## **Cherish the Past, Prepare for the Future**

W. Douglas Wong, M.D.

Department of Surgery, Memorial Sloan-Kettering Cancer Center, New York, New York

I has truly been a privilege and a wonderful honor to serve as president of the American Society of Colon and Rectal Surgeons this past year. I want to extend my heartfelt gratitude to all of you here in attendance today, and to everyone who supported my presidency year. I am sincerely grateful to our three past presidents on the nominating committee: Dr. Rick Billingham, Dr. David Schoetz, and Dr. Bruce Wolff, as well as to all of you who endorsed my nomination. This is the pinnacle of my career.

I also appreciate the hard work and outstanding effort of the Executive Council in helping me through this year; and the Society's administrative staff which, for many years, has efficiently organized and maintained our society at such a high level. And I am extremely grateful to my colleagues at Memorial Sloan-Kettering for their enduring support. They are an outstanding group of surgeons, and it is an honor for me to work with them. I would also like to thank my former colleagues from Minnesota who initially trained and mentored me, and set my career on the right path—as opposed to the "Wong path" to which I am accustomed!

Finally, there are two ladies I have relied on most during this past year. Stella Zedalis, Associate Executive Director of our Society, is a remarkable individual: extraordinarily efficient, well-organized, and personable; I know that all of our presidents have relied on her for support. And of course, my dear wife Sola; she has been my guiding light throughout our married life and throughout my entire career. She did a marvelous job of raising our three wonderful children while I worked long hours. During those early years I never thought that I had the potential to rise to the position in which I find myself

DISEASES OF THE COLON & RECTUM VOLUME 52: 3 (2009)

today. But she did, and always encouraged me to do my very best. Without her influence and loving support I would not be standing here.

The title of my talk is "Cherish the Past, Prepare for the Future". To set the stage, I would like to share a quote from the personal development expert Chuck Gallozzi, who has stated that "The secret of life is to do your best now. When we live by this rule, we guarantee a happy past and a successful future. We need to make the most of the past, not get distracted by the past, but learn from it. Cherish the past, learn, let go of it, and move on. Use the past as a guiding light."<sup>1</sup> As Ivern Ball has stated, "The past should be a springboard, not a hammock!"<sup>1</sup>

It is the future that provides promise and potential. Life is about endless growth. One of our tasks in life is to prepare for the future, make plans, and boldly take on the challenges that lie ahead.

Well, one of the major challenges I have taken on over the years has been to give quite a large number of talks and lectures nationally and internationally, including this presidential address. So I'd like to share a story with



W. Douglas Wong, M.D.

Presidential Address at the meeting of The American Society of Colon and Rectal Surgeons and Tripartite, Boston, Massachusetts, June 7 to 11, 2008.

Address of correspondence: W. Douglas Wong, M.D., Chief, Colorectal Service, Department of Surgery, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, Room C-1069, New York, NY 10065. E-mail: wongd@mskcc.org

Dis Colon Rectum 2009; 52: 367–373 DOI: 10.1007/DCR.0b013e31819e86f3 ©The ASCRS 2009

you. Early in my career, Sola placed a special, modestly ornate box on our mantle and told me that I was never to look inside it. But after 30 years or so, in the early months of my presidency year, my curiosity got the better of me...so I snuck a peek. In the box were three eggs and \$1,000. This puzzled me. When Sola returned home, I asked her what was so special about the box and its contents. She said that she had listened to so many of my lectures over the years that, whenever I gave a bad talk, she would put one egg in the box. "Wow, that's great!" I remarked. "Only three bad talks after all these years!" But she replied, "Darling, whenever it reached a dozen eggs I took them out and sold them."

I certainly cherish my past. I was raised in a small farming community in rural Manitoba. The winters were brutally cold, often minus 40°F for weeks on end, and I would walk to school backwards to minimize the freezing feel of wind against my face. But even at minus 40° I enjoyed playing hockey outdoors. And when the temperature rose to a warm, sultry 0°, with clouds insulating the environment, my friends and I were so hot and sweaty that we'd go skiing.

I prepared for my future very early in life. At age five, I knew I wanted to be a doctor. Our family physician (who made house calls) looked after us well. I admired him as a role model and wanted to follow in his path, and I was privileged to be accepted to medical school at the University of Manitoba.

I had wanted to be a surgeon even before then. But at the University I was confronted by practicing physicians who advised me against it. They told me that, because significant racial bias existed at the time, if I went into surgery as a Chinese Canadian my practice would never flourish. I struggled for a while, trying to decide whether I should follow my dream or accept their advice. However, I had read about a Chinese American surgeon who was well respected, and had achieved major accomplishments throughout a very successful career in the United States. I had read many of his publications and, although I had never met him, it was his influence that helped me decide to pursue a surgical career despite the advice of experts. That surgeon was Dr. Stuart Quan, who was the first Chinese American president of our society in 1979 to 1980. I am honored to follow in his path as the second Chinese American president of the ASCRS. And I am truly privileged to have received the Stuart H. Q. Quan Endowed Chair in Colorectal Surgery at Memorial Sloan-Kettering Cancer Center in 2003.

Here is the trajectory of my career. After my training, I practiced as the first general surgeon in a rural community in Manitoba that boasted a population of about 7,000. There I worked for 24 hours a day, seven days a week, practicing the full spectrum of surgery. Despite the constant work, those were peaceful days too; in fact, a time to remember and cherish. But after six years I had reached a plateau, and knew that my practice would never change significantly if I remained.

My early experience in caring for patients with colorectal and anorectal diseases led me to pursue this particular specialty. So we moved to Minneapolis-St. Paul, Minnesota, for my colorectal fellowship. Minnesota is a land of 10,000 lakes, with a wonderful population of friendly people and a serene environment. Autumn, especially, is beautiful there; the foliage is spectacular, and it gives one time to regroup and reflect on life. Following that, I returned to Canada to practice in Calgary, Alberta. Calgary is in the foothills of the Rocky Mountains, not far from Banff and Lake Louise. The mountains are magnificent, with snow-covered peaks. Our family spent many active weekends hiking in the summer and skiing in the winter. In 1987 I was recruited back to Minnesota. After ten years in Minnesota, I was recruited to New York. And here we are.

The six keys areas that I would like to address during this talk are:

- The history and future of The American Society of Colon and Rectal Surgeons
- The history and future of the Tripartite
- The surgical workforce
- Surgical mentoring
- The globalization of colorectal surgery
- Surgical education

As I cherish my own past, I also cherish the history of our American Society of Colon and Rectal Surgeons. Thirteen charter members met in 1899 to form the American Proctologic Society, with Dr. Joseph Mathews as our first president. In 1940 the American Board of Proctology was established as a subsidiary of the American Board of Surgery, and in 1949 the American Board of Proctology was advanced as an independent board. In 1960 it was renamed the American Board of Colon and Rectal Surgery, and in 1973 our society's name was changed to The American Society of Colon and Rectal Surgeons (ASCRS).<sup>2,3</sup>

I have been a member of the ASCRS for more than 25 years. In my opinion it is the warmest, closest-knit, and friendliest society I have ever belonged to. I stand in awe of our past and current leaders and staff who have led us to this level of distinction and influence. How do we maintain that level of distinction, and augment our influence, as we prepare for the future? We need to:

- Maintain our Society's voice in critical organizations that influence quality medical care and promote patient education
- Increase the extent of our collaborations and relationships with other important and influential societies
- Promote the globalization of our specialty, with a goal of encouraging development of state-of-the-art training

programs in colorectal surgery that will enhance patient care worldwide

We also cherish our Society's history of combined meetings—which, from the beginning, led us in the direction of globalization. In 1924, the first joint meeting between the American Proctologic Society and the Royal Society of Medicine Section of Proctology occurred in two sessions: one in New York, one in London. Twenty-five years later in 1949, the next combined meeting took place in Columbus, Ohio to celebrate the 50th gala anniversary of the American Proctologic Society. Ten years after that, in 1959, a combined meeting was held in London.

Thereafter, the plan was to meet jointly every five years. In 1964 the combined meeting was in Philadelphia, sponsored by the American Proctologic Society and the Royal Society of Medicine Section of Proctology—57 countries were represented. Our president that year, Dr. Robert Scarborough, noted that "joint meetings help to promote peace, and provide an opportunity to strengthen the bonds of brotherhood in a profession dedicated to human service."<sup>3</sup>

A number of Australian surgeons interested in colorectal surgery attended the 1969 ASCRS annual meeting in Boston, initiating a relationship that led to the development of the Tripartite. The Tripartite is a combined gathering of The American Society of Colon and Rectal Surgeons (ASCRS), the Association of Coloproctology of Great Britain and Ireland (ACPGBI), the Royal Society of Medicine Section of Coloproctology (RSM), the Colorectal Surgical Society of Australia and New Zealand (CSSANZ), and the Royal Australian College of Surgeons Section of Colon and Rectal Surgery. The first Tripartite meeting was held later that year in London.

What makes combined meetings so valuable? In my opinion it is the broad potential they offer for friendship and collaboration, for the sharing of different approaches to colorectal disease, educational advances, and training objectives of specialists worldwide. How should we prepare for the future of the Tripartite? I think we need to open our doors, but retain the current nucleus. This year, for the first time, we are honored to have the European Society of Coloproctology participate in the Tripartite. In the future we should welcome the participation of societies dedicated to the specialty of colon and rectal surgery, while emphasizing quality care, education, and the training of colorectal specialists.

As we cherish our Society's past and our history of combined meetings, we must also plan for the future of our surgical workforce. From 1929 to 2000 the growth of physician supply in the United States followed economic growth closely. Medical school capacity doubled; so did residency programs. By 1980 the physician supply had increased, and paralleled domestic product growth over the prior two decades. But where are we now? In the late 1970s, policymakers came to fear that the increasing number of physicians was responsible for a precipitous rise in health care spending, which was harming the economy. As a result, a significant amount of federal support for medical schools was withdrawn, and a spending cap placed on graduate medical education (GME).<sup>4</sup> This is why medical school slots have remained at 1980 levels for two decades; and why, in per capita terms, the number of medical students has actually declined. The number of medical students enrolled in American schools has remained flat for 15 years, with no increase, despite a rise in the United States' population. Applications to medical school peaked in 1996 to 1997, and have dropped off since.<sup>5</sup> America is now on the brink of a significant physician shortage.

There are additional factors at play: the "aging-out" of the current physician workforce; the 80-hour work week; the desire of young physicians for fewer hours of work, less time on call, and more family time.<sup>4</sup> Then, too, more and more physicians are taking positions in health care organizations and pharmaceutical companies, and availing themselves of other opportunities outside of clinical practice.<sup>4</sup> In fact, over the past 20 years there has been a steady increase in the percentage of medical students choosing "lifestyle-friendly" specialties.<sup>6,7</sup> The percent of those choosing surgery peaked in 1992, and has declined steadily for 10 years.

Despite all this, however, the fact remains that—if a cap had not been placed on GME—physician shortages would not exist today. Primarily because of that spending cap, the projected shortfall of physicians is 200,000 by 2025.<sup>4</sup>

Some have suggested that a growth in numbers of working nurse practitioners (NPs) and physician assistants (PAs) will fill the health care gap in a cost-effective manner. Indeed, many studies have shown that general medical care is not compromised when provided by PAs or NPs; that these practitioners are well accepted by patients; and that, as health professionals who are trained primarily to be generalists, they provide good continuity of care and possess great flexibility in being able to respond to workforce needs.<sup>8</sup> However, the assumption that these practitioners will simply make up for the physician shortfall fails to take into account the fact that there is currently a significant shortage of qualified teachers and educational training programs for NPs and PAs as well—so the demand for their services outpaces the supply even now. Furthermore (while NPs work independently as primary care providers in some areas of the world), most NPs and nearly all PAs operate under the supervision of MDs.<sup>9</sup>

In the United States, the average lifespan is much longer than ever before. But, aging is accompanied by increasing frailty, complex illness, and chronic disease. Heart disease and cancer are leading causes of mortality. Patients want quality health care. And studies show that better, high-quality outcomes are associated with specialized, skilled, and experienced surgeons.<sup>10</sup> How does all of this affect our specialty of colorectal surgery? How will it impact global health?

My first impulse is to say: The lights may be going out. But that reminds me of a story I'd like to share with you.

Many years ago, when I was young, my grandfather owned a restaurant in rural Manitoba. I remember a group of eight sitting at a table in that restaurant checking out the menu one evening. The overhead light began to flicker. So they called my grandfather to the table and said, "Sir, can you please fix the overhead light?" My grandfather said, "Sure. Please, all of you look at the light, and clap your hands." They did. Suddenly the light stopped flickering and went back on. As my grandfather walked away, someone from the group called after him, saying, "Mr. Wong, that is very peculiar! Please explain how it worked!" My grandfather replied: "Many hands make light work."

In preparing for the future of the surgical workforce we do, in fact, need more hands.

As we face the challenges that lie ahead, the first step is to expand graduate medical education. We need an additional 1,000 postgraduate year (PGY)-1 positions annually to meet demand. Graduate medical education should be financed with Medicare direct and indirect medical education payments, or other funding schemes.<sup>4</sup>

We need to increase United States medical school output. In the mid-1970s to the mid-1980s, 80 percent of our residents were graduates of United States medical schools. This has since fallen to 60 percent, while the percentage of doctors of osteopathy and international medical graduates has risen.<sup>4</sup>

Both the American Surgical Association and the American College of Surgeons have gone on record advocating expansion of GME and a lifting of Medicare caps on GME. It is essential that other specialty societies, like ours, support these goals so that a broad national consensus can be reached.<sup>11</sup> The medical profession has long accepted responsibility for producing an adequate supply of physicians. This is an obligation that we must meet.

In preparing for the future—and convincing more medical graduates to become surgeons—we cannot overlook or underestimate the value of mentors and role models. Significant mentors were missing from my experience as a medical student and resident. No one guided me into colorectal training; it was really my own experience in a general rural surgical practice—where I was impressed by the gratitude of patients with anorectal problems, whom I was able to treat despite a lack of specific training—that convinced me this would be a good specialty to pursue. I was extremely fortunate to be accepted into the University of Minnesota program, where the mentorship was exceptional and helped me focus on colorectal surgery, surgical education, and clinical research. I am deeply indebted to my mentors, particularly Stan Goldberg, David Rothenberger, Sandy Nivatvongs, and others in the Minnesota group. Without their influence I would not be here today.

Mentorship is indispensable. The next generation of surgeons will be responsible for determining the very future of surgery.<sup>12</sup> It is essential that we continue to develop young surgeons as future leaders. Surgical specialists, in particular, bear the multifaceted responsibility of being mentors, consultants, and role models working as part of a technologically advanced health care team that often provides complex care.<sup>13</sup> Residents traditionally learn interpersonal communication and professional skills from their role models and mentors.<sup>14</sup> We must take a leadership role and entice more medical students into surgery now, in order to meet the world's future needs. And we must keep in mind that a medical student's educational experience is crucial in sustaining his or her interest in a surgical career.

The extent of a student's interaction with role models and mentors has been shown to strongly influence the career plans of United States medical graduates.<sup>15</sup> Dr. Murray Brennan, one of my own excellent mentors and former Chairman of the Department of Surgery at Memorial Sloan-Kettering Cancer Center, has written that "We can never underestimate the value of identified role models and subsequent mentors. If we want students to embrace surgery, then we need to give them the experience of seeing the rewards of surgical care and of our own delight and enthusiasm for what we do."6 A powerful factor in a student's choice of medical specialty is identification with role models and mentors. Fifty-six percent of residents cite role models as their impetus for entering a particular surgical subspecialty.<sup>6</sup> Role models can be introduced at any point in a training program, but the best point may be while a student is in medical school.<sup>6</sup>

As an example of how our Society is fostering mentorship: this past year two new types of initiative grants were established by José Guillem and Walter Koltun at the ASCRS Research Foundation. Five \$20,000 initiative grants will be available to general surgery residents; ten \$4,000 initiative grants will be available to medical students. The goal is to attract these young men and women into the field of colon and rectal surgery through participation in clinical or laboratory-based research, hopefully stimulating career interest in our specialty.

Surgeons worldwide share a love and passion for surgery. The demands of our profession oblige us to learn continuously and be educated to the fullest extent. Clinicians in every country on earth are motivated to share ideas, knowledge, new technology, and surgical skills.

In the 18th, 19th, and early 20th centuries, United States surgical trainees seeking to master cutting-edge skills opted for higher education in England, Germany, and France. St. Mark's Hospital in London was long regarded as the "mecca of proctology." Numerous surgeons, including Dr. Joseph Mathews and many of the original founding members of our Society, studied at St. Mark's. These educational experiences fostered the early globalization of colon and rectal surgery. Nowadays, students and surgeons around the world admire the United States residency system. Although the United States' system is not perfect, its high standards for proficiency and ethics inspire many international students to seek surgical training here.

The ASCRS has promoted the globalization of our specialty for many years, and significant progress has been achieved. United States colorectal programs routinely train international clinical and research fellows and host international observers. Our Journal, *Diseases of the Colon & Rectum*, is not only the journal of the ASCRS but the official journal of the Colorectal Surgical Society of Australia and New Zealand and the Japanese Society of Coloproctology. Dr. Vic Fazio, a past president of our Society and past Editor-in-Chief of *Diseases of the Colon & Rectum*, championed and fostered the journal's global distribution.

Another example of our specialty's thrust towards globalization is the International Council of Coloproctology (ICCP), which was established by the ASCRS in 2003 and is currently chaired by Graham Newstead of Sydney, Australia. The goals of the ICCP are to provide international fellows with scholarships that enable them to further develop the specialty of colorectal surgery in their home countries. Traveling fellowships have also been established for the purpose of fostering international relations between the ASCRS and other colorectal societies. Outreach programs are being developed to support areas of need in colorectal surgery internationally. The plan is to determine international standards of practice and facilitate the development of international collaborations. Many colorectal societies are now developing worldwide, some with more than 1,000 members.

How can we work to further enhance the globalization of high-quality, cutting-edge colorectal surgery?

First, we must promote the fact that globalization will ultimately lead to an increase in knowledge and surgical skill. We should encourage experienced colorectal surgeons to travel abroad, representing us in other countries and enhancing the quality of surgical education internationally. We should increase the worldwide exchange of students and residents, promote the establishment of good colorectal training programs in developing nations, and encourage certification in our surgical specialty worldwide.

Currently the ASCRS is in a leadership position in terms of being able to instantly disseminate medical information and broadcast meeting proceedings via the Internet. In the future, it is conceivable that the Internet—and other forms of information technology that we do not yet know of—will spur the globalization of all medical and surgical specialties. Developing nations may have access to information immediately and inexpensively.<sup>16</sup> Worldwide, consumers may have access to remote specialty consultations, medical advice, individualized treatment regimens, and other services.<sup>17</sup>

Colorectal surgeons have developed important interactions and collaborations with colleagues internationally. This will prove important to us in the years ahead. The ASCRS has an increasing international presence and responsibility. More than 50 percent of our new members live outside the United States. We should continue to grow through a diversity of approaches: by meeting our membership's educational needs; developing a global infrastructure for providing high-quality and appropriate care; enhancing communication internationally; maximizing our ability to collaborate with other organizations worldwide; promoting and supporting research; and increasing our membership while preserving financial growth and stability.<sup>18</sup> We should support colorectal surgeons internationally, paying special attention to nations with areas of great need, while maintaining a goal of establishing high standards in practice and education.<sup>19</sup>

One nation deserving our special focus is China, with a population of 1.3 billion people. In major Chinese medical institutions, the development of colorectal surgery is progressing very well. In more obscure institutions and in many regions, however, the specialty is still primitive and undeveloped. Many Chinese surgeons whose practices involve colorectal disease are now requesting guidance and input into the development of this specialty. China is a country with significant need.

The People to People Ambassador Delegation, which was established by President Dwight Eisenhower in 1956, is an organization formed to encourage worldwide peace and understanding. The goal of People to People is to promote global exposure to different forms of knowledge, and to share education and skill in many areas. When physicians form a traveling delegation, it enables distant colleagues to learn from one other, share information, observe patient care, compare treatments, implement new technologies, and work together to improve health care in developing countries.<sup>20</sup>

As President of our Society this year, I am honored to have been asked by the People to People Ambassador Program to lead a Colorectal Surgical Delegation to China in April of 2009. Invitations will be sent out to our members, spouses, and guests asking them to participate in this trip to Tibet, Beijing, and Chengdu. Meetings, cultural events, and sightseeing are included. I hope that many of you will join me.

The surgical education that has brought every one of us here today is, in many ways, a shared experience to be remembered and cherished. In the past, we all enjoyed an intense immersion in our surgical education, during which we gained the knowledge, skill, and training to perform well. We were rewarded for providing optimal patient care, for being educators as well as clinicians, for serving as role models to junior trainees and colleagues. However, we now find ourselves burdened by restrictive legislation, mandated compliance, and regulatory guidelines.<sup>11,12</sup>

There is much ongoing debate regarding the adequacies and inadequacies of surgical education today. Surgical education now takes place in a rapidly changing environment, one filled with the conflicting realities of rigidified existing programs that have failed to adapt to modern trends, and alternating demands for accommodation of different lifestyles.<sup>6</sup>

In the not-too-distant past, a career in surgery offered a good standard of living and considerable social prestige. In the current climate, however, the cost of medical education itself burdens students with debt. General surgery residencies are perceived as being overly long and nonspecific, further delaying the resident's ability to begin paying off debts and make a living. Reimbursements have declined while the costs of practice have skyrocketed, causing some to leave surgery altogether and dissuading others from entering the profession.<sup>21</sup>

The fact is that today's medical students base many important career decisions on lifestyle preferences as well as financial realities. Between 1996 and 2002, there was nearly a 100 percent increase in the number of medical graduates choosing to enter the specialty of radiology; and a 600 percent increase in those choosing anesthesiology.<sup>22</sup> Surgery is perceived as a lifestyle-limiting specialty.

Our urgent task is to make surgery more attractive to the medical student. It is evident that surgical residents have significant and valid concerns regarding the length of surgical training, the demands of clinical service that take time away from education and family life, and meeting the unrealistic goals of overly comprehensive training in which they are expected to successfully manage disease entities that they will never deal with in practice. The current shortfall in filling surgical residency positions with United States medical graduates is approximately 22 percent; hence, our increasing recruitment of international medical graduates to fill these slots. This often results in the permanent loss of these young physicians to their home countries—where they are most needed.<sup>23</sup>

Approximately 70 percent of males and 50 percent of females completing general surgical residencies now apply for specialist training.<sup>6</sup> In order to prepare for the future and entice more medical students into colorectal surgery, it is essential that we provide attractive clerkships in our subspecialty. We must also be willing to serve as role models and mentors, giving our students a rich and appealing glimpse into the life of a colorectal surgeon.

Practical changes in surgical training are also being considered. The American Board of Surgery is redefining critical core curricula in favor of modular training programs. A proposal to shorten the duration of the traditionally lengthy, overly comprehensive training in general surgery has been favorably reviewed. Altered programs are already in place. In vascular surgery, a 3 + 3 module has been established. In cardiac surgery the module is either a 4 + 2 or, alternately, a 4 + 3. And for urology and orthopedics the module is now 1 + 4 or 5.

Modular training programs are being considered for all specialties. The basic component will be uniform: an understanding of clinical diagnosis and management. Specialization, however, will be developed around a framework of essential knowledge and skills. The future of surgical training programs is that they will be specifically designed for and focused on what surgeons will ultimately practice. This will make surgical residency more efficient, realistic, and attractive.

The American Board of Surgery Core Curriculum Committee continues to negotiate the components of its training curriculum.<sup>24</sup> As our specialty of colorectal surgery evolves and expands, we must reassess whether the current training program is adequate. The American Board of Colon and Rectal Surgery Blue Ribbon Committee, which is chaired by Dr. Bruce Wolff, is considering a change in the standard residency program for colon and rectal surgery, which currently includes 1 colorectal residency year after 5 years of a general surgery residency.<sup>25</sup> All Committee and Board members are in substantial agreement that a 2-year training program is preferable; and the Committee is now in the documentation phase. Two options have been considered: a 4 + 1 + 1 program; or a 5 + 2 program. The Blue Ribbon Committee's consensus was that the 4 + 1 + 1 is preferable, and a proposal seeking approval of the 4 + 1 + 1 program was submitted to the American Board of Surgery Core Curriculum Committee.

If this proposal was accepted, colorectal surgery would have to be offered to all general surgery residents in the PGY 1 to 3 years. Every colorectal program would have to be affiliated with a general surgery program, and the colorectal match will be moved to PGY 3.

The components of the proposal for PGY 1–4 include endoscopy and covering 125 colonoscopies, vascular access, laparoscopic skills, urology, and the intensive care unit; there would be less exposure to vascular, thoracic, breast, ear, nose, and throat, orthopedics, neurosurgery, and cardiac surgery. The PGY 5 year would include 3 months of trauma and acute surgery, 3 months of transplant, hepatobiliary, or surgical oncology, and 6 months of colorectal surgery. The PGY 6 year would cover a full spectrum of colorectal surgery, with broadened exposure to chemotherapy, advanced endoscopy, interpretation of colography, advanced technology, medical management of inflammatory bowel disease, liver disease, and physiology.

Unfortunately, the 4 + 1 + 1 proposal was not approved by the American Board of Surgery Core Curriculum Committee. A 5 + 2 program is now being considered.

Nevertheless, this is just part of how we must prepare for the future. We should move forward with optimizing colorectal surgical training as is currently being proposed. As Murray Brennan has said: The issue is not whether we should change but how we should change, and how best we should change.<sup>26</sup> In recent years, there has been increasing interest in our subspecialty on the part of general surgery residents. This is quite promising. We should remain optimistic.

Meanwhile, advances in technology—including computer simulation, e-mail, teleconferencing, remote access, digital assistants, robotics, and advances in imaging tools—have the potential to change medical education and practice dramatically, and on a global level. The future will not wait for anyone. It is here now. As surgeons, our collective responsibility is to meet its demands.

I would like to close with quotes from two famous individuals.

The first is Charles Kettering, an inventor and a founder of Memorial Sloan-Kettering Cancer Center. "The world hates change," he stated, "yet it is the only thing that has brought progress."<sup>27</sup>

The second is Sir Winston Churchill, who said the following: "A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty."<sup>28</sup>

Colorectal surgery is a great profession, with splendid opportunity for personal and professional satisfaction. With more and more hands, we can make light work! I believe that our future is bright.

## REFERENCES

- Gallozzi C. Chuck Gallozzi, personal-development.com. Available from: http://www.personal-development.com/chuck/. Accessed March 13, 2008.
- 2. Rutkow IM. Moments in surgical history: colorectal surgery. Arch Surg 2000;135:97.
- 3. Sullivan ES. Joseph M. Mathews Oration: Giants, heroes, comrades, and friends. Dis Colon Rectum 2001;44:335–40.
- Cooper RA. It's time to address the problem of physician shortages: graduate medical education is the key. Ann Surg 2007;246:527–34.
- AAMC Data Book 2004. Available from: http://www.aamc.org/ data/databook/start.htm. Accessed March 25, 2008.
- 6. Brennan MF, Debas HT. Surgical education in the United States: portents for change. Ann Surg 2004;240:565–72.
- Lind DS, Cendan JC. Two decades of student career choice at the University of Florida: increasingly a lifestyle decision. Ann Surg 2003;69:53–5.
- O'Connor TM, Hooker RS. Extending rural and remote medicine with a new type of health worker: physician assistants. Aust J Rural Health 2007;15:346–51.
- 9. Cooper RA. New directions for nurse practitioners and physician assistants in the era of physician shortages. Acad Med 2007;82:827–8.

- Smith LE. ASCRS Presidential Address (Washington, DC 1999): "A Bold Message for the Next Millennium." Dis Colon Rectum 2000;43:1201–5.
- 11. Fry R. ASCRS Presidential Address: "A Picture from Philadelphia." Dis Colon Rectum 2003;46:1–5.
- James TA, Russell TR. The future of the American College of Surgeons: uniting two perspectives. Bull Am Coll Surg 2007; 92:14–8.
- Fernández-Cruz L. General surgery as education, not specialization. Ann Surg 2004;240:932–8.
- Sachdeva AK, Bell RH Jr, Britt LD, Tarpley JL, Blair PG, Tarpley MJ. National efforts to reform residency education in surgery. Acad Med 2007;87:1200–10.
- Andriole DA, Klingensmith ME, Jeffe DB. Who are our future surgeons? Characteristics of medical school graduates planning surgical careers: analysis of the 1997 to 2004 Association of American Medical Colleges' Graduation Questionnaire National Database. J Am Coll Surg 2006;203:177–85.
- Goldberg SM. Joseph M. Matthews Oration. Globalization comes to colon and rectal surgery. Dis Colon Rectum 2005;48:424–8.
- Crounse B. Microsoft. 5 healthcare trends to watch. Available from: http://www.microsoft.com/industry/healthcare/providers/ businessvalue/housecalls. Accessed December 10, 2007.
- MacKeigan JM. ASCRS Presidential Address: "Finding Longitude." Dis Colon Rectum 2001;44:1739–42.
- ASCRS: International Council of Coloproctology (ICCP). Available from: http://www.fascrs.org/aboutus/international\_ iccp/. Accessed March 13, 2008.
- 20. Citizen Ambassador Programs. People to People Ambassador Programs. PeopletoPeople.com. Available from: http://www. citizenambassadors.org. Accessed March 25, 2008.
- Ellerin BE. Debt, demographics, and dual degrees: American medicine at the crossroads: part 3: a paradigm shift or a return to the basics? J Am Coll Radiol 2007;4:537–46.
- 22. Dorsey ER, Jarjoura D, Rutecki GW. Influence of controllable lifestyle on recent trends in specialty choice by US medical students. JAMA 2003;290:1173–8.
- Sheldon GF. Surgical workforce since the 1975 study of surgical services in the United States: an update. Ann Surg 2007;246:541–5.
- Debas HT, Bass BL, Brennan MF, et al. American Surgical Association Blue Ribbon Committee Report on Surgical Education: 2004. Ann Surg 2005;241:1–8.
- Chu KM, Shoetz D. What impact might general surgery practice patterns of colon and rectal surgeons have on future training? Dis Colon Rectum 2007;50:1250–4.
- Brennan MF. Lifelong surgical education: adapt, change, or wither. Arch Surg 2007;142:394–8.
- Charles Kettering quotes. Brainy Quote. BrainyMedia.com. Available from: http://www.brainyquote.com/quotes/authors/ c/charles\_kettering.html. Accessed March 13, 2008.
- Winston Churchill quotes. Brainy Quote. BrainyMedia.com. Available from: http://www.brainyquote.com/quotes/authors/ w/winston\_churchill.html. Accessed March 13, 2008.