Annals of Surgical Oncology, **11**(9):798–806
DOI: 10.1245/ASO.2004.03.942

Presidential Address

Society of Surgical Oncology Presidential Address: Friendships, Partnerships, and Teams—Keys to Academic Success

Alfred M. Cohen, MD, FACS, FASCRS

After productive careers at the Massachusetts General Hospital and Memorial Sloan-Kettering Cancer Center, I accepted the position of Director and CEO of the Lucille P. Markey Cancer Center at the University of Kentucky in Lexington. I was impressed by the state, the institutional commitment to the Cancer Center, and the outstanding physical plant that involved four relatively new high-quality buildings. In the 3 years that I have been in Lexington, I have grown to greatly enjoy my new lifestyle and the many new friends that I have made at the University and in the "Bluegrass."

Lexington is known for the "three H's"—history, horses, and hoops. History goes back to 1775, when Lexington was established and named for the first battle of the Revolutionary War. Most children have read about the life of Daniel Boone, who helped establish the state of Kentucky. The equine industry, particularly thoroughbred racehorses, is an integral component of Kentucky, particularly the Central Bluegrass region within which Lexington is situated. Keeneland Race Track is a beautiful facility that provides the venue for a very large number of the thoroughbred horse auctions that occur during the year. The last *H* is for *hoops*, which has to do with the University of Kentucky being the "winningest" basketball team in the United States. The basketball team plays in Rupp Arena, 6000 seats larger than my prior venue at Madison Square Garden. My life in Lexington is dramatically different, my having moved from an apartment in New York City to a thoroughbred horse farm in Lexington. Although only 25 minutes from the University of Kentucky Chandler Medical Center, I live in a rural environment.

Received March 18, 2004; accepted June 22, 2004.
Address correspondence and reprint requests to: Alfred M. Cohen, MD, FACS, FASCRS, Lucille P. Markey Cancer Center, University of Kentucky Chandler Medical Center, 800 Rose Street, Room 140, Lexington, KY 40536; Fax: 859-323-2074; E-mail: acohen@uky.edu.

My academic career has proceeded in various venues—Boston, Bethesda, New York, Chicago, and, most recently, Lexington. As I thought about the opportunities to share some insights gained over the years with the membership of the Society of Surgical Oncology, it became clear to me that an important unifying theme has been my ability to leverage sequential friendships, partnerships, and teams as keys to academic success. It is very difficult to start an academic career and define an academic or business model for a career that will survive unchanged through a lifetime. It is the purpose of my address to share with readers the success factors that I have had in my academic career that provide what I believe are useful paradigms for others in academic surgical oncology.

Surgical Residency: Massachusetts General Hospital

Massachusetts General Hospital was a pioneer in the implementation of a nonpyramidal surgical training program. The Halsted-Hopkins model was changed there more than 50 years ago. When I arrived to start my internship, the team approach to patient care avoided excess competition and encouraged the development of close friendships among peers. I rapidly recognized the value of such teams in providing quality patient care in an integrated educational atmosphere.

Surgery Branch: National Cancer Institute

After an internship and 1 year of residency at the Massachusetts General Hospital, I had the opportunity and privilege to join Dr. Alf Ketcham at the Surgery Branch of the National Cancer Institute for 2.5 years. During this time, I gained appreciation that in radical cancer surgery, technique matters. A quality operative procedure is the best way to maximize oncological outcome and to minimize morbidity and mortality. During this stay at the National Cancer Institute, I was able to partner and develop friendships with Everett Sugarbaker, Bill Wood, and Peter Deckers, as well as many others. I

was successful in obtaining mentorship not only from Dr. Ketcham, but also from Dr. Don Morton, Yosef Pilch, and, for a brief time, Sam Wells. My initial work in Dr. Ketcham's laboratory in partnership with Dr. Sugarbaker led to a number of publications relevant to the biology of metastases.[1–3] My interest turned toward tumor immunology, and Drs. Morton and Pilch were very helpful additional mentors.[4–9] The Surgery Branch taught me the value of partnerships and teams in productive bench research.

Massachusetts General Hospital

After completing my residency and "superchief" residency year at the Massachusetts General Hospital, I joined the faculty in the Surgical Oncology Division. As I look back on the pivotal success factors, many aspects are instructive. It was the first time that I appreciated how essential quality support staff are to a successful career. This includes nurses, secretaries, and program coordinators. I also appreciated that despite all my years of training, I would need ongoing mentorship. Dr. Claude Welch played that predominant role (Fig. 1). However, additional key surgical faculty included Drs. W. Gerald Austen (the Chairman of Surgery), George Nardi, Stephen Hedberg, and Ashby Moncure, among many others. In retrospect, having a large number of mentors to turn to for clinical and academic advice is essential throughout our careers.

The most important partnership that led to my success was that with Dr. William Wood (Fig. 2). We were partners during my entire 9 years at the Massachusetts General Hospital. This was a true partnership, in that we realized that to maximize our productivity, our goal should be to aggressively support each other. This has been a partnership of friendship and love, as well as mentoring of each other, which continues to this day.

At the Massachusetts General Hospital, I became involved with an essential component of surgical oncology—the leadership of multidisciplinary clinical trials. I was able to develop a strong linkage to radiation therapy, particularly in regard to rectal cancer.[10–18] Through ongoing educational efforts, I was able to convince the conservative surgical staff that in breast and rectal cancer, radiation therapy represented complementary and not alternative therapies. Implementing an intraoperative radiation therapy program required a fully integrated radiation, surgical, and anesthesiology team program.[19–22]

In my linkage with medical oncology, my focus was on hepatic arterial chemotherapy. I had been involved with hepatic arterial chemotherapy for metastatic colorectal cancer for several years when Dr. Perry Blackshear entered my office holding a early model of an implantable titanium pump patented by himself and his father at the University of Minnesota. I immediately developed a program using this entirely implantable system,[23–26] which ultimately led to my interest in joining Nancy Kemeny at Memorial Sloan-Kettering Cancer Center. I adapted the implantable system for use in patients with diabetes[27] and in chronic pain by using epidural morphine infusion, proving the principle in a canine model and then in patients.[28,29]

FIG. 1. Dr. Claude Welch.

It was during this time of my career that I had a large clinical practice in breast and colorectal cancer, as well as smaller practices in head and neck, esophageal, and liver cancer combined with a bench research program.[30–33] It became apparent that to really be productive in academic surgical oncology, superspecialization was essential. It was at this time that I had the opportunity to move to Memorial Sloan-Kettering Cancer Center.

Memorial Sloan-Kettering Cancer Center

In my 14 years at Memorial Sloan-Kettering Cancer Center, there were a large number of factors that I believe were pivotal to success.

FIG. 2. Dr. William Wood.

Leadership Skills

It was during my years at Memorial Sloan-Kettering Cancer Center that I was able to observe firsthand Dr. Murray Brennan, the physician-scientist leader of the Department of Surgery (Fig 3). It was impressive to see a department chairperson with outstanding technical and multidisciplinary expertise and commitment to evidence-based practice culture and who measured his own success by his ability to help develop the careers of others in his department. It was during my stay at Memorial Sloan-Kettering Cancer Center that I had the excellent opportunity to understand and develop leadership skills.

FIG. 3. Dr. Murray Brennan.

Leadership is something that is not part of our education in academics and is learned mostly on the job. I found that this required some thought and that many aspects of leadership were not entirely obvious.

Recruit and Mentor Faculty

During this time, I was able to recruit Elin Sigurdson, Jose Guillem, Philip (Pat) Paty, and W. Douglas Wong. I also arranged for Dr. Marty Weiser, when he completed his surgical oncology fellowship, to take a colorectal fellowship, and he has subsequently returned to the Memorial Sloan-Kettering staff. The Colorectal Service is now under the excellent leadership of Dr. Doug Wong.

I was able to partner with Dr. Nancy Kemeny and with a number of other colleagues in surgery and medical oncology to expand an already vibrant hepatic arterial chemotherapy program.[34–40] I was able to partner with Dr. Stuart Quan and Dr. Warren Enker, colleagues in the colorectal service, in developing additional quality initiatives in the surgery of rectal cancer. We reported our experience with coloanal reconstruction.[41–47] Dr. Enker and I developed a clinical program of nerve-preserving total mesorectal excision surgery.[48,49] When Dr. Paty joined our team, we started addressing the problem of late bowel dysfunction after low anterior resection or coloanal reconstruction. The use of colon J-pouches for ultralow reconstructions was introduced to improve bowel function.[50] I expanded on my partnership with radiation medicine and built a long-standing collaboration with Dr. Bruce Minsky in the development of innovative rectal chemoradiation therapy protocols.[46,51–55] By building additional partnerships with Dr. Sidney Winawer, the Chair of Gastroenterology and Nutrition, the colorectal service was able to greatly increase its volume.

Two aspects of the colorectal program that were essential to our success were the development and implementation of a colorectal disease clinical database and a fresh frozen tissue bank. Health Insurance Portability and Accountability Act of 1996 regulations have complicated such initiatives, but deidentified linked tissue-clinical datasets are crucial for translational research success.

The disease team concept at Memorial Sloan-Kettering Cancer Center formally put into place disease management teams. While I was leader of the colorectal team, it was apparent for many years that this vision is absolutely critical to quality care, to control over the clinical research portfolio, and to formalizing translational research linkages. It is a concept that I have embraced at the Markey Cancer Center.

Mentoring Fellows

As my own career matured, I gained increasing appreciation for the many pathways for success in academic surgical oncology. In reality, there are only a small subset of faculty who will maintain the passion to succeed as a principal investigator of a laboratory-based research program. However, there are many other options for success. Working within disease teams, faculty can provide the key link to the translational research programs. Additional career paths are listed in Table 1.

Textbook Senior Editor

During this time in my career, I had the opportunity to be the lead editor of a major textbook in my field of interest. I found this a very educational experience. Partnering with senior coeditors is essential. If one wants to have chapters written in a timely fashion by senior faculty, it is imperative to use coeditors to interact with people in their own field. I also gained further appreciation that many accomplished academic physicians are poor writers and that despite a textbook of more than 1100 pages that was extremely well reviewed, these types of specialty publications are not a very lucrative endeavor considering the amount of time involved. I devoted 2 days a week for 2 years on this project.

American College of Surgeons Commission on Cancer

This has been a very rewarding component of my career, with multiple success factors. The Commission on Cancer involves collaborating with a highly productive and organized full-time staff and a medical director and using a large voluntary membership. Joint leadership with the above was a constant challenge, yet it was highly rewarding. Over the past 2 years, we have expanded the quality and usefulness of the National Cancer Database, implemented disease teams, and refocused the liaison program toward a stronger partnership with the American Cancer Society and local and regional cancer control issues.

TABLE 1. *Career paths in surgical oncology in addition to bench research*

Expert clinician
Collaborator in laboratory research
Clinical trials
Education
Quality improvement
Population-based outcomes research
Prevention
Screening
Medical informatics
Business aspects—administration

Cancer Center Director and Medical Center Leadership

I have had an exciting 3 years since becoming a Cancer Center director. I rarely use terminology such as *diarrhea*, *anastomotic leak*, and *colonoscopy*. More commonly, I use terminology in my daily life such as *vision*, *enterprise*, *leverage*, *cohesive*, *strategic plan*, *critical success factors*, and *aligning incentives*. As a matrix Cancer Center director, I have 170 faculty in 28 departments from 8 colleges. I have strong interactions with the State of Kentucky, the University of Kentucky, and the Markey Cancer foundation. The success factors in at the University of Kentucky are illustrative.

Markey Foundation

The Markey Cancer Center Foundation was established in the 1980s to help develop a matrix cancer center at the University of Kentucky. This initiative has been led the entire time by Dr. Ben Roach, a family practitioner in Midway, KY. Dr. Roach is president of the Foundation and has led the board in fundraising to allow construction of four Cancer Center buildings (Figs. 4 and 5), as well as providing yearly financial support for

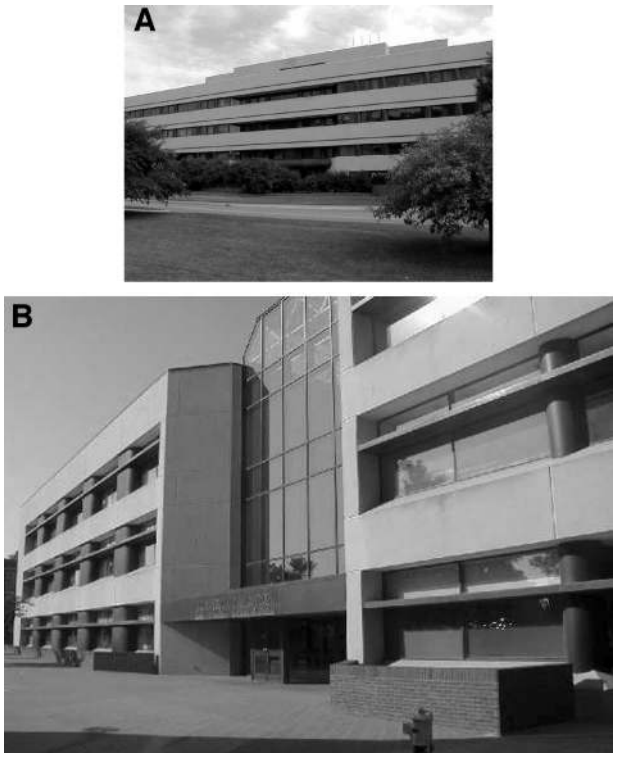

FIG. 4. (**A**) Ben Roach Patient Care Building; (**B**) Combs Research Building.

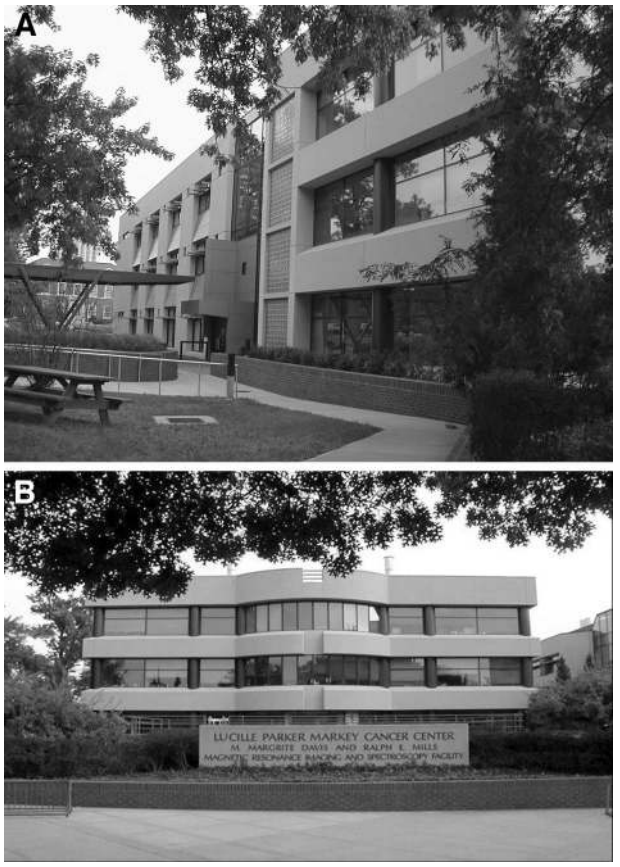

FIG. 5. (**A**) Whitney-Hendrickson Ambulatory Care Building; (**B**) David-Mills Research Building.

myself and other people and programs within the Cancer Center.

Lung Cancer Research Program

Kentucky was one of the first states to formally use tobacco settlement money for lung cancer research. The program is a joint initiative of the University of Kentucky and the University of Louisville. It provides more than $3 million per year to the University of Kentucky for lung cancer research.

TABLE 2. *Impediments to successful organizational change—mistakes to common-to-fail transformational efforts*[57]

Underestimating the power of vision
Failing to create a powerful, guiding coalition—aligning incentives
Undercommunicating the vision
Permitting individuals or structures to block the new vision
Failing to create short-term wins

TABLE 3. *Leadership versus management functions*

Leadership
Setting direction
Setting priorities
Aligning people
Motivating people
Management
Planning and budgeting
Organizing and staffing
Controlling and problem solving

Cotter JP. What leaders really do. In: Wren JT, ed. *The Leader's Companion—Insights on Leadership Through the Ages.* New York: The Free Press, 1995.

Partnership With the College of Pharmacy

One of the great strengths of the University of Kentucky Medical Center is the College of Pharmacy (ranked third in the United States). Its very large pharmaceutical sciences division has provided the Cancer Center with many links in the area of experimental therapeutics. We were able to leverage this partnership to obtain several million dollars in state support for new drug development. A new and larger Current Good Manufacturing Processes facility is under construction.

Cancer Registry

Under the leadership of Dr. Tom Tucker, the state has supported a high-quality State Cancer Registry for more than the past decade. Last year, Kentucky became one of the Surveillance, Epidemiology, and End Results–designated registries. This is a part of our outstanding cancer prevention and control program with a prevention research center, all led by Dr. Steve Wyatt.

UK Chandler Medical Center

When I came here, I had the opportunity to join an outstanding Department of Surgery led by Dr. Robert Mentzer. The surgical oncology section is a wonderful home for my surgical practice, with high-quality faculty including Drs. Pat McGrath, Dan Kenady, David Sloan, and Nader Hanna. Other faculty who have been in Lex-

TABLE 4. *Human resources strategies*[60,61]

Era	Criteria for assigning work	Method
Preindustrial	Age	Visual inspection
	Sex	
	Tribe	
	Class	
Industrial	Trade skills	Certification
	Experience	Selection panel
	Education	
Postindustrial	Team role	Computer matching
	Personal orientation	Interviews

ington through the years include Ben Eiseman, Ward Griffen, and Benjamin Rush, among many others.

One of the cultural problems I identified soon after arriving was the friction between the University of Kentucky Hospital and the University of Kentucky College of Medicine, despite both being integral components of the University of Kentucky. Under the leadership of our new University president, Dr. Lee Todd, the Medical Center has been reorganized, and a position of Executive Vice President for Health Affairs was established. I chaired the search for this key leadership person and had the opportunity to serve as interim Executive Vice President for Health Affairs. During this period of time, I gained additional insights into the complexity of academic health centers.

As I look back on my career and success factors, the issues related to leadership and management of corporations and academic health centers were consistent with what I saw as many of the key success factors in my own career.

Leadership and Change in Corporations and Academic Health Centers

Many in the business community have shared their insights with the general public and have published well-read books on leadership and management. I want to share some of what I consider the highlights of some of these publications that I believe are relevant to academic health centers.

In a pivotal book 20 years ago about American business, R. M. Canter described five important characteristics of competitive organizations: flexibility, commitment to the individual, use of teams, strong core competencies, and encouragement of diversity.[56] For any of us who have been involved in leadership, we appreciate how difficult change in an academic health center can be. J. P. Cotter described this appropriately in his 1996 publication[57] in regard to impediments to successful organizational change: "Most leaders overestimate their ability to force large organizational changes, and underestimate how difficult it is to drive people from the comfort zones." Cotter was able to define the mistakes common to failed transformational efforts, and these are listed in Table 2. Cotter also pointed out the importance of differentiating leadership versus management. He states, "Most U.S. corporations are over-managed and under led—an imbalance that leads to organizational inertia and mediocrity." This certainly applies to academic and medical centers as well.

As I have explored aspects of leadership, I have been most impressed with an analogy described by Ben Zander, a Boston musician and conductor, and more widely popularized by Peter Drucker, the management guru, in his 1994 book *The Post Capitalist Society*.[58] The widely quoted comment from Ben Zander is "The conductor is the last bastion of totalitarianism in the world. . ..I practiced that model of conducting for years. It wasn't until I was about 45 that I realized something amazing: the conductor doesn't make a sound. The conductor's power depends on his ability to make other people powerful. That insight changed everything for me. I started paying attention to how I was enabling my musicians to be the best performers they could be." Peter Drucker uses the same vision in his publications.

The critical nature of leadership has been further defined by Jim Collins in his best-selling book *Good to Great.*[59] In looking at corporations that were already successful but transformed themselves to "great," there were five factors associated with the leadership of these organizations. The leaders were ambitious, but foremost for the company or enterprise and not for themselves. They were modest, self-effacing, and understated. They were results oriented. They were "more plow-horse than show-horse." Finally, they tended to attribute success to others in the organization.

We frequently tend to combine our descriptors used for leadership versus management. The distinction is important, has been described by J. P. Cotter, and is delineated in Table 3.

The clear themes of my career that have led to successful academic clinical programs have been friendships, partnerships, and teams. The importance of management teams has been well established in the military and was articulated 20 years ago by R. Meredith Belbin: it has been essential to the re-engineering of contemporary businesses. Peter Drucker and Meredith Belbin are two leading management academics who have articulated these issues.

TABLE 5. *The nine Belbin team roles*[60,61]

- Plant/innovator: creative, imaginative, unorthodox, solves difficult problems
- Resource investigator: extrovert, enthusiastic, communicative, explores opportunities, develops contacts
- Coordinator: mature, confident, a good chairperson, clarifies goals, promotes decision making, delegates well
- Shaper: challenging, dynamic, thrives on pressure; drive and courage to overcome obstacles
- Monitor evaluator: sober, strategic and discerning, sees all options, judges accurately
- Team worker: cooperative, mild, perceptive, diplomatic; listens, builds, averts friction
- Implementer: disciplined, reliable, conservative and efficient, turns ideas into practical actions
- Completer: painstaking, conscientious, anxious; searches out errors and omissions, delivers on time
- Specialist: single-minded, selfstarting, dedicated; provides specific knowledge and skills

TABLE 6. *Belbin phrase and slogan descriptors*

Plant/innovator	Resource investigator	Coordinator
When a problem is baffling, think laterally	We could make a fortune!	Let's keep the main objective in sight
Where there's a problem, there is a solution	Never reinvent the wheel	Does anyone else have anything to add to this?
The greater the problem, the greater the challenge	You can always telephone to find out	Never assume silence means approval
Ideas start with dreaming	Time spent in reconnaissance is seldom wasted	I think we should give someone else a chance
Without continuous innovation, there is no survival	Opportunities arise from other people's mistakes	Good delegation is an art

Management Teams

In selecting team members for major projects, it is essential that the team members' skill sets be complementary. They should have a good fit if one is to avoid the Apollo syndrome. The Apollo syndrome is a reference to teams needed to get us to the moon. Teams were initially formed of people with sharp analytical minds, all extremely intelligent, which was assumed to be essential to success. Dr. Belbin and his group appreciated that many of these teams failed. Dr. Belbin has led a 30-year research initiative at the Administrative Staff College, Henley, and the Industrial Training Research Unit in Cambridge.[60,61] Over this period of time, Dr. Belbin has moved the search focus from the study of qualities of an effective manager to study of successful management teams. The main reason that organizations have eliminated middle management has not been to save money, but to empower such motivated teams. The changes in hiring of human resources are listed in Table 4. These points have been well defined by Belbin and his colleagues. The Belbin team, in their publications over the past 25 years, have defined nine team member roles.[60,61] Tables 5 and 6 help the reader to define these team roles and subsequently provide phrase and slogan descriptors of these various roles (Tables 7 and 8). All of this information is available in Dr. Belbin's publications referenced previously, as well as his Web site (http://www.belbin.com).

The awareness of different and complementary roles for team members is empowering for leadership. The usual collection of innovative analytical leaders is not ideal for a management team. One would not want 11 quarterbacks on a football team or 5 point guards on a basketball team all at the same time.

CONCLUSIONS

I am grateful for the opportunity to have served the Society of Surgical Oncology as president during this past year. Rick Slawny and staff are highly professional and provide wonderful support to the Executive Council and the entire membership. Under the leadership of Dr. Scott Kurtzman, the establishment of the Society of Surgical Oncology Breast Fellowship has been a major turning point for the Society. The *Annals of Surgical Oncology* has reached its 10th anniversary, with an impact factor that ranks it fourth out of more than 100 surgical journals. If one excludes a surgical pathology journal, we are ranked third! Congratulations to Drs. Balch and Roh and the many section editors and reviewers. This high impact factor has allowed us to negotiate an excellent contract with Springer, our new publisher, another highlight of this past year.

There are many roads to professional success in surgical oncology. Over the last 35 years, I have tried to build friendships and mutually beneficial partnerships and to use productive teams to leverage my own expertise. This broadly applicable paradigm maximizes success and personal satisfaction. "Give time to love, give time to speak, and give time to share the precious thoughts in your mind. . ..And always remember....Life is not measured by the number of breaths we take, but by the moments that take our breath away." —George Carlin, 2003, on the death of his wife.

TABLE 7. *Belbin phrase and slogan descriptors*

Shaper	Monitor evaluator	Team worker
Just do it!	I'll think it over and give you a firm decision tomorrow	Courtesy costs nothing
Say "no," then negotiate	Have we exhausted all the options?	I was very interested in your point of view
If you say "yes," I will do it," I expect it to be done	On balance, this looks like the best option	If people listened to themselves more, they would talk less
I may be blunt, but at least I am to the point	Let's weigh up the alternatives	You can always sense a good atmosphere at work
I'll get things moving	Decisions should not be based purely on enthusiasm	I try to be versatile

TABLE 8. *Belbin phrase and slogan descriptors*

Implementer	Completer/finisher	Specialist
If it can be done, we will do it	This is something that demands our undivided attention	In this job you never stop learning
An ounce of action is worth a pound of theory	The small print is always worth reading	My subject is fascinating to me
To err is human, to forgive is not company policy	As O'Toole said about Murphy's law—"Murphy was an optimist"	The more you know, the more you find to discover
Let's get down to the task at hand	Perfection is only just good enough	It is better to know a lot about something than a little about everything
The company has my full support	Has it been checked?	A *committee* is 12 people doing the work of 1

ACKNOWLEDGMENTS

The acknowledgments are available online in the full-text version at www.annalssurgicaloncology.org. They are not available in the PDF version.

REFERENCES

1. Sugarbaker EV, Ketcham AS, Cohen AM. Facilitated metastatic distribution of the Walker 256 tumor in the Sprague-Dawley rat with hydrocortisone and/or cyclophosphamide. *J Surg Oncol* 1970; 2:277–89.
2. Sugarbaker EV, Ketcham AS, Cohen AM. Studies of dormant tumor cells. *Cancer* 1971;28:545–52.
3. Sugarbaker EV, Cohen AM, Ketcham AS. Do metastases metastasize? *Ann Surg* 1971;174:161–6.
4. Cohen AM, Millar RC, Ketcham AS. A microassay for cytotoxic antibody using I-125 iododeoxyuridine labeled target cells. *Transplantation* 1972;13:57–60.
5. Cohen AM, Ketcham AS, Morton DL. Cellular immunity to a common human sarcoma antigen and its specific inhibition by sera from patients with growing sarcomas. *Surgery* 1972;72:560–7.
6. Cohen AM, Millar RC, Ketcham AS. Host immunity to a growing transplanted methylcholanthrene-induced guinea pig sarcoma. *Cancer* 1972;32:2421–6.
7. Cohen AM. Host immunity to growing sarcomas. *Cancer* 1973; 31:81–9.
8. Cohen AM, Ketcham AS, Morton DL. Tumor-specific cellular cytotoxicity to human sarcomas: evidence for host immune response to a common sarcoma cell-surface antigen. *J Natl Cancer Inst* 1973;50:585–9.
9. Cohen AM, Ketcham AS, Morton DL. Specific inhibition of sarcoma-specific cellular immunity by sera from patients with growing sarcomas. *Int J Cancer* 1973;11:273–9.
10. Cohen AM, Wood WC, Gunderson LL, Shinnar M. Pathological studies in rectal cancer. *Cancer* 1980;45:2965–8.
11. Gunderson LL, Cohen AM, Welch CE. Residual, inoperable or recurrent colorectal cancer—interaction of surgery and radiotherapy. *Am J Surg* 1980;139:518–25.
12. Cohen AM, Gunderson LL, Welch CE. Selective adjuvant radiation therapy in colorectal cancer. *Dis Colon Rectum* 1980;4:247–51.
13. Cohen AM, Gunderson LL, Wood WC. Intraoperative electron beam radiation therapy boost in the treatment of recurrent rectal cancer. *Dis Colon Rectum* 1980;23:453–5.
14. Dosoretz DE, Gunderson LL, Blitzer PH, et al. Low dose preoperative radiation surgery and elective postoperative radiation therapy for resectable rectum and rectosigmoid carcinoma. *Cancer* 1983;52:446–51.
15. Willet C, Tepper JE, Cohen AM, Orlow E, Welch C, Donaldson G. Local failure following curative resection of colonic adenocarcinoma. *Int J Radiat Oncol Biol Phys* 1984;10:645–51.
16. Willet CG, Tepper JE, Cohen AM, Orlow E, Welch CE. Failure patterns following curative resection of colonic carcinoma. *Ann Surg* 1984;200:685–90.
17. Willett C, Tepper JE, Cohen AM, Orlow E, Welch C. Obstructive and perforative colonic carcinoma: patterns of failure. *J Clin Oncol* 1985;3:379–84.
18. Tepper JE, Cohen AM, Wood WC, Orlow EL, Hedberg SE. Postoperative radiation therapy of rectal cancer. *Int J Radiat Oncol Biol Phys* 1987;13:5–10.
19. Gunderson LL, Shipley WU, Suit HD, et al. Intraoperative irradiation: a pilot study combining external beam photons with "boost" dose intraoperative electrons. *Cancer* 1982;49:2259–66.
20. Gunderson LL, Cohen AM, Dosoretz DD, et al. Residual unresectable, or recurrent colorectal cancer: external beam irradiation and intraoperative electron beam boost ± resection. *Int J Radiat Oncol Biol Phys* 1983;9:1597–606.
21. Tepper JE, Gunderson LL, Orlow E, et al. Complications of intraoperative radiation therapy. *Int J Radiat Oncol Biol Phys* 1984;10:1831–9.
22. Tepper JE, Cohen AM, Wood WC, Hedberg SE, Orlow E. Intraoperative electron beam radiotherapy in the treatment of unresectable rectal cancer. *Arch Surg* 1986;121:421–3.
23. Cohen AM, Wood WC, Greenfield A, Waltam A, Dedrick C, Blackshear PJ. Prolonged transbrachial hepatic arterial chemotherapy using an implanted infusion pump. *Dis Colon Rectum* 1980;23:223–7.
24. Cohen AM, Greenfield A, Wood WC, et al. Treatment of hepatic metastases by transaxillary hepatic artery chemotherapy using an implanted drug pump. *Cancer* 1983;51:2013–9.
25. Cohen AM, Kaufman SD, Wood WC, Greenfield A. Regional hepatic chemotherapy using an implantable drug infusion pump. *Am J Surg* 1983;145:529–33.
26. Cohen AM, Kaufman SD, Wood WC. Treatment of colorectal cancer hepatic metastases by hepatic artery chemotherapy. *Dis Colon Rectum* 1985;28:389–93.
27. Blackshear PJ, Shulman GI, Roussell AM, et al. Metabolic response to three years of continuous, basal rate intravenous insulin infusion in type II diabetic patients. *J Clin Endocrinol Metab* 1985;61:753–60.
28. Poletti CE, Cohen AM, Todd DP, Ojemann RG, Sweet WH, Zervas NT. Cancer pain relieved by long-term epidural morphine with permanent indwelling systems for self-administration. *J Neurosurg* 1981;55:581–4.
29. Cohen AM, Wood WC, Bamberg M, Risaliti A, Poletti C. Continuous canine epidural morphine analgesia with an implanted drug infusion pump. *J Surg Res* 1982;32:32–7.
30. Cohen AM, Wood WC. Lysis of allogeneic tissue cultured colorectal cancer cells by blood group isoantibody in normal human serum. *J Surg Res* 1979;27:1–7.
31. Cohen AM, Wood WC. Carcinoembryonic antigen released from colorectal cancer cells in tissue culture. *J Surg Res* 1979;72:372–8.
32. Wood WC, Cohen AM, Bamberg M. Complement-mediated microcy to toxicity and microimmunofluorescent assays of allogeneic sera against breast carcinoma tissue culture lines. *Serol Anal Hum Cancer Antigens* 1980;565–70.
33. Cohen AM, Wood WC, Bamberg M, Martuza R. Cytotoxicity of human brain tumors by hematoporphyrin derivative. *J Surg Res* 1986;41:81–3.
34. Kemeny N, Cohen AM, Bertino JR, Sigurdson ER, Oderman P.

Continuous intrahepatic infusion of floxuridine and leucovorin through an implantable pump for the treatment of hepatic metastases from colorectal cancer. *Cancer* 1989;65:2446–50.
35. Seiter K, Kemeny N, Sigurdson E, Cohen AM, Oderman P. A phase I trial of hepatic artery fluorodeoxyuridine combined with systemic 5-fluorouracil for the treatment of metastases from colorectal cancer. *Reg Cancer Treat* 1991;3:293–7.
36. Kemeny N, Seiter K, Niedzwiecki D, Chapman D, Sigurdson ER, Cohen AM. Randomized trial of hepatic arterial floxuridine, mitomycin, and carmustine versus floxuridine alone in previously treated patients with liver metastases from colorectal cancer. *J Clin Oncol* 1993;11:330–5.
37. Kemeny N, Conti JA, Sigurdson E, et al. A pilot study of hepatic artery floxuridine combined with systemic 5-fluorouracil and leucovorin. *Cancer* 1993;71:1964–70.
38. Kemeny N, Seiter K, Conti JA, et al. Hepatic arterial floxuridine and leucovorin for unresectable liver metastases from colorectal carcinoma: new dose schedules and survival update. *Cancer* 1994; 73:1134–42.
39. Kemeny N, Conti JA, Cohen A, et al. A phase II study of hepatic arterial floxuridine, leucovorin and dexamethasone for unresectable liver metastases from colorectal carcinoma. *J Clin Oncol* 1994;12:2288–95.
40. Kemeny N, Huang Y, Cohen AM, et al. Hepatic arterial infusion of chemotherapy after resection of hepatic metastases from colorectal cancer. *N Engl J Med* 1999;341:2039–48.
41. Cohen AM, Enker WE, Minsky BD. Proctectomy and coloanal reconstruction for rectal cancer. *Dis Colon Rectum* 1990;33:40–3.
42. Cohen AM, Minsky BD. A phase I trial of preoperative radiation/proctectomy/coloanal reconstruction as an alternative to abdominoperineal resection—phase I results. *Arch Surg* 1990;125:247–51.
43. Minsky BD, Cohen AM, Enker WE, Sigurdson E. Phase I/II trial of pre-operative radiation therapy and coloanal anastomosis in distal invasive resectable rectal cancer. *Int J Radiat Oncol Biol Phys* 1992;23:387–92.
44. Paty PB, Enker WE, Cohen AM, Minsky BD, Friedlander-Klar H. Long-term functional results of coloanal anastomosis for rectal cancer. *Am J Surg* 1994;167:90–5.
45. Paty PB, Enker WE, Cohen AM, Lauwers GY. Treatment of rectal cancer by low anterior resection with coloanal anastomosis. *Ann Surg* 1994;19:365–73.
46. Minsky BD, Cohen AM, Enker WE, Paty P. Sphincter preservation with preoperative radiation therapy and coloanal anastomosis. *Int J Radiat Oncol Biol Phys* 1995;31:553–9.
47. Coakley V, Schwartz LH, Blumgart LH, et al. In vitro detection of occult bone marrow metastases in patients with colorectal cancer hepatic metastases. *Dis Colon Rectum* 1998;41:1112–5.
48. Havenga K, Enker WE, McDermott K, Cohen AM, Minsky BD, Guillem J. Male and female sexual and urinary function after total mesorectal excision with autonomic nerve preservation for carcinoma of the rectum. *J Am Coll Surg* 1995;182:495–502.
49. Hanna N, Guillem J, Dosoreta A, Steckelman E, Minsky BD, Cohen AM. Intraoperative parasympathetic nerve stimulation with tumescence monitoring during total mesorectal excision for rectal cancer. *J Am Coll Surg* 2002;195:506–12.
50. Cohen AM. Colon J-pouch reconstruction after total or subtotal proctectomy. *World J Surg* 1993;17:267–70.
51. Minsky BD, Cohen AM, Kemeny N, et al. Combined modality therapy of rectal cancer: decreased acute toxicity with the preoperative approach. *J Clin Oncol* 1992;10:1218–24.
52. Minsky BD, Cohen AM, Kemeny N, et al. Efficacy of pre-operative 5-FU, high dose leucovorin, and sequential radiation therapy for unresectable rectal cancer. *Cancer* 1993;71:3486–92.
53. Minsky BD, Cohen AM, Enker WE, et al. Preoperative 5-FU, low dose leucovorin and concurrent radiation therapy for rectal cancer. *Cancer* 1994;73:273–8.
54. Minsky BD, Cohen AM, Enker WE, et al. Preoperative 5-FU, low-dose leucovorin and radiation therapy for locally advanced and unresectable rectal cancer. *Int J Radiat Oncol Biol Phys* 1997;37:289–95.
55. Grann A, Minsky BD, Cohen AM, et al. Preoperative 5-flourouracil, low-dose leucovorin, and concurrent radiation therapy for clinical resectable T3 rectal cancer. *Dis Colon Rectum* 1997;40:515–22.
56. Canter RM. *The Change Masters—Innovation for Productivity in the American Corporation*. New York: Simon & Schuster, 1983.
57. Cotter JP. *Leading Change*. Boston: Harvard Business School Press, 1996.
58. Drucker P. *The Post Capitalist Society*. New York: Butterworth-Heineman, 1994.
59. Collins J. *Good to Great*. New York: Harper Business, 2001.
60. Belbin RM. *Management Teams: Why They Succeed or Fail*. New York: Butterworth-Heineman, 1981.
61. Belbin RM. *Team Roles at Work*. New York: Butterworth-Heineman, 1993.