimal patient care, surgical research, health policy, and continuing education and networking opportunities. Membership in the American College of Surgeons signifies a personal commitment to furthering your professional development and conducting your career with the highest set of professional standards.

Discover all the ways ACS membership benefits you, your patients, and the surgical profession.

To learn more about becoming a member and to access an application form, visit: www.facs.org/memberservices/documents.html or contact: ms@facs.org / 800-621-4111
Support the ACS by booking your room through Travel Planners at one of the official Clinical Congress hotels.

To obtain the necessary amount of meeting and exhibit space at the convention center and the hotels, the ACS must commit to a minimum number of guest rooms. If that commitment is not met, ACS will incur significant financial penalties and have difficulty obtaining sufficient meeting space in the future. This can have a major impact on the programs that the ACS is able to offer. You can help the ACS avoid penalties by booking your reservation through the official housing company.

**Suite Raffle**

To thank you for booking your reservation through Travel Planners in the official housing block, you will be entered in a raffle to win an upgrade to a one-bedroom suite for your entire hotel stay, valid for reservations booked October 26–30, 2014. Your reservation must be made by September 23, 2014, to qualify for the raffle. The winner will be notified via e-mail on September 24, 2014.

**Applying for Hotel Accommodations**

The following housing procedures apply to all general registrants of the Clinical Congress. If you are a Regent, Officer, Past Officer, Advisory Council Chair, Governor, Recipient of the Distinguished Service Award, Special Invited Guest, or Standing Committee Chair and are applying for the Hilton San Francisco Union Square, please use the special housing application sent to you.

**Housing Procedures**

ACS has appointed Travel Planners to coordinate housing for Clinical Congress 2014. Reservation requests will be processed on a first-come, first-served basis and must be received by Tuesday, September 30, 2014. Requests received after this deadline, or after the room blocks are filled, are subject to rate and space availability. Housing requests can be made using one of the following options:

- **ONLINE** at www.facs.org and submit your Clinical Congress hotel reservation. The online reservation service is available 24 hours a day, seven days a week.
- **CALL** Travel Planners at 800-221-3531 or 212-532-1660 (international calls) between the hours of 9:00 am and 7:00 pm ET, Monday through Friday.
- **FAX** your completed Clinical Congress Hotel Reservation Form (which can be found at www.facs.org) to 212-779-6128.
- **MAIL** your completed Hotel Reservation Form (which can be found at www.facs.org) to: Travel Planners/ACS Housing Bureau 381 Park Ave. South, 3rd Floor New York, NY 10016

Reservations received after the housing deadline of Tuesday, September 30, 2014, or after the room blocks are filled, are subject to space and rate availability. Please do not send your request directly to the hotel or to the ACS office; doing so will only delay the processing of your request. If you do not receive acknowledgement within 72 hours, please contact Travel Planners at acs@tphousing.com or at the numbers indicated. Please verify your acknowledgment for accuracy. It is the only acknowledgment you will receive.

**Deposit Policies**

Reservations made via the Web, phone, fax, or mail will require a credit card (American Express, VISA, or MasterCard) for guarantee purposes only. The credit card will guarantee your room for late arrival for the day of scheduled arrival only. Credit cards will not be charged at the time the reservation is made. Credit cards will only be charged directly by the hotel if your reservation is not cancelled at least 72 hours prior to arrival or in accordance with your hotel’s cancellation policy as noted on your confirmation.

**Changes and Cancellations**

Changes to and/or cancellation of your reservation should be made directly with Travel Planners (the ACS official housing bureau) until October 21, 2014, at 7:00 pm ET. Beginning October 22, 2014, you must contact the hotel directly to make any changes. Please ask for a confirmation number when cancelling or changing your reservation directly with the hotel. Do not call or write the ACS office to change or cancel your reservation.

Your credit card will not be charged unless you cancel your reservation less than 72 hours in advance of arrival date or in accordance with your hotel’s cancellation policy as noted on your reservation confirmation.

“As always, the single best surgical conference of the year for all surgeons.”
The ICD-10 delay

There were mixed emotions on April 1, as President Barack Obama signed into law the Protecting Access to Medicare Act of 2014. The lukewarm reception was largely because the law provides only a temporary delay in implementing a nearly 24 percent cut in Medicare physician payments stemming from the sustainable growth rate (SGR) formula, rather than offering a permanent fix to the problem. However, the legislation also provided for a one-year delay in implementation of the International Classification of Diseases, 10th Revision (ICD-10). The new compliance deadline for ICD-10 conversion is October 1, 2015. This is the second time in nearly two years that the ICD-10 compliance date has been pushed back.

This column addresses questions providers may have concerning the ICD-10 delay and offers resources for surgical practices to continue to prepare for the conversion.

Now that ICD-10 has been delayed, can my practice scale back its preparation efforts?
Although the ICD-10 transition has been delayed for another year, the American College of Surgeons (ACS) encourages members to use the additional time to become familiar with the new code sets, understand the differences between the International Classification of Diseases, Ninth Revision (ICD-9), and ICD-10, and prepare for how the switch may affect their practices. Health policy experts believe that the transition to ICD-10 will have widespread effects on operational processes across health care.

According to research released on February 4, by the Medical Group Management Association, practices lag in overall readiness for ICD-10 implementation.

In fact, less than 10 percent of responding practices reported that they had made significant progress when rating their overall ICD-10 conversion, and 38 percent indicated they had not started to prepare. Research also revealed, among other data, that software upgrades or replacements are needed. More than 80 percent of respondents indicated that their software would require replacement or upgrades to accommodate ICD-10 diagnosis codes.*

What are the major differences between ICD-9 and ICD-10?
In 2003, the Health Insurance Portability and Accountability Act (HIPAA) identified ICD-9-Clinical Modification (ICD-9-CM) as the standard code set for reporting diagnoses and inpatient procedures. ICD is a diagnostic tool for epidemiology, health management, and clinical purposes. It permits the systematic recoding, analysis, interpretation, and comparison of mortality and morbidity data to track the incidence and prevalence of diseases and other health indicators around the world. Currently, ICD-9-CM includes both diagnosis and procedural codes.†

ICD-10 is expected to be an expanded code set, including additional information for ambulatory and managed care and injuries. It is expected to combine diagnosis and symptom codes to better define certain conditions, increase specificity through greater code length, and provide the ability to specify laterality.‡

What should providers do now to prepare for a smooth conversion?
The following are suggested preparation tips:

• Develop an organizational implementation strategy,

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including risk analysis and development of a timeline, checklist, and budget.

- Identify an organizational leader to facilitate the implementation process.

- Consider obtaining a line of credit. The conversion to ICD-10 could create a disruption in cash flow while practices become accustomed to the new system, and a line of credit could be useful in averting any associated financial worries.

- Participate in ACS ICD-10 training courses and purchase ICD-10 materials, such as the codebook.

- Review current clinical documentation practices in all practice settings (hospital, office, ambulatory surgery center, and so on) to determine whether they will be sufficient for ICD-10 coding. Work with the case manager and hospital documentation staff to ensure correct documentation.

- Reach out to external partners, such as the billing service, clearinghouse, practice management, electronic health record vendors, and hospitals, surgery centers, labs, and other affiliates to determine their progress in achieving the conversion.

- Ensure that external partners, which may have already created an infrastructure to support ICD-10 conversion after October 1, 2014, are able to accept ICD-9 for another year.

- Communicate with payors to be sure that they can receive and pay claims.

- Once all systems and external partners are compliant with ICD-10, conduct end-to-end testing before October 1, 2015. The Centers for Medicare & Medicaid Services may provide an opportunity for practices to participate in a demonstration project.

**What ACS resources are available to help surgeons and their practices prepare for the ICD-10 conversion?**

The ACS has added ICD-10 readiness sessions to its 2014 ACS coding workshops. The new sessions are aimed at helping surgical practices prepare for the 2015 conversion by providing specific ICD-10 examples of the most commonly cited conditions and educating surgeons and coders on how to locate codes in the ICD-10 manual. For a list of remaining 2014 ACS surgical coding workshops, go to [http://www.facs.org/ahp/workshops/icd-10.html](http://www.facs.org/ahp/workshops/icd-10.html).

Surgical practices also may participate in a complimentary 45-minute ICD-10 webinar, Transitioning to ICD-10 Smoothly. This resource is provided by KarenZupko & Associates, surgical coding experts, and is available at [http://www.karenzupko.com/workshops/americancollegeofsurgeons/index_copy1.html](http://www.karenzupko.com/workshops/americancollegeofsurgeons/index_copy1.html).


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**What other resources are available?**

See the sidebar on this page for a list of further resources. 

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**ADDITIONAL RESOURCES**

- The CMS website, [www.cms.gov/ICD10](http://www.cms.gov/ICD10), and the CMS eHealth University, [http://www.cms.gov/eHealth/eHealthUniversity.html](http://www.cms.gov/eHealth/eHealthUniversity.html)


- The American Health Information Management Association ICD-10 website, [http://www.ahima.org/topics/icd10](http://www.ahima.org/topics/icd10)

- The American Medical Association ICD-10 website, [www.ama-assn.org/go/ICD-10](http://www.ama-assn.org/go/ICD-10)


- Online tool for converting ICD-9 codes to ICD-10, [www.icd10data.com](http://www.icd10data.com)
For many years, rural surgeons had felt isolated, unrecognized, underrepresented, and neglected. In a word, rural surgeons described themselves as “underdogs.” These feelings were expressed to the American College of Surgeons (ACS) Board of Regents in February 2012, and in June of that year, the ACS established the Advisory Council for Rural Surgery (ACRS).

The need to communicate with rural surgeons and to connect them as a group with the ACS leadership was immediately apparent, but surveys failed to identify the best means of enhancing communication. Although rural surgeons were acquainted with many social networking modalities, ACRS leaders chose to use a listserv, if for no other reason than simplicity, even though the listserv may be considered the underdog of social networking. Because the ACS was looking at ways to improve its networking techniques, however, the rural listserv was considered sufficient as a stop-gap measure.

How it works
Listserv technology became available in 1986, when Eric Thomas, an engineering student, developed automated software to manage mailing lists, which, until then, was a manual, cumbersome, and labor-intensive process.* Applied to e-mail, listserv software allows for the automatic distribution of e-mails to all members of a group. E-mails go to a single address, in this case acsrural@listserv.facs, and all subscribed members receive the correspondence. Discussions of subjects can then take place as list members respond.

A listserv is either completely automated, or it can be moderated by an individual(s). The rural list has two moderators—the author, Phil Caropreso, MD, FACS, and Tyler Hughes, MD, FACS, Chair of the ACRS—who review subjects and content. Only subscribers may participate in the group.

An introductory e-mail was sent on August 12, 2012, to 1,700 rural surgeons identified from the College’s member database. Following the Clinical Congress, the rural listserv debuted with the posting of the first official communication on October 23, 2012. The initial e-mail from the listserv stated:

[T]he work of the ACRS on your behalf is just beginning. Your participation in that work is vital to provide direction to the fulfillment of the ACRS’s mission. Without your involvement, the identification of the challenges of rural practice will merely be guesswork. With that thought in mind, the College has established a listserv for rural surgeons’ communications.

In his Presidential Address at the 2012 Clinical Congress, A. Brent Eastman, MD, FACS, FRCSEd(Hon), FRACS(Hon), FRCSI(Hon), proclaimed his “calls to action” for the next 100 years, which included renewed focus on challenges in rural surgery. In November 2012, Dr. Eastman contributed to the rural list, referring to the ACRS and to the listserv. This was the first communication from an ACS President specifically to College members who practice in rural areas.

Listserv comes of age
In the months that followed, the rural list went through a period of adjustment, which led to a fully formed and stable electronic mailing list with approximately 1,000 members. The rural

The rural listserv has fulfilled the goal of improving communication, and it has connected rural surgeons as a group while also engaging them with the ACS leadership. The following comments from rural surgeons are a few examples that illustrate the perceived benefits of the rural list:

- Extremely valuable. I definitely feel more connected with surgeons who do what I do.
- I enjoy the rural listserv for the sense of connectedness with other rural surgeons.
- One of the great things about listserv is relief from the isolation we all feel as rural surgeons.
- The list is the most tangible, personally applicable arm of the College I have been exposed to in nearly 40 years as a Fellow.
- It is more exciting to have a voice with the College.
- I am encouraged to attend the rural activities at the ACS [Clinical] Congress.

The ACS’ leaders support the rural list and recognize its success. Patricia L. Turner, MD, FACS, Director, ACS Division of Member Services, recently stated in an e-mail communication, “The rural listserv is an effective way to engage those who may be geographically isolated in conversations about what we do every day as surgeons. The community and camaraderie of the ACS transcends locale, and the rural surgery listserv provides a structure for some... continued on next page
## DISCUSSION CATEGORIES AND THREAD TOPICS ON RURAL LISTSERV

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of those conversations. As part of the new ACS website, Web-community functionality will bring a wealth of new ways to interact even more actively.”

In addition to the accomplishments of improved communication and engagement of rural surgeons with the College, the listserv has yielded other tangible benefits. One achievement has been the creation of a forthcoming document, Resources for Optimal Rural Surgery, which will address the common problems associated with developing the infrastructure necessary to support a rural surgical practice. The success of the rural listserv will lead to achieving key goals by addressing such topics as call coverage, locum tenens services, and the preservation of rural surgery.

The rural listserv is having an impact outside of its own boundaries. For example, Dr. Eastman has challenged surgeons operating in tertiary hospitals to create programs with a two-way exchange—not only updating education and training, but also preparing surgeons for rural life and working independently. Given its success, Dr. Eastman believes the rural listserv can serve as an example for fostering meaningful consultations and important referral relationships throughout surgical communities. The rural listserv will continue to evolve and could become a source for continuing medical education and routine video conferencing.

A new community
The rural listserv will evolve into a new group—the rural surgeon community, one of the many communities that will be formed as part of the College’s redevelopment of the member side of the ACS website. The ACRS is optimistic that this online community will retain the benefits of the rural list, while creating a new Web-based community that will be exciting, modern, and successful.

The rural listserv began as an “underdog” project, but rural surgeons responded strongly to this initiative. The effort became a success by recognizing, connecting, and engaging rural surgeons. With the establishment of the ACRS and the rural listserv, rural surgeons have an effective voice and representation in the ACS, and the perception of the neglected rural surgeon has been largely eliminated. The unique challenges of being a rural surgeon continue, but the future of rural surgery looks a little brighter because of the underdog victory of the ACS rural listserv. ◆
Earlier this year, the surgical community lost a renowned innovator, researcher, and surgical oncologist with the passing of Donald Morton, MD, FACS. Among Dr. Morton’s most significant contributions to surgical oncology was the development of sentinel lymph node (SLN) surgery for patients with melanoma that was subsequently extended to breast cancer and other solid tumors. SLN surgery allows for accurate nodal staging with lower morbidity than a complete lymphadenectomy. The procedure has been legitimized in prospective randomized breast cancer trials, and, for patients with clinically node-negative disease, SLN surgery is standard for axillary evaluation. For SLN-negative patients, axillary lymph node dissection (ALND) can be omitted without diminishing local-regional control, disease-free survival, or overall survival.1,2

While SLN surgery is used in the management of patients with clinically node-negative breast cancer, ALND remains standard practice for patients presenting with clinically node-positive disease. However, breast cancer oncologists are aware that neoadjuvant chemotherapy will clear axillary disease in 30 percent to 40 percent of these patients.3,4 Patients experiencing a nodal pathologic complete response (pCR) would not be expected to benefit from complete ALND; therefore, investigators questioned the potential role of SLN surgery. This question was formally addressed in an American College of Surgeons Oncology Group (ACOSOG) trial—ACOSOG Z1071.

ACOSOG Z1071
ACOSOG Z1071 was a phase II study designed to determine the SLN surgery false-negative rate (FNR) in clinically node-positive breast cancer patients treated with neoadjuvant chemotherapy (see figure, page 53). The protocol encouraged using dual tracer technique and specified that at least two SLNs be resected. The primary aim was to determine the SLN surgery FNR in clinical N1 patients with at least two SLNs removed. The prescribed criterion for success was a FNR of 10 percent.

The trial enrolled 756 patients, including 649 with clinical N1 disease who completed chemotherapy and then underwent SLN surgery and ALND. The SLN identification rate was 92.9 percent. In the 525
The Z1071 trial does provide data informing a way forward toward a surgical approach to the clinically node-positive axilla determined by response to therapy.

Moving forward
The Z1071 trial does provide data informing a way forward toward a surgical approach to the clinically node-positive axilla determined by response to therapy. Improvements in patient selection and approach are anticipated to help improve the performance of SLN surgery. With respect to patient selection, patients in the trial underwent axillary ultrasound (AUS) before and after chemotherapy. A secondary endpoint of the trial was to determine how the post-neoadjuvant chemotherapy AUS lymph node appearance affects the FNR and to determine how the AUS status correlates with residual pathologic disease. These critical data, which will determine if AUS has a role in selecting patients for SLN surgery, have not yet been reported.

It is also possible that molecular subtype may guide patient selection. Although the nodal pCR rates in clinically node-positive patients receiving neoadjuvant chemotherapy are 30 percent to 40 percent for all comers, the rates are highest in patients with hormone receptor-negative, high-grade tumors, and human epidermal growth factor receptor 2-positive tumors treated with neoadjuvant chemotherapy plus trastuzumab in whom axillary pCR rates of 74 percent have been reported. The Z1071 trial was not designed to address the impact of tumor biology on the SLN surgery FNR.

Surgical technique will also be critical. The Z1071 trial recommended use of dual tracers, which was done in 79.1 percent of patients. In these patients, the FNR was 10.8 percent versus
Additional data from the Z1071 trial presented at the 2012 San Antonio Breast Cancer Symposium suggest that it is useful to place a clip in the biopsy-proven positive lymph node at diagnosis and to ensure that the clipped lymph node is removed during SLN surgery.

20.3 percent when a single agent was employed. To ensure that complete SLN surgery was performed, the trial required removal of at least two SLNs. The FNR was 31.5 percent when one SLN was removed, 21 percent when two were removed, and 9.1 percent when three or more were removed. Three or more SLNs were identified in 57.1 percent of patients. Although these data demonstrate that the FNR decreases with an increasing number of SLNs removed, most surgical oncologists recognize that some patients have only a single SLN present. Experienced surgeons must assess the quality of mapping and determine if SLN surgery is appropriate for a given patient. Additional data from the Z1071 trial presented at the 2012 San Antonio Breast Cancer Symposium suggest that it is useful to place a clip in the biopsy-proven positive lymph node at diagnosis and to ensure that the clipped lymph node is removed during SLN surgery. In 96 patients with a clipped node documented to be in one of the SLNs, the FNR was 7.4 percent. Clearly, the Z1071 trial will offer much important data to help inform patient selection and surgical technique.

Conclusion
Continued improvements in systemic therapy will lead to increased pCR rates providing additional incentive to optimize local regional management. SLN surgery in clinically node-positive patients receiving neoadjuvant chemotherapy should not be abandoned based on the Z1071 results. The trial data should guide future efforts to personalize local regional management. To move forward in a thoughtful manner—that is what Dr. Morton would expect of us.

REFERENCES
Editor’s note: As part of the regular “From the Archives” column, the Bulletin will be publishing vignettes regarding important key individuals and events that have played influential roles in the history of the American College of Surgeons (ACS). These essays will be written by members of the ACS Surgical History Group, led by LaMar S. McGinnis, Jr., MD, FACS.

Prior to founding the American College of Surgeons (ACS) in 1912, Franklin H. Martin, MD, FACS, practiced gynecologic surgery in Chicago, IL. He achieved professional and personal distinction by presenting clinical and research papers at national meetings and befriending leaders in the field. He developed a large practice and was prominent within the Chicago medical community.

Ovarian transplant
In 1901, a 29-year-old woman contacted Dr. Martin because her fallopian tubes and ovaries had been removed for dysmenorrhea a year earlier, and she could not bear children. She believed her life and her prospects for marriage were ruined and asked Dr. Martin if he could transplant into her the ovaries of another woman who needed to have them removed. After performing unspecified experiments on animals, he agreed to perform the operation.

When she saw him a year later, Dr. Martin told her the procedure was experimental and that she had to assume responsibility if it failed. She consented and found a boarding place near the hospital. One month later, Dr. Martin found a donor who agreed to the procedure. After the operation, he wrote:

> The operation in all of its details was satisfactorily performed from the standpoint of my prearranged technique and the patient recovered promptly. Monthly reports were received on this and similar cases. They revealed that the monthly function was restored to a degree in the early months, and that the unpleasant symptoms of premature menopause were materially lessened.*

Dr. Martin subsequently performed this procedure on several women, reporting two more cases of heterotransplantation and five cases of homotransplantation in 1908. His initial enthusiasm was dulled, however, when none of the patients began to menstruate normally. After an extensive review of the literature in 1917, he concluded, “In spite of the perhaps overenthusiastic conclusions of a few workers, neither homonor heterotransplantation has as yet justified its use in human surgery.”†

New standards
Since Dr. Martin performed these operations, the ethics of human experimentation have been carefully defined. An institutional review board would not have approved his project as described. Dr. Martin did not understand that his experiment was doomed because the transplanted ovary had no blood supply, nor did he know about the post-transplant rejection process that is currently combated through immunosuppression.

It was not until 2008 that the recipient of a whole ovary transplant delivered a healthy baby. The ovarian vessels were anastomosed using microsurgical techniques, and immunosuppression was unnecessary because the donor was the recipient’s identical twin. Success eluded Dr. Martin and his courageous patient, but they had set the stage for the scientific advances that enabled another surgeon to bring happiness to a childless couple more than a century later.

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Media reports of possible exposure to Creutzfeldt-Jakob disease (CJD) continue to occur because some health care facilities are reportedly not following recommended guidelines for the decontamination, sterilization, and quarantine of neurosurgical equipment. Routine sterilization practices have proven ineffective against the CJD organism and exposure may occur when a surgeon operates on a patient using instruments that have been used previously on a different patient with undiagnosed CJD without having undergone CJD-specific sterilization.

CJD is extremely rare—only one in 1 million people worldwide are diagnosed with the disease.* However, recent incidents signal the need for renewed awareness and implementation of preventative measures to address infection control during surgery. It is essential that surgeons and other health care providers, as well as sterile processing staff, take all necessary measures to prevent the transmission of CJD.

To that end, The Joint Commission recently issued an addendum to its 2001 Sentinel Event Alert on the recommended practice of quarantining surgical equipment. The addendum encourages health care institutions to use specific CJD-related, evidence-based sterilization guidelines provided by the Centers for Disease Control and Prevention, the World Health Organization (WHO), and the American National Standards Institute with the Association for the Advancement of Medical Instrumentation.

**CJD case study and sentinel event**

The 2001 Sentinel Event Alert explains how a Joint Commission-accredited hospital performed a brain biopsy on a patient who did not present with symptoms of CJD.†

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weeks later, a pathology report confirmed CJD in the patient. In the meantime, six other patients had undergone brain biopsies using the same instruments. A manual instrument tracking system was in place that helped the hospital identify and inform patients of their possible exposure to CJD.

The hospital reported the event to The Joint Commission and conducted its own root-cause analysis, which yielded three important findings:

• A CJD or prion disease patient may present without symptoms of CJD.

• The time interval between biopsy and pathology report should be monitored and reviewed to ensure the shortest time from biopsy to results.

• Instruments used in brain biopsy procedures should not be reused when a patient’s diagnosis is uncertain at the time of the procedure.

These results caused the hospital to revise its policies and procedures. The hospital now requires follow-up with pathology reports within one week, and it also quarantines instruments used in neurosurgery—including brain biopsies—for patients with an unknown or uncertain diagnosis until a confirmation of diagnosis is determined.

Quarantining surgical equipment

The Joint Commission encourages health care providers to establish policies for the cleaning, disinfection, sterilization, and disposal of instruments used in neurosurgery, as well as with loaner instrumentation practices. In 1999, WHO developed CJD infection control guidelines that stated, “Items for quarantine should be cleaned by the best non-destructive method as per Section 6 and Annex III, sterilized, packed, dated and 'Hazard' labeled, and stored in specially marked rigid sealed containers.”

If a CJD diagnosis is negative, the instruments can be routinely sterilized and returned to use. However, if a CJD diagnosis is positive, the instruments should be incinerated or sterilized using stringent sanitization methods for heat-resistant instruments. These methods are described in Annex III of the WHO guidelines and include the use of 1N sodium hydroxide (NaOH).

When surgeons and other health care providers consistently remind their colleagues about infection prevention measures—including the appropriate cleaning, decontamination, and sterilization of surgical instruments—they will help to improve the safety and quality of patient care.

For more information on CJD and infection control during surgery, visit jointcommission.org.

To protect your children, keep your pool safe

by Richard J. Fantus, MD, FACS, and Michael L. Nance, MD, FACS

Approximately 71 percent of the earth’s surface is covered in water, with the world’s oceans accounting for 96 percent of the planet’s water mass.* However, it does not take a vast body of water to signify a potential threat of drowning.

Swim at your own risk
Drowning is defined as the process of experiencing respiratory impairment from submersion or immersion in liquid with the outcome classifying as death, morbidity, or no morbidity.† In the U.S., each day approximately 10 people die from unintentional drowning, and typically two of these individuals are 14 years of age or younger. Children ages one to four have the highest drowning rates, and, unfortunately, most of them drown in home swimming pools. Drowning is the cause of more deaths among children in this age group than any other cause except congenital anomalies. Among the one-to-14-year-old age group, fatal drowning is only second to motor vehicle crashes in causing unintentional injury deaths. Approximately 80 percent of drowning death victims are male, and drowning is the fifth leading cause of death, regardless of gender, by unintentional injury.‡

Several factors influence drowning risk, including swimming ability, lack of supervision while swimming, swimming pools without adequate barriers, failure to wear life jackets, seizure disorders, and alcohol use. More than half of drowning victims treated in emergency departments require hospitalization or transfer for further care. This hospitalization rate is almost nine times greater than that of any other unintentional injury. Though not fatal, these hospitalized drowning patients may have sustained brain injury leading to long-term disabilities that affect memory, learning, and impaired activities in daily life.‡

To examine the occurrence of pediatric drowning 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 with age younger than or equal to 19.

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The NTDB Annual Report 2013 is available on the ACS website as a PDF file and as a PowerPoint presentation at www.ntdb.org.
In addition, information regarding how to obtain NTDB data for more detailed study is available on the website.
Several factors influence drowning risk, including swimming ability, lack of supervision while swimming, swimming pools without adequate barriers, failure to wear life jackets, seizure disorders, and alcohol use.

Safety first
Of course, it is impossible and undesirable to eliminate exposure to water, but one can take steps to reduce the risk of drowning incidents. Supervise small children when in or around water, including when they are bathing or playing in small plastic pools. Use the buddy system when swimming and choose locations that have lifeguards. Teach children to swim at an early age. For someone with a seizure disorder, provide one-to-one supervision. To protect your children, keep your home pool safe by installing a four-sided fence with self-latching gates that is at least four feet high to separate the pool area from the house, and consider installing an alarm.

Throughout the year, we will be highlighting NTDB data through brief reports in the Bulletin. The NTDB 2013 Pediatric Report is available on the ACS website at http://www.facs.org/trauma/ntdb/index.html. In addition, information on how to obtain NTDB data for more detailed study is posted on the site. If you are interested in submitting your trauma center’s data contact Melanie L. Neal, Manager, NTDB, at mneal@facs.org.

Acknowledgement
Statistical support for this article has been provided by Chrystal Caden-Price, Data Analyst, and Alice Rollins, NTDB Coordinator.
The Commission on Cancer (CoC) of the American College of Surgeons (ACS) has granted the 2013 Outstanding Achievement Award (OAA) to 74 accredited cancer programs throughout the U.S. The CoC based the awards on qualitative and quantitative surveys conducted last year.

Established in 2004, the CoC OAA recognizes cancer programs that strive for excellence in providing quality care to cancer patients. The award is granted to facilities that demonstrate a commendation level of compliance with seven standards that represent areas of program management, clinical services, patient outcomes, and data quality. The level of compliance with the seven standards is determined during an on-site evaluation by a physician surveyor. In addition, facilities must receive a compliance rating for each of the remaining 27 cancer program standards.

The 74 programs, approximately 14 percent of the cancer programs surveyed, received the OAA as a result of surveys performed in 2013. Most of the recipients are community-based facilities; this year, however, academic hospitals, integrated networks, a pediatric hospital, and a freestanding cancer center received the award as well.

View the complete list of award-winning cancer programs at http://www.facs.org/cancer/coc/outstandingachievement2013list.html.
Dr. Ko appointed to NQF Surgery Standing Committee

Nominated by the American College of Surgeons (ACS), Clifford Y. Ko, MD, MS, MSHS, FACS, FASCRS, was recently appointed to the National Quality Forum’s (NQF) Surgery Standing Committee. The committee identifies and endorses performance measures for accountability and quality improvement that address a number of surgical specialty areas, including cardiac, thoracic, vascular, orthopaedic, neurosurgery, urologic, and general surgery. View additional information about the committee at http://www.qualityforum.org/ProjectDescription.aspx?projectID=73838.

Dr. Ko, Director of the ACS Division of Research and Optimal Patient Care, oversees all of the College’s quality improvement programs, including those activities conducted through the Committee on Trauma and the Commission on Cancer, as well as the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program, the National Accreditation Program for Breast Centers, the Surgeon Specific Registry, and the ACS National Surgical Quality Improvement Program.

Dr. Ko also has served on many NQF committees, including the Colorectal Cancer Technical Working Group, National Voluntary Consensus Standards for Hospital Care, Surgery and Anesthesia Technical Expert Panel, and the Health Care Outcomes Steering Committee. He was the principal investigator on a study assessing the NQF indicators for cancer, as well.

The NQF is a multi-stakeholder, not-for-profit organization that builds consensus on national priorities and goals for performance improvement, working in partnerships to achieve them; endorses national consensus standards for measuring and publicly reporting on performance; and pursues national goals through education and outreach programs.

Dr. Sachdeva elected vice-president of the Society for Academic Continuing Medical Education

Ajit K. Sachdeva, MD, FACS, FRCSC, Director, Division of Education, American College of Surgeons, was recently elected to the position of vice-president of the Society for Academic Continuing Medical Education (SACME). In this role, Dr. Sachdeva will serve on the Board of SACME and as a member of the joint working group of SACME and the Association of American Medical Colleges.

SACME is the national organization of continuing medical education/continuous professional development professionals, and includes leaders in this field from medical schools, specialty societies, and other stakeholder groups. SACME aims to advance the field of continuing medical education/continuous professional development through research, scholarship, practical application of innovations, and dissemination of best practices.
The Women in Surgery Committee of the American College of Surgeons (ACS) is seeking applications for the Mentorship Program for Women Surgeons. Applications for mentees are due July 31.

This program is an opportunity for early-career female surgeons to develop a mentoring relationship with established surgeons in all of the specialties represented within the ACS. This year, the program will include up to 12 participants who should plan to attend the ACS Clinical Congress 2014 in San Francisco, CA. Applicants to the program must be either ACS Fellows or Associate Fellows, or currently in the process of applying for Fellowship.

**Requirements and responsibilities**

Applicants should need mentorship in one or more of the following areas:

- Career development
- Research
- Work-life balance
- Practice development
- Transition to practice
- Leadership development

Mentee responsibilities will include the following:

- Participate in an introductory call with her mentor

**Mentors**

The Women in Surgery Committee also is seeking individuals to serve as mentors for the program. Mentor responsibilities will include the following:

- Attend the ACS Clinical Congress in San Francisco to meet the mentee
- Establish a plan to cultivate one or more of the areas in need of mentoring and identify specific goals
- Commit to connecting with the mentor minimally on a quarterly basis
- Complete an evaluation form and submit a brief summary on your mentor experience at the conclusion of the program in October 2015

Interested individuals should contact Connie Bura, Assistant Director, ACS Member Services, at cbura@facs.org to receive an application. In addition to the application, candidates will be required to submit their curriculum vitae by July 31, along with a personal statement discussing the benefits that the program will provide to their career.

Individuals interested in serving as mentors should contact Ms. Bura at cbura@facs.org before July 31. ◆
When the American College of Surgeons launches its new website this summer, it will include state-of-the-art online communities you can access anytime, anywhere, and on any communications device.

This exciting new member platform will allow you to:

- Find and connect with your colleagues
- Participate in discussions relevant to your specific interests
- Upload and access documents, photos, and videos
- Engage with the experts

Communities will be created in phases, and the five communities that will launch initially are:

- Board of Governors*
- Breast surgery
- General surgery
- Residents
- Rural surgery

Based on information indicated in your member profile, you will automatically be added to communities that are relevant to your specialty or area of interest. You can join additional communities or change communities if you’d like. If your interests fall outside of those listed—don’t worry. We’ll be adding other communities down the road.

*Note: The Board of Governors is the only closed group of these initial five.
I was very fortunate to be chosen as the first Carlos Pellegrini Traveling Fellow of the American College of Surgeons (ACS).

**Cleveland Clinic Florida**
My visit to the U.S. started September 30, 2013, when I met my host, ACS Regent Steven Wexner, MD, FACS, chair, department of colorectal surgery, Cleveland Clinic Florida, Weston, and his team. They showed me their state-of-the-art operations for treating a variety of colorectal conditions, including ultra-low rectal cancer, inflammatory bowel disease, and complex ano-rectal disease. I felt particularly fortunate to watch Dr. Wexner demonstrate, without assistance from a plastic surgeon, the harvesting of a gracillus muscle flap in a minimally invasive approach to recto-vagina fistula repair. Although my visit to the Cleveland Clinic Florida was short, ending on October 3, it was valuable and helpful.

**2013 Clinical Congress**
After visiting Florida, I went to Washington, DC, to give a presentation at the Fifth Worldwide Congress of the Clinical Robotic Surgery Association, followed by participation in the 2013 ACS Annual Clinical Congress. I had never had the opportunity to attend the ACS Clinical Congress before, and I was so thankful to be there. It was an excellent academic meeting with ample time for learning and sharing of surgical knowledge. I also enjoyed participating in a fantastic social event where surgeons gathered to celebrate the ACS Centennial. My experience at the Clinical Congress was unforgettable. It was one of the biggest surgical meetings I have attended and yet was well-organized in terms of registration, transportation between the convention center and hotels, smooth presentation of all the sessions, and social events. Most impressive was the variety of topics covered at the meetings. Apart from...
presentations on the latest clinical developments, the Clinical Congress also featured sessions on more personal interests, including tax planning, asset management, and career and leadership development.

I was also deeply touched to see the respect and tribute that the ACS pays to surgeons who dedicate themselves to volunteerism and humanitarian efforts. This area receives little attention in the surgical community of my country, where honor is mainly given to surgeons who excel in clinical or academic performance. I was moved by the Clinical Congress presentations during the plenary session on Humanitarian Surgical Outreach at Home and Abroad and the recognition of award winners at the Board of Governors dinner.

At the College’s International Scholars and Travelers 2013 session I presented a summary of my research on various strategies to improve outcomes in laparoscopic colorectal surgery. I was pleased to meet and speak to Victor Fazio, MD, FACS, emeritus chairman of the department of colorectal surgery, Cleveland Clinic, OH, who offered kind and helpful advice.

By attending various academic sessions and social activities, I had opportunities to meet renowned U.S. surgeons—among them good friends from my department who have come to Hong Kong frequently to support our surgical meetings. I was most excited to see Prof. Stephen Deane, MB, BS, FACS, Chair of the ACS International Relations Committee, because he was my teacher at medical school in Sydney, Australia.

A Welcome to Washington Tour, which included visits to notable buildings, monuments, and memorials in Washington, DC, as well as Arlington National Cemetery, provided me with insights into American history.

**Learning from Dr. Pellegrini**

After the ACS Clinical Congress, I spent a weekend in Vancouver, BC, and then crossed the U.S.-Canada border by car to arrive in Seattle, WA, and start my visit to the department of surgery at the University of Washington Medical Center (UWMC) on October 13. My hosts were ACS President Carlos Pellegrini, MD, FACS, FRCSI(Hon), The Henry N. Harkins Professor and Chair, department of surgery, and Alessandro Fichera, MD, FACS, professor of surgery.

I spent a very meaningful week at UWMC. I worked largely with Dr. Fichera and his team, and we had good discussions about our experience in colorectal surgery. Dr. Fichera has excellent operative skills and a very good sense of humor, and I very much enjoyed observing his operations. I also joined Gary Mann, MD, FACS, associate professor of surgery, in a robot-assisted rectal cancer resection, and we shared our views on the application of robotic systems in colorectal cancer surgery. UWMC is equipped with the latest da Vinci Si system, which has a dual console and allows for direct supervision and teaching of trainees via the robotic system.

My visit to UWMC coincided with its Harkins Surgical Symposium. The UWMC department staff made excellent presentations on a variety of topics, and their comments demonstrated the unit’s dedication to high standards of patient care.

My sincere thanks to Dr. Pellegrini and Peter Wu, MD, FACS, chairman of the organizing committee, for inviting me to present my experience in colonic stenting for obstructive colorectal cancer and robot-assisted rectal cancer resection. The presentation allowed me to interact with the residents, and to introduce them to my department. Most importantly, I offered my thanks for all the kindness that Dr. Pellegrini has shown toward the University of Hong Kong through the years.
A highlight of the symposium was the Alfred A. Strauss Lecture, and I was honored to converse again with the speaker, former ACS Executive Director Thomas R. Russell, MD, FACS, a renowned colorectal surgeon who had visited my department in the past. Although the theme of this Strauss Lecture centered on the U.S. health care system, the message was not restricted to U.S. surgeons, and I, too, benefited from Dr. Russell’s lecture.

Dr. Pellegrini kindly allowed me to stay in his home during my visit to UWMC. I was looked after very well by him and his wife, Kelly. I treasured the chance to build a good relationship with them and their two lovely dogs. I particularly enjoyed the time Dr. Pellegrini and I shared on our way to work every morning in his car. I enjoyed the beautiful scenery on both sides of Lake Washington as well as the opportunity to speak with and learn from a great and kind leader about surgery, hospital administration, and life in America.

Professional friendships to last a lifetime
My experience as the first Carlos Pellegrini Traveling Fellow allowed me to visit and connect with two first-class U.S. surgical centers and to rewardingly participate in the very special Centennial of the ACS at the 2013 Clinical Congress. I am grateful to several individuals for my successful trip, including Prof. John Wong, MB, BS, FACS(Hon), who led the department of surgery at the University of Hong Kong to become a world-renowned institution and established good collaborative relationships with many surgical leaders in the U.S. As a result, I was well recognized and received in the U.S.

I am also obliged to Drs. Wexner and Pellegrini, who hosted my visit. Finally, I thank Kate Early, the International Liaison and Scholarships Administrator, ACS Division of Member Services, who worked tirelessly to ensure the smooth travels of each international scholar in the class of 2013.

Soon after my visit to the U.S., Dr. Pellegrini came to Hong Kong with Kelly, and I had the chance to introduce them to my family. I look forward to seeing all the friends I made in the U.S. again soon, and welcome you all to visit Hong Kong and my department in the future. ♦
2014 Oweida Scholar announced

John M. McBee, MD, FACS, a general surgeon practicing in Pendleton, OR, has been selected to receive the 2014 Nizar N. Oweida, MD, FACS, Scholarship of the American College of Surgeons (ACS).

Dr. McBee has provided broad-based surgical care to the people of Pendleton, a ranching and farming community, for 20 years. He is delighted that the scholarship will allow him to attend Clinical Congress 2014, both to polish his surgical skills and to interact with academic and community surgeons from many countries. Dr. McBee will make a presentation before the Scholarships Committee and the Rural Surgery Forum during Clinical Congress.

The Oweida Scholarship was established in 1998 in memory of Dr. Oweida, a general surgeon from a small town in western Pennsylvania. The $5,000 award subsidizes attendance at the annual Clinical Congress, including Postgraduate Course fees.

The Oweida Scholarship is intended to help young surgeons practicing in rural communities to attend the Clinical Congress and benefit from its educational experiences. The Executive Committee of the Board of Governors awards the Oweida Scholarship annually.

The requirements for this award are posted on the ACS website at http://www.facs.org/memberservices/oweida.html. The application deadline for the 2015 Oweida Scholarship is December 15, 2014.

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The American College of Surgeons (ACS) is accepting applications for the George H.A. Clowes, Jr., MD, FACS, Memorial Research Career Development Award. This award, offered through the generosity of The Clowes Fund, Inc., of Indianapolis, IN, is intended to provide support for the research of a promising young surgical investigator. The award consists of a stipend of $45,000 for each of five years and is not renewable thereafter. Applications are due August 1, 2014.

**General requirements**

General policies concerning the granting of the George H.A. Clowes, Jr., MD, FACS, Memorial Research Career Development Award are as follows:

- The award is restricted to a Fellow or an Associate Fellow of the ACS who has completed an accredited residency in general surgery within the preceding seven years and has received a full-time faculty appointment at a medical school accredited by the Liaison Committee on Medical Education in the U.S. or by the Committee for Accreditation of Canadian Medical Schools. The applicant’s academic appointment may not be above the level of assistant professor. Applicants should provide evidence, by publication or otherwise, of productive initial efforts in laboratory research.

- The award may be used for salary support or other purposes at the discretion of the recipient and the institution. Indirect costs are not paid to the recipient or to the recipient’s institution.

- The ACS Scholarships Committee will look preferentially upon applicants who have received investigator-initiated, peer-reviewed, federally funded research awards (for example, National Institutes of Health (NIH) R01/K08/K23, Veterans Affairs Merit Review, and Canadian Institutes of Health Research grants). The committee will not consider applicants who have already received research career development awards from professional societies. The recipient must notify the College’s Scholarships Administrator to request approval if another source of scholarship or fellowship funding is received.

- Approval of the application is required from the administration (dean or fiscal officer) and the head of the applicant’s department or administrative unit. This approval includes a commitment to continuation of the academic position and facilities for research during the entire period of the award. In addition, assurance must be provided that at least 50 percent of the applicant’s time will be spent conducting the research proposed in the application. This percentage may run concurrently with the time requirements of NIH or other accepted funding.

- In addition to the application form, the applicant must submit an NIH-style biosketch, a detailed research plan up to eight pages in length, and propose a budget for the five-year period of the award. The applicant also is required to submit a cover letter of no more than one page describing personal career objectives, how these career objectives will be achieved, and how the research protocol furthers the applicant’s career development. The Scholarships Committee requires an annual narrative progress report from the recipient on which annual renewal of the award is based.

- While holding the award, the recipient is required to attend the ACS Clinical Congress in 2016, 2018, and 2020 and present reports to the Scholarships Committee and its guests.

- Upon completion of the five-year funding period, the recipient will be required to submit a final report summarizing research progress and providing information regarding current academic rank, sources of research support, and future plans. The recipient is also required to apply to the Surgical Forum at the conclusion of the award period.

The closing date for receipt of completed applications and all related documents is August 1, 2014. The application form may be accessed at [http://www.facs.org/memberservices/acsclowes.html](http://www.facs.org/memberservices/acsclowes.html). Additional documents and questions are to be directed to the Scholarships Administrator at scholarships@facs.org.
It was my great privilege to be selected as the inaugural American College of Surgeons (ACS) Murray F. Brennan, MD, FACS, International Guest Scholar. I sought to make the most of the wonderful opportunity afforded by the scholarship and was able to visit a number of medical centers in the U.S.

I am a surgical oncologist based in Sydney, Australia, and my practice encompasses melanoma and non-melanoma skin cancers, soft tissue sarcoma, thyroid, and parathyroid disease.

**Duke University**
My trip commenced with a visit to the surgical oncology division at Duke University Medical Center, Durham, NC. My hosts were Julie Ann Sosa, MD, FACS, professor of surgery and chief, section of endocrine surgery at Duke, and Sanziana Roman, MD, FACS, professor of surgery and chief of general surgery, Durham Veterans Affairs (VA) Medical Center. I spent the first day at Duke with Dr. Sosa, attending clinic and observing her in the operating room (OR) performing thyroidectomies. I enjoyed participating in the thyroid tumor board meeting and finished the day by attending grand rounds.

The following day I observed Dr. Sosa conducting an interesting case—resection of a parathyroid adenoma from the superior mediastinum, followed by a thyroidectomy and central neck dissection for a locally invasive papillary thyroid cancer. I began my third day at Duke by attending the morbidity and mortality meeting and grand rounds, followed by more time in the OR with Dr. Sosa.

I spent my final day at Duke with Dr. Roman. I had the opportunity to observe her and Randall Scheri, MD, FACS, assistant professor of surgery, perform a laparoscopic retroperitoneal adrenalectomy via a posterior approach. Later that day, I attended clinic in the VA Medical Center, which was rather similar to the public hospital clinics I have encountered in Australia.

During my time at Duke, I stayed with Drs. Sosa and Roman, who were generous hosts. I also met Douglas Tyler, MD, FACS, chief, division of surgical oncology, and Paul Mosca, MD, FACS, associate professor of surgery, during a delightful evening meal that Drs. Sosa and Roman had prepared.

**Clinical Congress**
I then traveled to Washington, DC, to attend the 2013 ACS Clinical Congress. Before the conference, I attended part of...
the Association for Academic Surgery fall courses and the ACS Presidential Dinner with my husband at the kind invitation of the incoming ACS President, Carlos A. Pellegrini, MD, FACS, and his wife Kelly. The dinner took place in the Blue Room at the Omni Hotel, which is where President John F. and Jacquelyn Kennedy had their wedding reception. It was intriguing that the dinner commenced with a toast to the Queen, reflecting the shared origination of the ACS in Canada.

Before embarking on the educational programs at the Clinical Congress, I met the other International Scholars at our hotel. It was great to mix with surgeons from so many different countries, backgrounds, and specialties. Upon arrival at the convention center, we were escorted backstage, where it was an honor to participate in the prestigious Opening Ceremony.

My Clinical Congress experience was truly memorable. As an International Guest Scholar, on the first day, not only did I participate in the Opening Ceremony, but I also attended the Centenary International and Volunteer Reception at the Carnegie Library, and the breakfast meeting of the International Relations Committee. In addition, all the scholars were presented with a commemorative certificate at a luncheon hosted by the International Liaison Section of the ACS. The final official engagement was the Board of Governors Dinner.

It was great to spend time with my ACS mentor at the Clinical Congress, Rebecca Sippel, MD, FACS, associate professor, division of general surgery, and chief, section of endocrine surgery, University of Wisconsin-Madison, who did a stellar job. The Clinical Congress was amazing both in its scale and the variety of sessions offered. I attended sessions that included topics such as melanoma, chest wall reconstruction, emergency surgery, acute pancreatitis, parathyroid disease, and smoking cessation. A highlight of the conference was listening to the other International Scholars’ and Traveling Fellows’ presentations and having the opportunity to present my own work.

Following my time in Washington, DC, I diverted from my academic schedule and traveled to Chicago, IL, to run in the Chicago Marathon. I had a great race and ran a personal best (3:16:27). I also appreciated the beer offered at the finish line!

University of Wisconsin
From Chicago I traveled to Madison to visit the University of Wisconsin (UW) Hospital and Clinics. In addition to Dr. Sippel, my hosts were Herb Chen, MD, FACS, professor of surgery; chairman, division of general surgery; and vice-chairman of research, department of surgery, and Layton F. Rikkers, MD, FACS, ACS First Vice-President and professor emeritus, UW. They had generously planned a varied and full schedule of activities both at work and after hours.

On my first day, I attended the endocrine case conference and a lab meeting. Later that
day, I had meetings with Ken Meredith, MD, FACS, associate professor of surgery, and Greg Kennedy, associate professor of surgery, before attending clinic with Dr. Chen which featured several patients with multiple endocrine neoplasia.

I went out for dinner with Dr. Sippel and Adjwoa Opoku-Boateng, MD, FACS, one of the endocrine surgery fellows, at which time I sampled fried cheese curds—a Wisconsin dish far tastier than it sounds—before going to a blues concert.

On the second day of my visit, I attended the morbidity and mortality conference and grand rounds before observing thyroid cases in the OR with Dr. Chen. That afternoon I met with Mark Albertini, MD, associate professor of medicine, and had a useful discussion comparing melanoma services at UW and in Sydney, followed by dinner with another endocrine surgery fellow, Dawn Elfenbein, MD.

My third day in Madison started with a delicious breakfast with Dr. Chen and his wife, Harriet, followed by an informative guided tour of the state Capitol building, constructed over 11 years, from 1906 to 1917. I then met with Stephanie Orzechowski, RN, MBA, the director of oncology services, who took me on a tour of the UW Carbone Cancer Center, which provides comprehensive services to oncology patients. This was followed by a meeting with Howard Bailey, MD, the interim director of the cancer center and professor of medicine. I also met with Heather Neumann, MD, assistant professor of surgery, whose practice covers breast, sarcoma, and melanoma. We had a useful discussion about the pros and cons of minimally invasive inguinal node dissection, the subject of a trial in which she was participating. I had a pleasant sushi dinner that night with Caprice Greenberg, MD, FACS, associate professor of surgery, and Carla Pugh, MD, FACS, associate professor of surgery.

The following day I visited the OR with Emily Winslow, MD, FACS, assistant professor and a hepatobiliary surgeon. I then met with Mary Beth Henry, NP, and Sarah Schaefer, RN, MS, ANP-BC, who offered useful insights into their roles, which was interesting because nurse practitioners are far less common in Australia than in the U.S. I then met with the chair of the department of surgery, Craig Kent, MD. Later that afternoon, I met with Lauren Howard, director of clinical research, and Emily Breunig, clinical research co-coordinator. That evening, I had dinner with Dr. Chen and his wife and Dr. Neumann and her husband, Abe.

On my last day in Wisconsin, I managed to go for a jog alongside Lake Mendota at sunrise. I then went to the farmers’ market with Dr. Chen and, to my astonishment, found a stall selling emu meat! I appreciated being able to meet both formally and informally with a variety of clinicians and health care workers during my time in Wisconsin, which reflected my usual multidisciplinary work environment in Sydney.
Memorial Sloan-Kettering
I then flew to New York, NY, where I spent the week visiting Memorial Sloan-Kettering Cancer Center (MSK). It was an honor to meet with Murray Brennan, MD, FACS, and a privilege to have the opportunity to visit such a world-renowned cancer center. My visit commenced with grand rounds, and I spent the remainder of the day observing in the OR. I was able to observe cases by Samuel Singer, MD, FACS, chief, gastric and mixed tumor service; Mary Sue Brady, MD, FACS, surgical oncologist; Jatin Shah, MD, FACS, FRCSEd, chief, head and neck service; and Ashok Shaha, MD, FACS, chair, head and neck surgery and oncology. During the remainder of my time at MSK, I observed Daniel Coit, MD, FACS, surgical oncologist, in the OR, and attended several clinical meetings, including the general surgery conference, the gastric and mixed tumor pre-op conference, the head and neck conference, and the hepatobiliary conference. I also had the opportunity to meet with Peter J. Allen, MD, FACS, surgical oncologist; Dr. Shaha; and Christopher Barker, MD, a radiation oncologist.

In addition, I attended the sarcoma outpatients clinic and Dr. Shaha’s thyroid clinic. After work I was fortunate to spend some time with Laura Wang, MD, an Australian surgical resident doing research in thyroid cancer in the head and neck unit, who helped introduce me to the sights of New York City at night. I also spent an evening with Jim Barone, MD, FACS, who writes The Skeptical Scalpel blog, and family, who kindly hosted a dinner on my behalf. I made the most of my time in New York City, sampling various cuisines, seeing the Book of Mormon and a performance by the New York Philharmonic, enjoying runs in Central Park, and a stroll across the Brooklyn Bridge.

Vanderbilt
After the hustle and bustle of New York City, I headed south to Nashville, TN, to visit the Vanderbilt University Medical Center and meet my host, Carmen Solórzano, MD, FACS, professor of surgery and director, Vanderbilt Endocrine Surgery Center. I was born and raised in Tamworth, Australia’s country music capital, which made Nashville an interesting cultural experience. My first night there was marked by dinner in the home of Naji Abumrad, MD, FACS, chairman of the department of surgery, where it was a pleasure to catch up with Nipun Merchant, MD, FACS, professor of surgery and cancer biology. My first night there was marked by dinner in the home of Naji Abumrad, MD, FACS, chairman of the department of surgery, where it was a pleasure to catch up with Nipun Merchant, MD, FACS, professor of surgery and cancer biology.

After a weekend of soaking up the Nashville vibe, I had a productive two days at Vanderbilt. I was fortunate to observe Dr. Solórzano’s operative approach to parathyroid disease on both days of my visit. It was interesting to attend the melanoma clinic where I met with Mark Kelly, MD, FACS, associate professor of surgery and chief, division of surgical oncology. I also attended a surgical oncology teaching session and had a useful discussion with Dr. Solórzano regarding the use of clinical databases. Dr. Solorzano was a generous host during my time in Nashville.

Moffitt Cancer Center
My next port of call was Tampa, FL, where I visited the Moffitt Cancer Center. My hosts were Vernon Sondak, MD, FACS, chair of the department of cutaneous oncology and professor of surgery, and Bryan McIver, MD, FACS, program leader of head and neck and endocrine oncology and professor of medicine. I was fortunate to be able to stay in Dr. McIver’s home during my time in Tampa.

On my first day at Moffitt, I attended Dr. Sondak’s cutaneous oncology clinic and the melanoma tumor board meeting. I also met with Jane Messina, MD, associate professor and member of the cutaneous oncology group. On my second day at Moffitt, I spent time with the head and neck and endocrine oncology program, attending the head and neck clinic with Tom McCaffery, MD, FACS, professor of otolaryngology-head and neck surgery, and Dr. McIver’s endocrinology clinic. The following day I visited the OR and spent time observing Dr. Sondak; Jonathan Zager, MD, FACS, surgical oncologist, associate member of the departments of cutaneous oncology and...
On my final day at Moffit, I attended clinic with Ricardo J. Gonzalez, MD, FACS, sarcoma program leader and assistant professor of surgery, before spending time in the OR with Dr. Zager observing an isolated limb infusion case, and subsequently participating in the sarcoma tumor board meeting.

MD Anderson
I then traveled to Houston, TX, to visit the MD Anderson Cancer Center. Unfortunately, due to various bureaucratic obstacles, my visit was shorter than planned, but it was nonetheless interesting and enjoyable.

After spending half a day attending to paperwork, I met with Jeff Gershenwald, MD, FACS, professor, department of surgical oncology, who took me on a tour of MD Anderson. It is a remarkable facility in many ways, but possibly its most striking feature is its sheer size, dwarfing any center in Australia.

At MD Anderson, I observed the activities of the melanoma and the endocrine surgery units. I watched Dr. Gershenwald and Anthony Lucci, MD, FACS, professor, department of surgical oncology, perform thyroid operations with Nancy Perrier, MD, FACS, professor, department of surgical endocrinology. I also attended a melanoma clinic with Richard Royal, MD, FACS, associate professor of surgical oncology, and again was impressed by the use of nurse practitioners.

I had a meeting with Elizabeth Grubbs, MD, FACS, assistant professor of surgical oncology, at which we discussed approaches to parathyroid disease and the use of the intraoperative nerve monitor. I also attended clinic with Dr. Perrier.

While in Houston, I was able to take the opportunity to catch up with Lillian Kao, MD, FACS, associate professor, department of surgery, The University of Texas Health Science Center, and greatly appreciated the hospitality extended by Scott Lemaire, MD, FACS, professor of surgery at Baylor College of Medicine, and family, with whom I had an enjoyable stay.

Career highlight
The Murray Brennan International Guest Scholarship has been one of the highlights of my professional career. I made the most of the opportunities I had to learn and exchange experiences with my American colleagues and to sample the American way of life.

It was great to be able to interact with so many prominent and inspiring female surgeons and to network with so many fantastic professionals. I look forward to being able to reciprocate such wonderful hospitality in Sydney. On reflection, I have realized that although there are great differences between the U.S. and Australia in the way health care is funded, we all face the same fundamental challenges.
I was thrilled to be selected as one of the two American College of Surgeons (ACS) 2013 International Surgical Education Scholars. As the director at the time of the surgical skills center at Ahmadu Bello University Teaching Hospital, Zaria, Nigeria, I viewed this scholarship as a great opportunity to interact with simulation experts in North America, gain more knowledge on simulation training, and to learn about recent developments in the field.

My specific goals during the scholarship were to:

- Design new simulation curricula for surgical and nonsurgical health care workers
- Develop tools for assessing the quality of training at our center in Zaria
- Improve my management and administrative skills

However, at the conclusion of the scholarship, I achieved more than I had originally set out to accomplish and even had to reprioritize my objectives.

**Arrival in the U.S.**

The trip from Nigeria to Washington, DC, for the 2013 ACS Clinical Congress was long but pleasant. Staying at the hotel recommended for the scholars attending the conference had an added advantage, as I had fruitful discussions over breakfast and during shuttle bus rides with scholars from other parts of the world. Of note were my interactions with Stephen Smith, MB, BS, BSc, MS, FRACS, who runs the endoscopy skills center at the University of Newcastle, Australia.

My first activity at the meeting was participation in the Surgical Education: Principles and Practice Postgraduate Course on October 6. The program, moderated by Anne T. Mancino, MD, FACS, associate professor of surgery, University of Arkansas for Medical Sciences, Little Rock, was well-organized and highly interactive. I learned the rudiments of adult learning and the value of obtaining feedback from learners with a view toward determining their needs and expectations. The need for feedback obtained through deliberate, scheduled sessions at the end of the learning experience recurred at all the institutions that I visited in the U.S.

The Clinical Congress comprised plenty of attractions and interesting sessions, many of which took place simultaneously. I found the Trauma Update 2013 Postgraduate Course on October 7 to be very informative, especially the prehospital session, as that aspect of emergency health care is often neglected in my country, and the resuscitation session, which focused on the fluid regimen for trauma.

by Philip Mshelbwala, MB, BS, FWACS
patients. The How to Mentor a Newly Trained Partner session was beneficial in raising issues that are rarely discussed during or after residency training.

A high point of the Clinical Congress was the College’s International Scholars and Travelers 2013 session. This was a whole afternoon meeting where the ACS scholars presented works from their areas of interest, covering a variety of topics. The History and Current Role of the International Relations Committee presented by the other 2013 International Scholar for Surgical Education, Giuseppe Nigri, MD, PhD, FACS, FRCS, assistant professor of surgery, Sapienza University of Rome, Italy, contained many tips that proved useful during my subsequent tours of U.S. health care institutions. In addition, Ajit Sachdeva, MD, FACS, FRCSC, Director, ACS Division of Education, offered advice to both of us at the conclusion of the Clinical Congress.

**Post-Congress educational visits**

During the Clinical Congress, I had the pleasure of meeting John Daly, MD, FACS, dean, Temple University School of Medicine, Philadelphia, PA, who had earlier agreed to serve as my mentor. We had frequent correspondence prior to my arrival in the U.S., and he arranged for me to visit other institutions of interest in the Philadelphia area, including Pennsylvania State University Simulation Center, Hershey; Children’s Hospital of Philadelphia; and St. Christopher’s Hospital for Children.

My tour began at the William Maul Measey Institute for Clinical Simulation and Patient Safety at Temple University. I was given an in-depth tour of the facility by Richard Milner, the institute’s professional and technical associate director. The facility had many impressive high-fidelity mannequins, which appeared expensive and out of reach for use in my center. However, I was also shown some innovative, low-cost models that could easily be adapted to my center back home. I observed a number of simulated sessions where the medical students used standardized patients and interactive mannequins to learn about teamwork, communication skills, and decision making in emergency situations. Each module was followed by a debriefing session in which the processes were broken down into specific concepts and thoroughly discussed. The need to maintain professionalism was also highlighted.

One afternoon, I had a one-on-one discussion with Selwyn Rogers, Jr., MD, FACS, surgeon-in-chief, Temple University Health System. He gave me useful insights into career development and fulfilling my goals as a surgeon and an educator.

At Children’s Hospital of Philadelphia, I attended grand rounds on bowel management following surgical treatment of anorectal malformation. However, I spent most of my time at the Pediatric Endoscopic Surgical Training and Advancement Laboratory (PEDESTAL), a simulation center managed by Thane Blinman, MD, FAAP, assistant professor of surgery, Perelman School of Medicine, University of Pennsylvania. The multipurpose PEDESTAL allows different modules to be conducted within the same space at different times. Most of the curricula focus on commonly encountered clinical conditions and equipment, and simulations are deployed to make teaching such procedures as endotracheal intubation and suturing as practical as possible.
I found the Trauma Update 2013 Postgraduate Course on October 7 to be very informative, especially the prehospital session, as that aspect of emergency health care is often neglected in my country, and the resuscitation session, which focused on the fluid regimen for trauma patients.

I then visited the Pennsylvania State University Medical Simulation Center, which is located in an abandoned operating theater away from the main hospital, allowing participants to concentrate fully on the simulation without interruption by clinical demands. Every available space is used for training, with specific areas dedicated to the debriefing sessions. A Fundamentals of Laparoscopic Surgery (FLS™) course took place while I was visiting, so I was able to observe first-hand the processes of this important aspect of surgical training with a view toward getting our surgical residents to undergo the course in the near future. While discussing the FLS course with one of the instructors, Kristoffel Dumon, MD, FACS, I realized that curriculum development was more important than acquiring mannequins and other simulation equipment.

My last visit in Philadelphia was the St. Christopher’s Hospital for Children, where ACS Regent Marshall Z. Schwartz, MD, FACS, surgeon-in-chief, chief of pediatric surgery, served as my host. I spent time with the department of pediatric surgery, attending academic conferences. Medical students and junior and senior residents studied together in the same room, which is quite different from how teaching takes place in Nigeria. Residents were also encouraged to practice basic instrument handling using laparoscopic trainers before going to the operating room to assist in cases. Multispecialty meetings on management protocols were convened, and I believe these discussions would greatly enhance patient outcomes.

A simulation consortium meeting took place while I was in Philadelphia, which brought together professionals from all disciplines. A representative from each participating center gave an oral presentation on their programs and progress and presented simulation-related scientific papers. It was an evening of brainstorming to find ways to encourage collaboration and cooperation among the
various centers. I witnessed the invaluable role that simulation technicians play in the development and implementation of new modules.

My experience in Canada

I then flew to Montreal, QC, for the next phase of the tour. The cold October weather greeted me at the airport in sharp contrast to what I had experienced in Philadelphia. Kevin Lachapelle, MD, FACS, a cardiac surgeon and director of the Arnold and Blema Steinberg Medical Simulation Centre at McGill University, was my host in Montreal. Despite his busy schedule, we were able to meet regularly to discuss a variety of surgical education topics—mainly how to develop and implement a simulation curriculum at my center with the resources at my disposal. He encouraged me to do a needs assessment and identify a core group of surgeons who would be committed to my vision.

The administrative and organizational structure of the McGill Center caught my attention. Considering the large number of different courses that run concurrently, the ease of registration by various participants was worthy of note. This led to a series of discussions over coffee with Ronald D. Gottesman, MDCM, FRCP, FAAP, FCCM, division chief, pediatric critical care medicine, at the center; and Linda Crelinsten, RN, MA, assistant director and manager of the center. I discovered that previous communication with prospective participants as well as coordinating experts from related specialties who teach at the center were keys to the smooth running of the center. The debriefing is essential to the learning process.

I was privileged to meet with ACS Regent Gerald M. Fried, MD, FACS, chair, department of surgery, McGill University, in his office at Montreal General Hospital. He gave me a tour of their simulation center and the DeKuyper Education Center, where I had roundtable discussions with the research fellows, mainly on curriculum development.

I also spent an afternoon with David M. Fleiser, MDCM, MSc, FACS, FRCS, associate professor of surgery and director, McGill Molson Medical Informatics Project, in the picturesque Royal Victoria Hospital. He introduced me to the world of the “virtual patient,” which is a cost-effective, highly interactive bridge between formal lectures and simulation training that has the capacity to enable learners to put into practice many concepts taught in class in various scenarios. Feedback from the learners was an integral part of the process, akin to the debriefing process.

The ninth Annual Harvey H. Sigman Lecture took place at the Jewish General Hospital during my time in Montreal. John D. Mellinger, MD, FACS, professor of surgery at Southern Illinois University School of Medicine, Springfield, delivered an inspiring lecture on surgical education. He had earlier spoken on the Core of Competence at the grand rounds, and during the tea break, he and I discussed challenges to surgical education in developing countries.

I then visited the Montreal Children’s Hospital under the guidance of Sherif Emil, MD, FACS, director, division of pediatric general surgery. I spent the day in a series of academic meetings, including the grand rounds where professional development was discussed.

The annual Simulation Summit took place in Vancouver.
A Fundamentals of Laparoscopic Surgery course took place while I was visiting, so I was able to observe first-hand the processes of this important aspect of surgical training with a view toward getting our surgical residents to undergo the course in the near future.

Plan of action in Nigeria
From the early stage of my tour it became obvious that a paradigm shift was necessary to run a successful simulation center upon my return to Nigeria. Instead of concentrating on acquiring expensive, high-fidelity mannequins and equipment, my emphasis had to be on developing a curriculum tailored to meet the needs of our subregion. I plan to employ the standardized steps learned using the ACS training template as a guide to fashion workable curricula for implementation in our center. I will incorporate the debriefing process into our already existing modules, allocating up to one-third of the time to debriefing alone with a view toward identifying and clarifying any misinformation and misconceptions to ensure that the participants have acquired the right knowledge and skills.

I will identify and involve clinicians both within and beyond the department of surgery who are interested in simulation training to help in curriculum development; this goal may be achieved in part via information collected from structured questionnaires aimed at determining specific needs. This process will broaden the scope of the courses as well as increase the pool of surgical experts available to the center. I plan to maintain the rich network of simulation experts that I developed during my visits, and I hope they will serve as my guides and advisors throughout implementation. I also plan to attend relevant courses on surgical education and simulation to keep abreast of recent advances and improve my teaching skills.

A nonsurgical lesson that I learned was to have my business cards with me at all times. Surgeons are not considered business people back home, so I didn’t bring any and often felt that I may have lost some valuable links with useful experts because they didn’t have my contact information handy.

One suggestion that I would offer regarding the program is that scholars have the option of undertaking the educational visits before attending the Clinical Congress. This sequence of events may enrich their Clinical Congress experience as it would allow more familiarity with the American health care system and enable the scholars to determine which sessions would have more impact on their practices.

I extend my profound appreciation to the ACS International Relations Committee and the Division of Education for granting me the unique privilege to be an International Surgical Education Scholar. The experience has widened my view and horizon, and has heightened my passion to train future generations of surgeons. ♦
## July

**North Carolina and South Carolina Chapters**  
**July 17–20**  
Myrtle Beach, SC  
Contact: Debbie Shealy,  
Debbie@scmanet.org,  
www.ncfacs.org,  
www.scfacs.org

**2014 ACS NSQIP National Conference**  
**July 26–29**  
New York, NY  
Contact: Whitney Watson,  
watson@facs.org,  
www.acsnsqipconference.org

**Latin American and International Chapters**  
**July 28–31**  
Cartagena, Colombia  
www.ascolcirugia.org

## August

**Tennessee Chapter**  
**August 8–10**  
Buchanan, TN  
Contact: Wanda McKnight,  
wanda@tnacs.org

**Georgia Society Chapter**  
**August 22–24**  
St. Simons Island, GA  
Contact: Kathy Browning,  
kbd@georgiaacs.org,  
www.georgiaacs.org

**Hawaii Chapter**  
**August 23**  
Honolulu, HI  
Contact: Gary Belcher,  
gbelcher@hawaii.edu,  
www.hawaii ACS.org

## September

**Kansas Chapter**  
**September 6**  
Wichita, KS  
Contact: Gary Caruthers,  
gcaruthers@kmsonline.org,  
www.kansaschapteracs.org/

**7th Annual ACS AEI Postgraduate Course**  
**September 12–13**  
Tampa, FL  
Contact: Catherine Wojcik,  
cwojcik@facs.org,  
www.facs.org/education/ 
accreditationprogram

**New Mexico Chapter**  
**September 12–13**  
Albuquerque, NM  
Contact: Gloria Chavez,  
ghachez@nmms.org

**Arkansas Chapter**  
**September 13**  
Little Rock, AR  
Contact: Linda Townsend,  
LATownsend@uams.edu

**Kentucky Chapter**  
**September 16**  
Louisville, KY  
Contact: Linda Silvestri,  
lsilv2@email.uky.edu

**Illinois Chapter**  
**September 18–20**  
Champaign-Urbana, IL  
Contact: LuAnn H. White,  
lhwhite26@gmail.com,  
http://www.ilchapteracs.org/

## October

**Italy Chapter**  
**October 12–15**  
Rome, Italy  
Contact: Giuseppe Nigri,  
giuseppe.nigri@uniroma1.it,  
www.facsitaly.com

**ACS Clinical Congress**  
**October 26–30**  
San Francisco, CA  
www.facs.org

## Future Clinical Congresses

2014  
**October 26–30**  
San Francisco, CA

2015  
**October 4–8**  
Chicago, IL

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

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*Dates and locations subject to change. For more information on College events, visit [http://www.facs.org/cmecalendar/index.html](http://www.facs.org/cmecalendar/index.html) or [http://web2.facs.org/ChapterMeetings.cfm](http://web2.facs.org/ChapterMeetings.cfm)