

Chairman's Comments

To the Society of Graduate Surgeons of Los Angeles County (SGS) –
University of Southern California Medical Center

The Capacity to Change

(January 2004)

It has been said that a characteristic of adult humans is their capacity for relationships, accountability and change. The first issue of the newsletter is evidence of this character trait. The Society of Graduate Surgeons was born out of a need for quality postgraduate surgical education on the west coast. This was before the days of instant information and five hour transcontinental flights. Famous surgical personalities from the east coast came to the Ambassador Hotel in Los Angeles to spend a week in the Coconut Grove exposing surgical residents and local surgical practitioners to new thoughts and concepts about surgical diseases. Such names as Allen Whipple, Robert Zollinger and Owen Wangensteen were legends, and stories abounded about their time in the west at what became the forerunner of all postgraduate courses, the Surgical Forum.

With the coming of a mobile society, the need for the Surgical Forum waned, and the necessity for change was evident. What has emerged, I believe, is as important to the surgical resident today as the Surgical Forum was to the surgical resident of the past. Today a structure is needed that allows the development and preservation of relationship within the short time frame permitted by a post-modern society. To fulfill this need our plan is to focus the Society of Graduate Surgeons on alumni relationship and support of the residency. Our efforts will center round the C.J. Berne Lecture with an alumni dinner the night before. The Society will continue to sponsor, along with the Department of Surgery, the reception for the society's members and the attendance of the chief surgical residents at the annual meeting of the American College of Surgeons. The concept is to maintain the USC heritage surgical residents identify with, while at the same time, adapting a style that fits comfortably with professional life in the twenty-first century. The surgical residents, faculty and I look forward to seeing the alumni on the evening of May 7th, 2004 and at the C.J. Berne Lecture on May 8th, 2004.

Surgical Education

(July-December 2004)

A paraphrase of the mission statement of the USC Department of Surgery is to educate tomorrow's physicians and surgeons through exceptional patient care programs and groundbreaking surgical and basic science research. The core of the mission statement is education. For the Department of Surgery this involves the education of medical students, graduate students, surgical residents, postdoctoral research fellows and clinical fellows. In order to achieve our core educational mission, two essential elements are necessary. First is an excellent research program so that the students, residents and fellows are immersed in an environment rich in scientific thought to keep their knowledge base at the cutting edge. Second is a clinical practice so that the residents have the experience necessary to excel in clinical surgery and the research trainees have sufficient clinical material to excel in translational research. The core educational mission of the Department of Surgery cannot be maximized unless the essential of research is at the forefront of scientific thought and the essential of patient care is at the forefront of clinical achievement. Keeping them there

is difficult because science and surgery are moving forward at an astonishing rate. Breakthroughs in both basic research and patient care occur on a routine basis, permeate the field and alter approaches to therapy by subtle but significant ways. The faculty's job is to weave the impact of these advances into our educational program.

What has the Department done to sustain the two essentials to our core educational mission? Foremost has been the integration of limited access technology into all aspects of the residency training. The majority of what our graduating residents do in practice will likely involve minimally invasive techniques. Hence it was incumbent upon the Department to incorporate this skill into the fabric of resident education. A little more than a decade ago the use of minimally invasive techniques for the treatment of surgical disease was just being conceptualized. The vast majority of surgical operations were performed through open incision. In the span of ten years, minimally invasive surgery has become the surgical approach of choice for gallbladder disease, appendicitis, incisional hernia, gastrointestinal reflux disease and adrenal disease. In fact, two out of every three surgical procedures performed on our busy non-trauma emergency surgery service is done by a minimally invasive approach. The technique is now being applied in obesity surgery, splenic surgery, gastric surgery, colorectal surgery, and some thoracic pulmonary and esophageal surgery. Further, the technology is constantly evolving to where grafts are placed endovascularly for aortic aneurismal disease, gastric and biliary surgery are done endoscopically and the appendix is removed by an endoscopic transgastric approach. To facilitate the teaching of minimally invasive surgery, endoscopy and endovascular surgery, the Department constructed one of the finest surgical skills training laboratories in the nation. In this laboratory residents develop their minimally invasive surgical and endoscopic skills and are exposed to the use of robotics, virtual reality simulation and surgery done with electronic imaging technology.

In basic science the Department has developed laboratories in molecular biology to characterize the pathophysiology of disease and wound healing at a molecular level. Similarly, a laboratory has been developed to investigate the field of angiogenesis that holds promise to redefine the therapy of cancer. As a consequence of this effort the Department, in comparison to other departments of surgery, has moved from 71 to 33 in total NIH funding. All of this is done so the graduating residents will be able to think of disease in molecular terms, comprehend the basis of pharmacogenetics, understand how to select chemotherapy on the basis of a tumor's genetic profile, to appreciate the epigenetic mechanism by which gene expression is silenced and to know how to block angiogenesis in the treatment of cancer.

How are the residents responding? Based on objective scores they are doing outstanding. There has been a progressive increase in the ABSITE score since 1998 and this year 24 of our residents scored above the 90th percentile (see page 3). That places >50% of our residents in the top 10% of the country. This is a record the Department, the School and all of us in the Society can be proud.

Surgical Research

(January-June 2005)

In the last issue of the SGS newsletter, I emphasized that the core mission of the Department of Surgery is education and that two essentials are necessary to accomplish

this core mission. These essentials are an excellent research program and a clinical practice built around recognized centers of excellence. Today I would like to focus on the essential of having an excellent research program. An emphasis on research keeps our educational efforts at the cutting edge. A well-formulated and functional research program can develop the minds of students and residents to visualize possible solutions to a clinical problem, encourage their desire to inquire, and stimulate their expectation of discovery. Much of the Department's resources over the past fifteen years have been used to establish our core educational mission and the essential of clinical practice. Less focus was placed on the second essential, our research program. Despite this the department, in comparison to other departments of surgery, has moved from 71 to 33 in total NIH grant funding. Our goal over the next five years is to be numbered among the top ten departments in the country in NIH grant funding.

To accomplish this goal requires three initiatives. First, select specific research areas to be developed and invest departmental resources in these areas. Second, provide for the training of residents and young faculty interested in launching a research career in the design, conduct and analysis of clinical studies that translate biomedical and technological discoveries into patient-oriented applications. Third, develop a mechanism to support protective time for newly recruited faculty to establish their research program to the level where NIH support can be competitively obtained.

In regard to the first initiative, the advancement of surgical therapy requires a fundamental understanding of the disease process being treated, the biology of wound healing, and the use of surgical intervention to ameliorate the former and stimulate the latter. Based on this principle, the Department has selected six specific research areas to invest in and develop. They are: 1. **Cancer biology** with a focus on developing technologies for early detection and staging of cancer, understanding the molecular processes involved in cancer development and predicting the effectiveness of chemotherapy. Programs in this area are under the leadership of Dr. Peter Laird and are already well developed and funded. 2. **Angiogenesis** with a focus of enhancing blood vessel growth in limbs and organs lacking adequate blood supply and interruption of blood vessels supplying life-threatening tumors. Over the past year an interdepartmental search committee has identified an exceptional candidate to develop this area and the Department, in cooperation with the Norris Cancer Center, is in the final stages of his recruitment. 3. **Transplantation immunology** with a focus on the selection and monitoring of drugs that prevent rejection of transplanted organs. Dr. Ian Hutchinson from the University of Manchester, England has been recruited by the Division of Hepatobiliary Surgery and Abdominal Organ Transplantation to develop this area of expertise and he will arrive on campus before July 2005. 4. **Wound healing** with a focus on mechanisms to accelerate the process of healing, minimize scar formation, enhance long-term structural strength of the wound and reduce pain during the acute phase of repair. Dr. Warren Garner of the Division of Plastic Surgery has successfully recruited a group of scientists who are well funded and are developing a center for wound healing. 5. **Whole organ physiology** with a focus on understanding the function of whole organs and how they can be improved by surgical intervention. Surgeons are the last vestiges of scientists with an interest in whole organ function. Currently, this effort is focused on esophageal disease in the Division of Thoracic and Foregut Surgery, and on the care of the traumatized patient by the Division of Trauma and Critical Care. 6. **Surgical technology** with a focus on

designing new surgical approaches that provide less discomfort and greater safety. The Department's efforts in this area are in sync with the University's new strategic plan that emphasizes, among other things, the need to develop interdisciplinary research. Following this lead the Department of Surgery along with the Department of Radiology at the Medical School have joined with the School of Cinematography, the Annenberg School of Computer Science, and the School of Engineering to develop an applied electronic imaging lab. Electronic imaging has advanced to where it is possible to robotically manipulate organs by needle like instruments guided to the organ of interest by an operating room navigational system similar to the Global Positioning System in your automobile. Surgeons need to be part of this development or they will be left behind.

The USC Surgical Education and Research Foundation was created to promote and support initiatives 2 and 3 on the Department's agenda for the development of a research program. For residents and faculty interested in future independent research careers, the Foundation would provide funding for a Master of Science degree. This program has as its objective to produce clinical researchers with either an in-depth knowledge in laboratory methodologies for those interested in basic science, or statistical and analytical skills for those interested in population-based clinical studies or outcomes research. The Foundation would also provide three-year grants to promising faculty for protective time to develop their research program. After this three-year start-up period, it is expected that the faculty member would generate his own support through public and private grant funding.

An inaugural gift of one million dollars was made to the Department to initiate the formation of the Foundation. This was a major step toward accomplishing the Department of Surgery's vision for research. Our goal for the Foundation is \$20 million. At this level of endowment, the Foundation could provide six training grants per year to faculty and residents interested in a research career and two, three year grants to protect a portion of a faculty members time to establish their research to a level where it can compete effectively for NIH support.

Research is the bedrock on which the clinical practice of surgery is based and advanced. All of our graduates have benefited from this process as they apply daily their knowledge and training to the care of patients. The USC Surgical Education and Research Foundation was created to promote the Department's vision for research. It is an essential to our core mission, education. Your tax-deductible gift to the Foundation would help the USC Department of Surgery accomplish this vision.

Surgery and the University Community

(July-December 2005)

I have emphasized repeatedly that the department's core mission is education of medical students, residents and fellows, and that two essentials are necessary to accomplish this core mission. These essentials are a clinical practice of sufficient size to support the educational mission and an active research program in each division to keep the knowledge base current and the practice of surgery up to date and at the cutting edge. At USC this activity takes place within a University community, an environment that fosters discovery and transmission of knowledge. For the Department of Surgery, the USC Health Science Campus is the focal point. It is a dynamic, interactive environment for learning, discussion,

collaboration and discovery. The residents and fellows are benefited by immersion in this invigorating environment.

The Health Science Campus is one of two USC campuses. It consists of some 50-acres and contains the Keck School of Medicine, School of Pharmacy, School of Independent Health Professions, USC University Hospital, USC Health Care Consultation Centers I and II, USC Norris Comprehensive Cancer Center, Doheny Eye Institute, as well as one of the largest teaching hospitals in the country, the Los Angeles County+USC Medical Center. The other campus, the University Park campus, is in downtown Los Angeles and the home of the College of Letters, Arts and Sciences and sixteen other professional schools. The Children's Hospital of Los Angeles is also staffed by USC faculty from the Keck School of Medicine and is commonly referred to as USC's third campus. Altogether these campuses house 16,500 undergraduate students, 15,500 graduate and professional students, and 3,000 full-time faculty. The Department of Surgery takes appropriate pride in being part of this great University. Today, USC is one of the worlds leading private institutions of higher learning and much of the university's success can be attributed to excellence in teaching, a strong emphasis on research, a serious commitment to public service and 180,000 living and loyal alumni.

Recently Dr. Steve Sample, President of USC, called attention to the Lombardi Report, an annual assessment of American research universities. The report shows the share of academic research productivity achieved by universities as they compete in the market place for federal research dollars. It measures the success of each institution's faculty and staff, not the success of each institution in a competition against a better or worse institution. Rather it indicates institutional performance relative to the entire market place of top research universities. It ranks each university according to nine objective criteria: total research, federal research, endowment, annual giving, membership of faculty and staff in national academics, faculty awards, number of doctorates granted, postdoctoral appointees and SAT/ACT ranges. These measures are reported without any adjustment for the size of the institution, the number of faculty, or size of budget. The institution is then ranked according to how many of their criteria are in the top 25 and how many are in the position of 26-50.

According to Dr. Sample, in the most recent Lombardi Report, USC had 7 of the 9 measures in the top 25 and 1 of the remaining 2 in the range of 26-50. This puts USC just below Yale and above UCLA. USC was ranked 12th overall and 10th among private funded research universities.

Although no one system of measurement can accurately reflect an institution's value or standing, the department is pleased at USC's performance in the various objective rankings. The influence of the University has had a positive effect on the Department's research productivity. In 1996 the USC Department of Surgery was 71st in the national NIH ranking for university surgical departments. At the last posting in 2004 we were 33rd. As a consequence of the scholarly environmental influence, almost every resident elects to spend a year or more in research. Most are productive and contribute to the body of knowledge upon which our practice of surgery rests.

I share this with the alumni of our general surgical residency program to emphasize the great blessing the department has in being part of the USC Keck School of Medicine. At USC, we have an incredible potential to be one of the great departments of surgery in the US and perhaps the world. It will require a commitment by everyone to do so: the surgical faculty and staff; residents, fellows and students; and surgical alumni, donors and other friends. It can be done, others have, and so can USC.

Selection of a Would Be Surgeon

(January-June 2006)

It is that time of the year when senior medical students are immersed in the activity of applying and interviewing for a residency. The USC Department of Surgery has approximately 500 applicants for their categorical internship. Several faculty members review the applications and 50-60 likely candidates are selected for interviews. Four interview dates are chosen, and following the interviews a rank order list of candidates is submitted from which seven will match with USC. They represent 1.2% of the applicants and 14% of those interviewed. To say the least, it is an enormously tense and competitive time for the students. They try to get the best possible position, a place where they can learn and develop the skills required to become a surgeon. They know that it takes five or more years to become a surgeon, and to select a department that will prepare them to function in a world five years hence is no easy task.

As Chairman I meet with all of the candidates on each scheduled day of interviews. My goal is to bring the personality and character of the applicants to their file. I do this by reviewing their personal story in a group interview, asking them questions prompted from their application. After the completion of the interview with each person, I give him or her the opportunity to ask one question. The group setting encourages a variety of different, carefully constructed questions. Through my answers the candidates learn about me, my thoughts about our residency program, and my perspective on becoming a surgeon. A question often asked is what characteristics I am looking for when selecting a candidate for the USC surgical residency program. I thought my answer to that question might interest you.

I start by stating that we are looking for two qualities: talent and capacity. The talents are the gift of intelligence and motor skills. They are necessities for anyone desiring to be a surgeon. For the most part, the applicant's insight into their abilities and their performance in medical school accomplishes this selection for us. The record of each candidate, prior to acceptance for an interview, has been reviewed by the faculty for evidence of these talents.

The capacities we are looking for are qualities the student has in addition to the talents of intelligence and motor skills. We are looking for candidates who have the capacity to change, that is, to modify their concepts and opinions, the ability to incorporate into their personality qualities that show respect for the field of surgery and the sacred trust patients have for their surgeons.

Second, we are looking for individuals who have the capacity for accountability. Surgeons are perhaps the most accountable practitioners in medicine. A surgeon's error is usually an error of commission as opposed to the error of omission. The capacity for a surgeon to hold himself accountable is critical for the process of self-correction and the commitment he

makes to the patient as he carries them through their therapy. This quality differentiates the surgeon from other technical specialists and is key to the preservation of the surgical profession.

Third, we look for candidates who have the capacity for meaningful relationships. The profession of surgery is dependent upon the willingness of patients to submit to surgery. To do so, patients develop a unique relationship with their surgeon that makes possible the confidence and trust they must have to undergo an operative procedure. The capacity for a surgeon to develop a relationship of confidence with their patients is critical if surgery as a profession is to survive. In a world that emphasizes self-fulfillment, there are few individuals who develop a relationship with a person for the purpose of taking on their burden and becoming accountable for it. That is why patients love their surgeons. Emphasis on the technical and disregard for patient relationships has allowed surgery to be eroded by the technology of less personal specialties. In the past, surgeons were the embodiment of technology in medicine; that is, technology was person dependent. Today technology is person assisted. For this reason, the future of surgery is dependent on the recruitment of candidates who have the capacity for change, accountability and relationships.

Partnership

(July-December 2006)

A partner is one who is associated with another in a joint venture. The relationship is called a partnership and involves a close cooperation between parties to achieve the goals of the joint venture. So was the relationship between National Medical Enterprise and USC in the development of University Hospital. The relationship worked. The University Hospital that started from scratch became nationally recognized as a center of clinical and academic excellence. Then through a hostile takeover came Tenet, and with time policy changes that threatened the relationship. The ability of the School of Medicine and the clinical departments to accomplish their mission, i.e. teaching and research, was compromised by the policy decisions of their hospital partner. On August 22, 2006 the University of Southern California filed a lawsuit in Los Angeles Superior Court to force Tenet Healthcare Corporation to give up its ownership and control of USC University Hospital. In so doing the University has crossed the "Rubicon" in its relationship with Tenet.

The Department of Surgery applauds the University's leadership in their response to our complaints regarding conflict of mission, the incapacity for Tenet to differentiate tertiary from community health care, hyper interpretation of Stark legislation to the point of undermining the department's major clinical and research programs, and questionable business practices that placed the faculty in a bad light with their patients. The effect has stressed the department financially to the point of complete cessation of all recruitment of new faculty and requiring emergency measures to maintain its clinical and educational programs.

Despite the financial stresses, we have managed to keep our education, research and clinical programs intact. Thankfully the surgical residency remains strong and vigorous, largely due to the support of our other hospital partners; the County, Kaiser West L.A. and Good Samaritan. The University has provided financial help that has allowed us to keep the ship afloat, though listing a little. We are grateful that in the end the University has done the right thing. The Department of Surgery looks forward to USC taking over the University

Hospital and setting the stage to restructure, rebuild and retool for the next fifteen years. Truly adversity makes one stronger.

Outcome: Work Hours and Skill Centers

(January-June 2007)

You have heard it said, “The only thing permanent in the world is change.” Change is so common in our lives that we often question if it is made only for the sake of change with little if any benefit. During the last decade there have been two significant changes that affected general surgical residency programs in a major way. One emerged as a consequence of advances in technology; the Residency Review Committee initiated the other. They were the introduction of skills laboratories and limiting the work hours to eighty hours per week. The question is have these changes been of benefit?

The changes in work hours required not only that the residents’ time at work be limited to eighty hours per week but they must have ten hours off between duty shifts, the longest duty shift could not exceed thirty hours, the number of call days per week could not exceed three and, on average, they must have one day in seven free. This limitation in work hours has been in place since July 2003, long enough to assess its benefits.

From our observation, there have been several positive outcomes. First, the residents are happier and less stressed. There are more smiles, less frowns and more personal time. Second, the residents have become more efficient. Their work must be done within a given time frame. No longer can a resident stay later, return after hours or come in earlier to “catch up.” Third, the team has become more important than the individual, and teamwork has increased along with more group interest and discussion about patients on the service. Prior to the eighty-hour work week residents were responsible for a portion of the patients on a service all the time. Now, with the change, residents are responsible for all the patients on a service for a portion of the time. This switch, if not properly managed, can lead to a new set of errors related to miscommunication and lapses in continuity of care. Fourth, the emphasis on teamwork has resulted in less competition among the residents. There is more of a “one for all and all for one” attitude, or “if we sink we all sink together.” Fifth, limiting resident availability has taken the clutch out of the hospital’s patient care obligation. These were services hospitals did not provide, but should have, when residents were available and told to take up the slack. Now, with limited resident availability, hospitals have employed more technicians to draw blood, obtain EKG, transport patients, etc. Sixth, after the implementation of the eighty-hour workweek we have seen a definite increase in the number and quality of students applying for surgical residency. It appears the limit on work hours has made a commitment to surgery more palatable.

On the other hand, limiting the work hours has been a mixed blessing. First, limiting a resident’s patient exposure time has more, than rarely, interfered with the opportunity to learn. This usually occurs when the resident is required to leave during the critical part of a patient’s management. Such opportunities, if not captured when they occur, may never happen again during the course of the resident’s training. Second, more time off has not convincingly resulted in reducing fatigue-related cognitive errors. This was one of the driving issues to establish the eighty-hour workweek, and the lack of improvement could indicate that cognitive function is more resilient than we thought, even when under stress and fatigue. Third, the movement toward teamwork has to some degree resulted in the loss of

an individual's pride of accomplishment in their work. This, however, may not be a deficit, as individual pride often gets in the way of personal progress. We may be better off with team pride. Fourth, limiting the work hours has expanded the concept of cross coverage at night. Coverage is now done by a few residents who work all night in isolation. They do not have time to interact with other residents as in the previous era when on-call residents gathered around the coffee table to discuss the management of nighttime challenges.

The introduction of the skills laboratory has been, for the most part, very positive. It focused the spotlight on education and encouraged the development of protective time, usually one half day per week, for formal training. In particular, the skills laboratories have enhanced the skill level during the early years of residency by introducing them to the visual/motor skills necessary to perform limited access surgery and properly training them in bedside procedures that were previously passed on under the philosophy of "see one, do one, teach one." Further, the skills laboratory provides an environment for remedial training. This was always difficult to accomplish prior to the development of skills laboratories. Now the effort can be organized and monitored. The skills laboratory also has provided the environment for structured educational encounters to expand beyond the acquisition of surgical skills to include mastery of an expanded curriculum encompassing the cognitive aspects of surgery, the business of medicine and the ethics of patient care.

In summary, our experience indicates that the changes brought about by the eighty-hour workweek and the introduction of the skills laboratory has improved the process of resident education and encouraged closer monitoring of the resident's education. We are uncertain about what the changes have done to improve the overall outcome of resident training. Are the residents better trained and better prepared for their subsequent work because of the eighty-hour workweek and the introduction of the surgical skills laboratory? To answer this question will require the assessment of residents' performance after graduation during their specialty training or first employment experience. I suspect this type of evaluation will come and, when it does, I am sure we will change again.

Residency Training: Arts of Personal Growth

(July–December 2007)

The Accreditation Council for Graduate Medical Education (ACGME) has attempted to define residency training by constructing six core competencies that each resident must master for successful completion. They are 1) patient care 2) medical knowledge 3) practice-based learning and improvement 4) interpersonal and communication skills 5) professionalism and 6) systems-based practice. Numbers 1, 2 and 3 are a restructuring of what has always been the goal of resident training. Number 6 has emerged in parallel with the increasing regulation and reporting requirements that have become so common in the world of medicine. Numbers 4 and 5 introduce a new emphasis on what was in the past, expected conduct of house officers. Professionalism, proper interpersonal relationships, and effective communication were usually learned through faculty role models and their assessment was largely subjective. Now the ACGME is attempting to describe these behavioral competencies more precisely and quantitatively. It is a challenge to define what attitudes when properly developed will result in professionalism, effective communication and proper relationships with patients, the patient's family and professional associates. Further, how does one construct educational interventions to teach such subjects? A literature search resulted in little help on how to acquire these competencies, let alone how to assess them.

Given the mandate from the ACGME, I have identified five skills or arts, if properly developed by the resident, are likely to lead to a professional attitude, proper interpersonal relationships and effective communication. At the orientation meeting with the new interns I go over these five arts, and stress that the assimilation of them into their character is critical to their growth as a physician. I call them the five arts of personal growth. They are as follows.

1. The art of submission. Submission is a fundamental, universal reality that every mature person must embrace. Stated another way, everyone has a boss. To be submissive is having an attitude that sensitively and graciously arranges oneself under another's authority. It is not a demeaning experience, but an exciting challenge and must be mastered by the young surgeon.
2. The art of humility. Humility is more readily defined as the lack of a proud and haughty spirit, or an arrogant and assertive attitude. On the positive side, it is a demeanor of reflection and self-expression that is part of being submissive. Biblical wisdom states that God resists the proud but gives grace to the humble and lifts them up. The art of humility is displayed in ones ability to refrain from offending, readiness to forgive, recognition of personal weakness and rejection of honor. This also must be mastered by the young surgeon.
3. The art of managing anxiety. Anxiety is a natural occurring uneasiness of the mind. It comes in two forms; concern about things we can do something about and concern about things we can do nothing about. The former is managed by doing that which needs to be done. In essence it is the motivation to get our job done. Anxiety over those things we can do nothing about is best managed by initially assuring ourselves that the issue is of sufficient importance to merit our concern. Since the issue is outside of our power circle, it should become part of our devotional life, i.e. a topic for prayer and reflection, with the goal of obtaining the wisdom to solve it or, if unsolvable, the appropriate skill to tolerate it. This also must be mastered by the young surgeon.
4. The art of self-control. This is the most difficult art to acquire and many careers have been shipwrecked on this shoal. The issues are initially camouflaged as insignificant until we think more deeply about them. For example, stealing someone's idea without giving credit is really embezzlement, saying an inappropriate comment to the opposite sex is really immoral, editorializing an answer to a question we do not know is really dishonesty. The latter commonly occurs on attending rounds. In such a situation a better response is "I don't know the answer, but will find out and report to you." Such a response means that you have been honest with yourself and have taken on the responsibility to correct your lack of information. This art also must be mastered by the young surgeon.
5. The art of involvement. This is the most common art called for in day-to-day living, and key to growth in the other four arts. When a group of co-workers make us uneasy or uncomfortable because of existing conflict, the most common response is to withdraw from the group or become passive. This response results in our becoming ineffective, encourages a judgmental attitude toward the group, disrupts interpersonal relationships and builds an inappropriate sense of pride. Remaining involved in such situations is of utmost importance; we must stay engaged. It is in

such environments that we grow in proper professionalism, interpersonal relationships and communication skills. By remaining involved and working things out, our appreciation of others increases and often unexpected and unpredicted positive results occur. This also must be mastered by the young surgeon.

The assimilation of these five arts of personal growth into an individual's character over the five years of residency is a major step in achieving a professional attitude, proper interpersonal relationships and effective communication skills. Assessment of their assimilation is mainly through faculty observations that a resident has the capacity to become a professional, that is, to adjust his actions for the benefit of those he serves, not for his pocket book. Further, the faculty looks for evidence that the resident can develop sustained and ethically sound relationships and communicate well with patients, patient families, and other members of the medical team. More recently, the assimilation of these arts has been evaluated quantitatively with the use of the standardized patient. These are individuals who have been trained to act like patients and in an outpatient setting score the resident on his professionalism, interpersonal relationships and communication skills by answering a series of standardized questions about the sham encounter. This sort of testing was initially resisted by some residents, but with time they agreed to its value. C.S. Lewis said that everything we learn comes from three sources in various amounts: authority, reason and experience, "taught or caught" as some would paraphrase. In the end, I believe that professionalism, proper relationships and effective communication are more caught than taught provided, of course, that the resident remains involved.

What is a Surgeon?

(January-June 2008)

We live in a day of excessive information with limited understanding. We know much about, but have little understanding of a subject. Where there is no understanding there can be no definition of a subject, and where there is no definition the subject dissolves into relativism. So it is when trying to define a surgeon.

In a medical world buried in information about health economics, regulations, litigation, medical ethics, and exploding technology we lose our comprehension of what a surgeon is. It becomes difficult to differentiate the surgeon from other medical specialists such as endoscopists, cardiologists, interventional radiologists, critical care specialists and ER physicians. Consequently, when attempting to define a surgeon all descriptions, in some manner, fall short and in the end most accept that a surgeon is a physician and something more. But, what is the something more? Whenever something is difficult to describe, define or communicate we attempt to convey the thought by using an allegory, a symbolic narrative, or a story with a translational meaning. I will use this method in an effort to define a surgeon.

Imagine yourself in a jungle, a dense and dark jungle. You are on a once-in-a-lifetime trip – paid the airfare, crossed the ocean, hired a guide, and joined a group. You have ventured where you never ventured before – into the thick, strange world of the jungle. Imagine that you are in the jungle, lost and alone. You paused to lace your boot, and when you looked up, no one was near. You go left, you go right, you go forward, you retrace your steps, and no one is there. You are alone.

You realize that you have a problem. First, you were not made for this place, sky-blocking foliage above you, trail-hiding thicket ahead of you, and strange sounds all around you. You become aware of the difficulty of surviving in this jungle. Second, you are not equipped—no

knife, no matches, no flares, no food, and no way to obtain the equipment you need to survive. Third, you do not know how to get out—no direction, no solution, no hope. Lost miles from home. Trapped in the jungle!

How would you feel in this situation? What emotions would surface? What thoughts would you wrestle with...fear (?), of course; anxiety (?), of course; anger at those who abandoned you (?), understandable; hopelessness, for sure! Can you imagine having no idea where to go, no knowledge of what to do, and the fear of not getting out? Can you sense, just for a second, how it feels to be alone, abandoned, out of reach, out of your normal element, without a solution or an idea of what to do, out of hope?

Now ask yourself, what would it take to restore your hope. You need just one thing. You need a person to rescue you. Not just any person, but a special person with three unique abilities. First, you need a person who can give you a vision and direction. Someone to lift your spirits, someone to look you in the face and say, “this is not the end, don’t give up, there is a way out of the jungle, and I will lead you.” Someone who has a vision and direction – a person with no vision is only company. A person with vision but no direction is a dreamer. You need a person who can restore your hope, encourage you and take you from this place to the right place. Take you in the right direction. Such a person will cause your loneliness to diminish because of their presence, your despair to decrease because you have vision, and your recovery to begin because you have a direction. Second, you need a person who is capable to guide you out of the jungle. Someone who knows the jungle and who has the knowledge and experience to lead you out of the jungle. Someone who is able to cut a path through the underbrush; knows the pitfalls of the path, and who is properly trained and equipped for the task. Third, you need a person who has the commitment to come to your aid. Someone who will take on the mission, enters the jungle, and will lead you out because they believe that you are of value. Someone who will stay with you and not abandon you in the process. Someone who is focused on you and will see the task to completion.

So it is with disease and surgeons. For most people a serious illness is a jungle. Failing health, life-threatening illness is the thickest and darkest of all jungles. Such patients are lost in the deep, dark, life-threatening jungle of disease without hope. These patients need to be rescued because human life is of value. This is what a surgeon is—a person who rescues people from the deep, dark jungle of disease. Not just any person, but a special person with three unique capacities.

First, a surgeon is a person who has the vision to encourage and direct a patient. The famous American, Helen Keller, born both blind and deaf, was asked what the worst handicap was. She responded, “It is neither blindness or deafness but no vision. Without vision there is no foresight, no focus, no encouragement, no direction.” King Solomon said, “Without vision the people perish.” A surgeon is a person who has the capacity of vision and maintains it despite the pressures of finance, litigation, over-regulation, and the culture of selfishness that surrounds him. A person who visualizes also sees that the purpose and meaning of their work is based in relationships, not in accomplishments. This person can heal with their words as well as with their hands. The tongue is like a scalpel. It can injure or heal depending on how it is used.

Second, a surgeon is a person who is knowledgeable and competent to guide a patient out of the jungle of disease. A person who believes that practice without theory is blind, theory without practice goes nowhere, and what is not properly understood cannot be properly applied. A person, whose passion for their work provides the initiative and perseverance to

perform the rescue, also has the discipline to let reason hold the reins. A person who is disease focused, not procedure focused. The job is to rescue the whole person, not to do only a technical task. A person who has spent hours in solitude to study the jungle of disease, who knows all aspects of disease, knows where and how to cut through it, knows the pitfalls and traps on the road to recovery, and has properly trained and prepared for the task.

Lastly, a surgeon is a person who has the courage and commitment to enter the jungle of disease. The surgeon is a person motivated by a calling, not a job; by love, not need; by knowledge, not feeling, and spiritual, not situational ethics. The surgeon is a person who practices a profession, not a business; and who self-corrects for the benefit of his patients, not his pocketbook. The surgeon is a person who is more interested in testimony than trophy. The surgeon is a person whose courage persists at the time of his testing, at the time of excessive demands despite the lack of acknowledgement, and at the time when self-sacrifice is required.

Dr. Franz Ingelfinger, a famous Boston gastroenterologist, describes this type of person when he recounted his struggle with Barrett's adenocarcinoma, a disease that eventually took his life. "Finally, when the pangs of indecision had become nearly intolerable, one wise physician friend said, "What you need is a doctor." He was telling me to forget the information I already had and the information I was receiving from many quarters, and to seek instead a person who would dominate, who would tell me what to do, who would in a paternalistic manner assume responsibility for my care. When that excellent advice was followed, my family and I sensed immediate and immense relief." Dr. Ingelfinger's reflection states well what a surgeon can do for a patient.

What is a surgeon? A surgeon is a visionary, knowledgeable, competent, and courageous...a committed person who rescues patients from the deep, dark jungle of disease. Will our current culture continue to supply such persons? Will an eighty-hour workweek be sufficient to train such persons? Will our self-focused culture war against the courage and commitment of such persons? In the answers to such questions lies the future of our profession.

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