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Sustaining the Spirit of Inquiry: The Key Role of the Department Chairman

PRESIDENTIAL ADDRESS DELIVERED BEFORE THE 75TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR CLINICAL INVESTIGATION, WASHINGTON, DC, 1 MAY 1983

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During the past three weeks, as I have been considering my remarks for today, I have also been in the position of trying to wear three hats: as chairman of a large academic department of medicine; as the president of your society; and as the new president of the Association of Program Directors in Internal Medicine.

As these three roles have joined and I approach the end of my term as your president, I feel a bit like Jen, the young protagonist of Jim Henson's fantasy *The Dark Crystal*, facing the approaching hour of the conjunction of three suns and needing to insert a missing shard of crystal so that light would be shed (1). For guidance, I have consulted my predecessors who have recorded their thoughts annually in *The Journal of Clinical Investigation*, and particularly Irving London and Neal Bricker, who were not only former presidents of this society, but also holders of my chair. In thinking through my present roles and trying to develop a statement that would be enlightening as well as personal, I decided to emphasize the importance of the department chairman's role in both "bringing out the best" in his colleagues and in supporting investigation. The title of my address, therefore, is "Sustaining the Spirit of Inquiry: The Key Role of the Department Chairman".

Others have commented on evolution and change in departments of medicine, of growing dissatisfaction of chairmen in their roles, and of the complexity and frenetic nature of modern clinical departments (2, 3). Although I find my task often frustrating and at times overwhelming, it is nevertheless a source of tremendous and continued satisfaction, replete with the challenge that comes with the need to define goals and strategies.

Traditionally, the goals of academic departments are to provide excellent patient care in the teaching hospital setting, seek excellence in education at all levels, and develop and sustain outstanding basic and clinical research. While my remarks are focused principally on departments of internal medicine, they are not meant to apply exclusively to such departments. Whereas we recognize these traditional goals as the basis for our academic efforts, it is also clear that one needs to seek modern approaches to sustain them. It is increasingly difficult to meet these objectives given our social and economic problems, the pressures of health service delivery with which modern academic medical centers contend, and the multiple demands on our time. Nevertheless, we must sustain these goals, and I believe there is much we can do, as leaders and as faculty members, to ensure that they persist.

As we move ahead into the uncertainties of the 1980s, I would suggest the following strategies as a means to achieving our traditional goals: (*a*) seek unity of purpose for departmental faculty members, while acknowledging different roles for individuals that are both professionally and personally satisfying; (*b*) attempt to "bring out the best" in the faculty; (*c*) find the resources to recruit the "best and brightest" young academicians on a regular basis; (*d*) provide regular review of the performance of individual faculty members and their divisions; (*e*) ensure efficient and profes-

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sional management with an organization that does not rely on any single strategy or source of support in a changing environment; and (*f*) engage in careful strategic planning.

Excellence in patient care in a cost-effective manner. Were I to survey the membership of our three societies about the most important role for a department of medicine in an academic setting, I am confident that I would get a variety of opinions which would include, as the first priority, education, research, or patient care. My own views on this subject have always been clear—the first priority of an academic department of medicine should be outstanding patient care. In the final analysis, it is the patient who enables us to educate our students and house officers and it is the patient for whom we ostensibly do clinical research. Such emphasis does not lessen the critical importance of education and research, it merely sets the ultimate objectives where they should be. If we are to serve as appropriate role models for our younger colleagues, we must focus on what is best for the patient. It is relatively easy to emphasize high-quality education if we practice that kind of medicine. We must have on our full-time faculties scientifically oriented, knowledgeable, and compassionate physicians who can provide and demonstrate concern for individual patients and their families. While some faculty members who are engaged heavily or principally in laboratory research do this extremely well, others do not, and there must be some full-time faculty who devote more substantial periods of their time to being outstanding role models as clinicians.

All of you are aware of increasing concern about the costs of medical care, particularly in our teaching hospitals. Students and house officers must be instructed in cost-effective care and in more cooperative use of limited resources. It is no longer acceptable for them to order anything they wish; they must be increasingly concerned about costs. While the American Board of Internal Medicine is trying to deal with these issues in structuring their cognitive examination, those of us responsible for training the next generation of physicians must assume a leadership role. At the same time, we must join hands with hospital administrators to ensure that we do not end up with an anti-intellectual cookbook approach to patient care. Although department chairmen may have traditionally viewed hospital directors as obstructionists with whom it was necessary to do battle, increasingly, partnership and cooperation must be found in order for both to be successful (joint problem solving rather than negotiation).

Excellence in education at all levels. In its educational role, the department of medicine transcends every sphere of the curriculum from basic science to the clinical arena. The fundamental quality of this education rests on the ability to perform the basics well, and those habits learned in the early years of education are critical to the final outcome. We must have renewed emphasis on basic medical skills and stress the importance of thinking through clinical problems in a scientific and disciplined manner. Too often I have been aware while serving on the faculties of four leading medical schools in the last 16 years that some of the thought processes in the clinical setting carried out even by excellent medical students and house officers are less than optimal. The patient care they provide is generally excellent, yet there is sometimes a lack of discipline in problem solving that also increases the costs of care. Many of you are participating in the current study by the Association of American Medical Colleges on the "General Professional Education of the Physician" which is addressing these issues. The recent response of the Association of Professors of Medicine to this study made a number of points with which I agree, namely that (*a*) clinical teaching return to the bedside; (*b*) emphasis be placed on the process of thinking and understanding concepts, rather than memorizing facts; and (*c*) the fourth year should be structured so that the faculty advisor supervises more closely the student's choice of electives.

Thus, education of our young physicians requires concentration on decision making based on complex data, but with the goal of providing medical care that meets personal needs of individual patients, deals with ethical dilemmas, and also uses better problem solving techniques. The difficulties underlying these issues involve the rapid growth of knowledge concerning disease, the development and expansion of complex technology and procedures, the complexities of the health care system in which we work, and the problems of individual physicians coping with both the progress in medical care and the multiple demands on them. The results of this study should be of considerable aid to us in pointing out changes in our educational system necessary to accomplish these goals.

Outstanding basic and clinical research. Let me now turn to research because that is why we are here, and I am speaking to you today as the president of a research society. It should be obvious from my earlier remarks that research and inquiry are critically tied to the issues I have just been discussing. For it is the disciplined thinking of the investigator that is the most helpful factor in sorting one's way through clinical problems and providing the educational experience that our students and house officers deserve. In his current article in *Clinical Research*, Wyngaarden emphasizes that the discoveries and accomplishments of our investigators have, in fact, provided the basis for the success of our practitioners (4). The clinician who receives the gratitude and the rewards from his pa-

tients is putting into practice the clinical, scientific, and technical advances that others have provided. It is essential that we transmit to our students the spirit of inquiry and scientific decision making in their approach to clinical problems. Those with significant experience in investigation know how to organize and collect data, advance or reject hypotheses, and approach questions in a disciplined and systematic way. A required research thesis for every medical student, either laboratory or library based, would permit him to focus on one clear-cut area, with development of problem solving as part of the educational process.

Because of its sophistication and development, research has become increasingly cooperative and collaborative. It is essential in the academic setting that the faculty interact significantly with people in other disciplines and hear about exciting and stimulating work in other areas which may engender new ideas and lead to collaborative ventures. It is surprising how often individuals focused in one narrow area of research may be partially or totally unaware of complementary activities taking place elsewhere, even in their own department or institution. This is no different from the focus of the membership of our three societies at these meetings toward their subspecialty sessions; we must continue to emphasize broad participation in plenary sessions and presentation there of the most outstanding scientific developments.

Let me turn my attention now to the departmental dynamics and human issues facing department chairmen as they try to accomplish these traditional goals.

Seek unity of purpose as well as differentiation of roles. The development of large full-time faculties in departments of medicine has been staggering. At the early part of this century, most faculty were part-time and were actually practicing clinicians. After the Flexner report there was an emphasis on full-time faculty, and with this came the development of the research ward adjacent to the laboratory, the precursor of the modern clinical research centers (3). A small number of full-time faculty were present in the 1920s and 1930s who provided research through their knowledge of the basic sciences and who were also involved extensively in the education of students and house officers in the laboratory and on the wards. The founding father of our society, Dr. Samuel Meltzer, and his contemporaries were such practicing clinicians who provided teaching and participated actively in clinical investigation.

In the post–World War II era, the enormous growth of full-time medical faculties was built on the increasing availability of government research grants which led to our new academic departments of medicine. There was tremendous growth of information in the clinical and scientific aspects of subspecialty medicine and with that the development of subspecialty divisions. These efforts led to centers concentrating in specific disciplines and drawing together people with common interests.

As care was focused on specific disorders and there was an accumulation of clinical and research fellows and research grant resources, this degree of specialization produced increasingly narrow views of the world among some faculty members (Fig. 1). Some departments of medicine have begun to resemble a series of autonomous feudal kingdoms, each knight brandishing his sword for his particular goals and leaving a collection of divisions hung on a hook and called a department of medicine. If the knight of hearts seeks his own glory and gratification in one direction, the pulmonary knight his satisfactions in another, and the knight of the gut in still another, it could leave the chairman in a frustrated and ineffectual position. This is not to imply that strong and able subspecialty "chieftains" should not be encouraged to fend for their own needs and goals, but the department head must provide strong leadership in directing the faculty in an integrated effort rather than a series of unidirectional fluxes. This is increasingly necessary not only because of major fiscal constraints facing chairmen and their "have and have-not" divisions, but also because of the need to focus patient care, education, and research efforts somewhere closer to the center.

The need for members of the faculty to identify with the department, as well as with their division is extraordinarily important, and it is essential that department chairmen, in turn, also reach beyond the division heads to their younger faculty. Unfortunately,

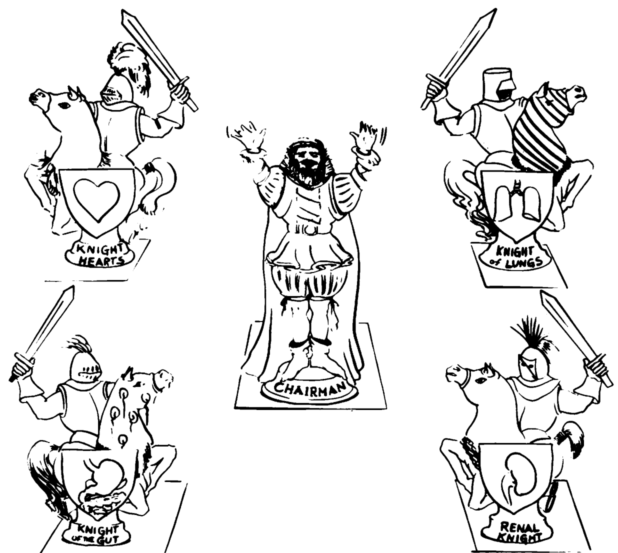

FIGURE 1 Feudalism.

the extraordinarily large size of some departments, including my own, makes this often difficult to accomplish, but it must be done. The impact of the department of medicine in an academic institution can best be expressed by a strong and able leader who has the cooperation and participation of his key divisional leadership and their members, so that the swords and shields of the division heads are rested at times, to seek not only individual goals but also the greater good of the department.

We must also consider the expectations we have for individual faculty members. We have all maintained traditional views of ourselves as triple-threats who are able to take care of patients, teach, and do research. The realities are different now. You have heard at these meetings about spectacular advances in basic science applicable to clinical medicine, some of which involve the use of the most recent and impressive advances in molecular biology. At the same time that subspecialty clinical medicine has expanded greatly, there is much more that one can do for the patient; and the clinical demands in certain areas such as cardiology, pulmonary medicine, nephrology, or oncology with extremely ill patients can be overwhelming. While I do believe it is possible in certain subspecialties where the patients are less acutely ill and often ambulatory (e.g., endocrinology or rheumatology) for the same faculty member to pursue sophisticated laboratory investigation and regularly participate in patient care, it is extraordinarily difficult in other areas. There must be a significant division of labor in order to achieve an outstanding result. There is a significant difference between the grant-supported, laboratory-oriented molecular biologist who conducts two months of teaching rounds a year and stimulates thinking in students and house staff, and the individual who devotes a great deal of time to the personalized care of patients and their families, providing support from third party carriers for his own salary as well as support for the division and department. Unless we appreciate and respect that there will be differentiation of efforts, we cannot have a successful venture as a department.

The bottom line, however, must be excellence. We are constrained by a faculty promotion system that has provided little recognition for the clinician-teacher unless he or she happens to be in the 95th percentile or above. When chairmen appoint new faculty, it is essential that they outline prospectively their expectations, be they in scientific laboratory development and teaching or in clinical matters and teaching, or in all three. In addition, it must be emphasized that the clear and careful organization and reporting of data in a reviewed manuscript is an essential part of faculty development, whether scientific or clinical.

In the recent past, many practicing subspecialists have moved to adjacent surburban communities to conduct their practices (in many cases competing for patients with the university center); now, however, these opportunities have been disappearing rapidly. Today, house staff and fellowship program graduates are finding fewer and fewer practice opportunities, and where present, often in nonteaching environments. While there appears to be an increasing desire on the part of some our trainees to reenter the academic environments that have spawned them, there are limited opportunities and limited funds. I do not wish to address the issues of physician oversupply here, but to focus instead on the academic departments and the future for the young people who enter them. In the last two years I have noted that some young people are seeking reentry into the academic environment. The issue has not been a lack of professional or financial success in practice but rather one of intellectual frustration. Some seek return even for lesser financial rewards to the more stimulating environment of the academic center and the rewards that all of us enjoy.

Bring out the best in the faculty (Fig. 2). Unity of purpose and an emphasis on human values are essential to the proper development of a department of medicine, and much rests in the hands of the chairman as leader. My philosophy is simple: The challenge of leadership is to surround yourself with individuals who are smarter than you are, to support them in every way possible, and to enjoy their accomplishments. For me, the best of all worlds is a department in which talented people who also like each other work effectively together. A department of medicine is not necessarily the proper place for a brilliant scientist who cannot get along with those around him, who needs

FIGURE 2 Bringing out the best.

to stomp over others, or who does not respect the goals of the department as a whole. I think it essential that we recruit faculty whose professional and human qualities are equally outstanding. We have not in the past made decisions to elect "Young Turks" on the basis of whether that person is a mensch or not, but the issue is of vital importance to the departments and institutions in which they work.

I do not mean to imply that these individuals should not be aggressive in the pursuit of knowledge and excellence. Traditionally, two ingredients are necessary for academic success. One is superior innate ability and the other is the drive and desire to be successful. The former without the latter leads nowhere. A third ingredient, I would add, is concern for others. While this may not necessarily apply in some basic science departments, in a department of medicine where the roles of physician, educator, and scientist are continuously intertwined and interactive, it is essential that we present to our medical students, house officers, and fellows the kinds of role models we wish them to be. The actual decision to enter a research career is often based on exposure to a particular faculty member. A personal selection of a research mentor, for example, should be based on the quality of science being carried out by the individual, the kind of human being he or she is, and the suitability of the environment for learning, inquiry, and support for career development.

The chairman thus has a key role in focusing not only on professional excellence but also on human qualities. I do not hesitate to sit down with any faculty member, junior or senior, full time or voluntary, and talk about the quality of his human behavior in relation to the inevitable series of conflicts that take place in the exciting and frenetic atmosphere of an academic department of medicine. The chairman must put out the brush fires before they grow too large and also deal with innumerable human problems.

Given the size of departments of medicine, the chairman cannot be this kind of role model alone. He must rely on both senior and junior faculty members to preach and practice these issues. In these matters, I find myself an eternal optimist. It is necessary to be so, both to keep one's sanity and also to provide effective leadership. In bringing out the best in one's colleagues, one brings out the best in one's self. This is an oft neglected issue in departments of medicine, but I believe it is central to the kind of morale and growth potential that exist in an academic environment.

Recruit the "best and the brightest." The vitality of any department is enhanced by regular entry of outstanding young people, but pruning is also necessary. Trained and schooled in an environment of excellence, junior faculty will naturally move on to senior positions or ones of leadership in other institutions. In other cases individuals whose goals and expectations have not been met should be encouraged to seek other opportunities or focus on skills they can better utilize. Each faculty member needs a rational basis of fiscal support related to the kind of activities he carries out.

In seeking outstanding academicians among medical students, we need to emphasize the excitement of working in an academic environment, the challenge of the search for new knowledge, the importance of a research experience, and the availability of research training support. As students, they are less concerned with the financial disadvantages of a research career, the frustration of researchers, and the uncertain availability of funds. Once they become house officers, the pressures are greater and the financial issues loom larger. There is a core of very talented students in our medical schools, and the chairman of medicine and his colleagues should be key figures in identifying and working with that group of individuals. A recent Health and Human Services study provides strong support to indicate that early research experience in medical school is a substantial factor in encouraging students to an investigative career (5). Dr. Lewis Thomas in his recent book "The Youngest Science: Notes of a Medicine Watcher" recaptures well his own sense of excitement on getting involved in fundamental biologic questions relevant to man (6).

Although our medical scientist training programs (MD-PhD) attract first-rate young people who are oriented in this direction, we need to move beyond this group. The development of special seminar programs for first year medical students, exposure to outstanding members of the faculty who are interested in clinical medicine and who do basic and clinical research, and a sense of student participation in the department of medicine from the very beginning of medical school are critical. Those who wish to take a year out of medical school to do research should be encouraged to do so, but even more importantly, those students in the fourth year who show an inclination to sample a smorgasbord of clinical electives should be encouraged to pursue one area in depth. Obviously, a chairman with a strong research background and interest can be even more effective in emphasizing these issues.

Our efforts should also extend to our house staff, including experience in a research project during elective time. I applaud the pulmonary programs that have done a great service to house staff planning academic careers by deferring decisions on fellowships through a matching program at the end of postgraduate year 2. It would be magnificent if those of you responsible for fellowship training in other specialties would follow their lead, allowing residents and the program directors who assist them in academic career devel-

opment to plan in a more rational and timely way. House officers are forced to make decisions at the end of their internship, which is much too early and extraordinarily stressful.

When young faculty members have been recruited to our departments, chairmen must do everything possible to protect them from harm and allow them to further their career development. This means more limited expectations of this group clinically and educationally in the early years, although they must be involved in some teaching so that their skills and enthusiasm can be sustained and they can be viewed as role models. Regrettably, it is even necessary at times for a chairman to protect young faculty members from powerful division heads who would subvert their independent development for their own ends. Independence of effort should be encouraged at an early phase, and unless a senior investigator is truly involved in the detailed planning, execution, and regular review of the research, the investigator's or division head's name need not be on a manuscript. Both the chairman and the division heads must view the development professionally and personally of their young faculty as central to the goals not only of the division but also the department. This is the best way to ensure that the young faculty member will have appropriate credentials for election to the American Society for Clinical Investigation. In bringing out the best in others, we bring out the best in ourselves.

Provide regular review of performance for faculty members and divisions. Any organization that does not provide a regular review of its performance is not preparing itself for the future or maintaining consistently high standards. Such efforts have traditionally involved both in-house review as well as outside review. Regardless of the means of review carried out, it is essential that the chairman provide it. After proper evaluation, it is necessary to report the results to individual faculty members as well as to divisions; this may involve both further support and encouragement for those who are doing well and criticism for those who could be doing better. The highest standards and a continued commitment to excellence are a critical part of this process.

Ensure efficient and professional management. The complexities of running modern large departments of medicine involve considerable focus and emphasis by the chairmen and key delegates on finance. In my own case, it involves a corporate enterprise of more than $30,000,000 per year. No small business corporation of that size would think of running it without professional management and a structure that is efficient and effective. While most chairmen are chiefly concerned with the academic side of their effort, they must at the same time be effective business managers who provide resources for vitally needed programs, recognize and maintain excellent faculty, and cease to support less productive programs and faculty.

For a department to rely too heavily on any single source of support in a changing world is dangerous, and one must have a multifaceted strategy to deal with an everchanging environment (Fig. 3). All research-oriented departments compete fiercely for federal funds to support their research programs, and I do not see any major change in this arena. Admittedly, the constraints have become greater, and one must produce better science to compete, but I believe this can be carried out successfully by a heavily research-oriented department; one must seek foundation support as well as other nonfederal funds. High standards of excellence, careful review of research work, insistence on peer review, and the highest ethical standards in the conduct of research are also the responsibility of the chairman. While cooperative efforts with industry may be helpful in supporting areas of mutual benefit, it is not the intent of industry to underwrite basic research support that has been carried out by the federal government. For any department to expect substantial growth in its research budget from federal sources in the years ahead is unrealistic, unless it is a department that has previously done very little research and suddenly acquires a group of very talented investigators. At the same time, other sources of support on which we depend have reached a plateau or in some cases have even declined. These include support from already constrained university budgets and from our teaching hospitals. With changes in reimbursement occurring all over the country and with the increasing constraints on teaching hospitals, one cannot expect

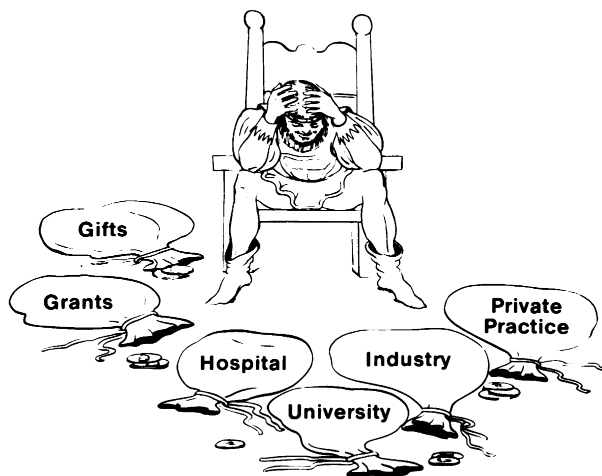

FIGURE 3 No single strategy.

significant growth in institutional support for faculty development. These historical developments are well outlined by Paul Starr in his recent book "The Social Transformation of American Medicine" (7).

One potentially flexible area for future growth is private practice, which has provided an increasing percentage of the budgets of medical schools and departments of medicine. The nature of this support is like a double-edged sword: The substantial involvement in private practice by research-oriented faculty members, except with ambulatory or less acutely ill patients, may represent a significant drain on the time they have available to carry out sophisticated research. There must be some differentiation of roles in order to make the entire departmental effort successful. While the financial benefits from practice will for the most part support the costs of practice as well as the physicians who are carrying out this activity, there should be some monies generated that can be used to help reseed and fertilize the academic area. This is where careful and structured managerial talents on the part of the chairman, and agreement to help support the department on the part of financially successful division heads, are essential. The chairman, roaming about in Sherwood Forest, needs to play Robin Hood where appropriate to help support not only areas that can generate funds, but must also borrow a "necklace of hearts" or a "bag of precious kidney stones" to assist colleagues in infectious disease or endocrinology and others who work just as hard but who have limited financial resources because of the peculiarities of the reimbursement system (Fig. 4). We can no longer afford to have a departmental structure that consists solely of individual entrepreneurial units generating all of their own resources for their own use. That is a divisive thrust in a department, and it is up to the chairman and key divisional leaders to ensure that this does not happen. Excessive expansion of one divisional effort to the exclusion of others does not lead to a well balanced and integrated department of medicine. At the same time, the chairman must appreciate that not all areas can be developed to the same degree and that the scientific and clinical talent as well as resources necessary to produce a world class division is not necessarily available for each of the clinical divisions. Thus, a department destined not only to survive but also to thrive intellectually and academically must engage in careful decision making and a multiplicity of strategies under strong, careful, and efficient leadership. In this regard, it must set priorities and engage in careful short- and long-term planning.

Engage in strategic planning. In seeking their future growth and development, our departments must set out carefully to plan for and deal with the problems they face. This can only be done by the chairman, who must step back from his crisis-oriented, day-to-day existence, and carefully sort out his goals and specific objectives before planning for the future. This must be an effort in which key junior and senior faculty members also participate, so that the overall goals and thrust represent not only the inclinations of the chairman but also those of a broadly-based constituency that can work together to seek and obtain those ends. We must set aside specific resources so we can continue to attract outstanding young people. There is much to be learned from the corporate world as we set out to meet these objectives, although our academic organizations are not strictly parallel. We must sustain academic freedom and, at the same time, ensure that our faculties work strongly for the department as well as themselves so that common goals and ideals can be fostered in a structure in which entrepreneurial instincts are also enhanced and developed.

Although Braunwald (2) described a group of frus-

FIGURE 4 Robin Hood.

trated, unhappy people in some of these roles that have a relatively short half-life, I believe these roles can and should be personally exhilarating. The challenges of providing leadership for academic goals to which we all aspire at a time when it is more difficult to do so is a major challenge. In closing, I wish to express my appreciation to this Society for the honor and privilege of having served as your president. I believe we need to sustain our efforts by working even more closely together in these times, and as we sing a new song (8), as Jesse Roth suggested three years ago, it not be Camelot but a commitment to sustaining the enthusiasm and morale of our faculty, and most importantly, to sustaining the spirit of inquiry.

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