

After his untimely death in 1968 many of his admirers in the GBA felt that it was very important to provide a significant memorial to this outstanding individual who had contributed so much to the profession of medical school administration and business affairs.

It was decided to establish an annual lecture in his honor. The lectures were to be presented as part of the annual national meeting of the GBA.

*On Creative Administration: [1968]*

The first lecture was presented by Julius B. Richmond, M.D., Dean, State University of New York at Syracuse School of Medicine.

Dr. Richmond began his lecture:, "... this marks the establishment of the A. J. Carroll Memorial Lectureship, and I feel deeply the responsibility which is mine in having been designated the first lecturer. Second, it marks the first annual meeting of the business officers of the medical centers of the United States. The relationship between these two events is not entirely fortuitous. For the organization of this group, on the agenda of this remarkable man, Gus Carroll, who had many agenda and his share of unfinished ones."

He went on to talk about the remarkable talents ... "he was what great figures often are: he was simple and extremely complex at the same time. In his personal life, modesty, quietness, order, simplicity, persistence, tenacity, and a prodigious capacity for hard work. Professionally, there was an openness of eyes and mind which enabled him to develop new insights into old problems."

Pasteur's old aphorism, "Chance favors the prepared mind", was particularly applicable to Gus Carroll.

"His genius might have stemmed partly from the fact that he had not been warned about the impossible. As a result he moved on to solve those problems that others considered insoluble. This reminds me of an episode I experience in World War II. A young fighter pilot had just returned from the early days of combat over Europe. He was talking to the young pilots in training about the performance of the new German Messerschmitts. He said, they could out-climb, out-dive, out-bank, out-maneuver any plane we had. One of the student pilots asked, 'what do you do when you're up against a plane like that?' He answered, 'You shoot the bastard out of the sky!'"

Dr. Richmond spoke of Gus Carroll's contributions as business officer at SUNY Syracuse New York.

He was asked about faculty salary levels by the New York State Legislature and he early on developed unique methods for developing faculty salary data that proved very helpful to the needs of his own institution and also lead to what we now refer to as the AAMC Faculty Roster Study.

The 1950's was a period of rapidly increasing costs of medical education and research and Gus pioneered studies to accurately determine the cost of medical education and research and all other health science center program costs.

He spoke of the importance of cost allocation studies to determine the appropriateness of resource allocation. The complexity related to the decision to increase medical student class size.

He concluded with a comment on credentialism. "The case of Gus Carroll is a good example. On the basis of formal education, degrees or certification he might not have qualified for the various tasks he undertook. Functionally, however, it is apparent that his talents and industry transcended the limitations of formal education. I trust that we can, in the face of our increasing institutional complexity avoid some of the pitfalls of credentialism and make room for the Gus Carroll's of our world."

Categories of Expenditures: [1969]

This lecture was presented by Ward Darley, M.D., President, University of Colorado.

Dr. Darley spoke about the sources of funding medical school programs.

He said that he was advocating new headings for the major categories of the sources of funds for medical school expenditures.

He discussed the details of each fund:

General Purpose Funds:

Those funds under the control of the medical school or its sponsors. Examples: state and city appropriations, unrestricted gifts, income from unrestricted endowments, transfers from general university funds, tuition and earned income from hospitals, clinics and medical service programs.

Funds For Sponsored Programs:

Sponsored programs are fostered and supported under special contracts, restricted grants, or restricted gifts by agencies interested in special programs. Allowances for overhead are proportionately related to these programs. These allowances are to help compensate the school for related administration, plant maintenance, and other indirect costs.

Dr. Darley said, "since the bulk of these funds come from the Federal government and since the government auditors make certain the related overhead is actually spent in support of these programs,

I think the time has come to stop counting overhead allowances as a portion of the funds available for general purposes and instead to assign expenditures that come from overhead to expenditures from funds for sponsored programs.”

*New Resources for Medical Education: [1970]*

This lecture was presented by Cheves McC Smythe M.D., Dean, University of Texas Health Sciences Center.

Dr. Smythe discussed start up expenditures in 22 new U.S. medical schools. He began by pointing out that in the past decade the number of medical schools enrolling students has grown more rapidly than the population. The ratio of active medical schools to population has moved from one school per 2.02 million people in 1960 to one per 1.94 million people in 1970.

Questionnaires were mailed to 30 American and 4 Canadian medical schools that had been authorized since 1950, and whose deans had been appointed prior to July 1<sup>st</sup> 1970.

The results reported in this paper included: Sixteen of the new schools secured sites of over 30 acres.

Four of the schools acquired major private support. In 16 schools more than two years elapsed between appoint of the dean and enrollment of the first students. Initial per class enrollment are generally small, (24 to 40), and projected class enrollments are in the same range (64 to 200).

From appointment of a dean to enrollment of a first class usually covers two years and average expenditures are \$1.178 million. The first year of instruction median expenditures were \$1.8 million.

Eighteen of the twenty-two new schools had in various combinations rented or renovated space in existing buildings or built a facility for temporary use. Eight schools rented 4,000 to 36,000 gross square feet.

Eleven renovated up to 100,000 gross square feet and five constructed initial facilities of 50,000 gross square feet or more. Nineteen schools reported using from 450 to 268,300 gross square feet of start up space at costs ranging from \$6,000 to \$1.5 million.

“The median size of basic science buildings, including library and animal-care facilities, is 200,000 gross square feet, the median cost was \$9.94 million.”

“Median size of clinical science buildings was 465,000 gross square feet at a median cost of \$20 million. Only ten schools had built clinical science buildings.”

“Operational support of the new schools from sponsored grants and contracts prior to the enrollment of students was meager. With the exception of two medical schools grafted onto hospitals with major on-going research programs and another joining a major university biological research program, 14 received prior to enrollment sums from external sources varying from zero to \$300,000, six \$300,000 to \$1.25 million, and two over \$5 million.”

*Medical College Business as Usual [1971]*

This lecture was presented by Kenneth R. Erfft, Professor Rutgers University.

He began, “There has never been a time in higher education when the role of the chief financial and business officer of a college or university has been so demanding or so difficult, and, at the same time, so little understood or so little appreciated as at present.”

He talked about the second Jellema report

“Dr. Jellema reported the following:

1. 365 private colleges and universities will close by 1981 unless they receive immediate aid.
2. 200 institutions will be exhausting their liquid assets within this year.
3. 26% of the 507 schools reexamined have operating deficits worse than expected.
4. 175 private accredited colleges and universities have already exhausted their total liquid assets ...
5. 36 can last less than one year while an additional 154 may be bankrupt in from one to ten years.
6. colleges enrolling 1,000 students or less, particularly those below 500, of which one-third are in the geographical center of the country, will be hardest hit and 210 in this group may be on the verge of extinction in less than one year.”

“As I consider the occasion of our meeting here today, I am awed by the magnitude and the scope of responsibilities which rest upon each of you. I am deeply aware how few there are who fully appreciate the complexity of the administrative duties with which you deal each day. Upon your shoulders more than any other rests a large measure of the potential totality for success or failure of the future of medical education in America.”

“The progress and success of your financial leadership is self-evident in our nation’s medical colleges. You are all worthy successors to the traditions of men like Gus Carroll whose memory we honored through this hour.”

“I would charge you to assume the leadership with dynamic and aggressive determination for the financial security and future of your institution, and with your academic counterpart strive to sustain and advance your efforts regardless of the magnitude of the task before you.”

*Medical School Financing Where Do We Stand? [1972]*

This lecture was presented Charles Sprague, M.D., Dean, University of Texas Southwestern.

Dr. Sprague began by mentioning the work he had been doing the past two years as the Chairman of the AAMC Committee on Financing Medical Education.

He spoke about the relationship between the dean and his business officer. He said in the past the single most important appointment that was made by a dean was the appointment of the chairman of the department of medicine He said now, the two most important appointments made by a dean are, the appointment of the chairman of the department of medicine and the appointment of the business officer.

He spoke about the changing role of the business officer, i.e., provide the institution with a better insight into the real costs of medical school programs.

He said the Committee on Financing Medical Education had made significant progress over the past two years. “The time is here where we must reveal, to a greater degree than we have in the past, an accurate portrayal of the income side of the ledger, as well as true costs and actual expenditures.”

He spoke about the Comprehensive Health Manpower Training Act of 1971, which gave a specific mandate to Congress:

1. “The Secretary of HEW will arrange for the conduct of a study to determine the national average annual per-student educational costs of schools of medicine ...”
2. “Such studies shall be completed and ... a final report not later than January 1, 1974.”

The National Academy of Science’s Institute of Medicine was assigned this task.

He referred to the fact that there had been strong interaction between the Institute of Medicine and the AAMC.

He said, “the methodology being utilized in costing undergraduate medical education is known to many of you who have been involved in recent cost allocation studies and you will recall the following formula:

$$\text{Education of the M.D.} = I/E + R/E + S/E.$$

Where  $I/E$  = Cost associated with instruction of the M.D. candidate.

Where  $R/E$  = Cost associated with research considered essential for the Program of the M.D. candidate.

Where  $S/E$  = Cost of patient services necessary to support the educational program of the M.D. candidate.”

He ended his talk by saying: “While on many occasions in the past 18 months I have felt our task was essentially hopeless, I am now convinced that we can come up with data and recommendations that will lead, hopefully, to more realistic approach to the financing of the medical school operation.”

*No Trumpets, No Drums: [1973]*

This lecture was presented by Ivan L. Bennett, Jr., M.D., Dean, New York University Medical School.

He began, “Mr. Carroll’s principal dictum was, ‘know the facts that explain the figures.’ He referred to the Norbert Wiener’s statement: ‘There is only one quality more important than ‘know how’ that is, ‘know what’, i.e. by which we determine not only how to accomplish our purposes, but what our purposes are to be.’”

He said: “Our classic claim to pursuit of excellence and our goal of high quality are under heavy challenge.”

“Ethnic and women’s groups demand more representation in our student bodies, our faculties, and our governing boards, community leaders, some self-styled and some bona fide, and community groups, official and unofficial, demand day care, free abortions, improvement of slum housing and job preferences to mention a few things only.”

“The medical schools are given to understand that the nation expects more primary care doctors, fewer specialists, better distribution of physicians, better utilization of hospital beds, prepaid comprehensive care, more physicians’ assistants and hitherto undescribed new types of paraprofessionals, more preventive measures, multiphasic screening, integrated emergency care systems, more targeted and less basic research, the conquest of cancer and heart disease, fewer medical scientists and more practitioners, better continuing education of physicians, programs for foreign medical graduates, better health education of the public, more efficiency and productivity, in research, education and patient care, more students and fewer faculty, multiple tracks to the M.D. degree, more humane evaluation of student performance to reduce the pressure of academic competition, better management of everything, and, oh yes, more parking space for patients, visitors, staff, faculty, and students.”

He concluded that the task of the dean of a medical school becomes much more difficult because, “most deans, and I include myself, come to their job without the requisite experience, knowledge and skills to bring about needed organizational change. The selection of medical school deans still tends to be on the basis of academic accomplishment alone. Much of which is the result of effort and experience that in no way prepared the individual for his role as manager of a complex organization.”

He described, how, as a result of this, a group of deans met informally to discuss what be done to correct the situation. As a result an educational program was developed. The program included two seminars. The first, a one-week seminar on management techniques and theory. The second, a follow-up Institutional Development Seminar.

The dean and a group of colleagues review some of the concepts and informational in put from the first seminar, and have the opportunity to apply some of these concepts to a problem of concern to the institution.

He observed: “Enough deans have gone through the program and are enthusiastic about its possibilities that it now seems probable that much of the future activity of the Council of Deans will be continuing education in management skills.”

*Some Comments On The Bases for Initiating Planning and Managing R&D Programs in the Biomedical Sciences: [1974]*

This lecture was presented by Robert S. Stone, M.D., Director, National Institutes Of Health.

Dr. Stone began, “In the executive action that determined the mission for this organization, you established as a general goal improvement in the management of health-oriented organizations, especially academic medical centers.”

He explained that as our academic medical centers grew larger and larger they reached such complexity that, “their very manageability is called into question.”

“Today the needs imposed by this environment in which the organization is immersed is so diverse that many different competencies must be available if the organization is to stay alive. That is to say, just the body of knowledge, information and skills required for organizational survival is vastly greater than it was in the days when a simple bureaucratic structure was appropriate.”

“Furthermore, our contemporary society, has placed new value on individual worth and has a new understanding that the best in people is only forthcoming when contributed voluntarily. These factors have converted the internal milieu of the organization into a multi dimensional, protean network of relationships among human beings of which we have only a limited capacity to represent graphically.”

“Health organizations seem to be giving increasing recognition to the role of teams – groups of individuals banded together to accomplish particular tasks.”

“This recognition is more and more explicit and influential in the administration of patient care. The fact is that teams are at work not only in direct patient care but throughout the general management of health organizations.”

“In the multiple missions of the academic health center, each member of top management must add to his specialized functions --- whether in academic affairs, fiscal matters, or personnel management --- a generalist approach. It is dangerous to describe the centers mission in such restrictive terms as the education of medical students, the production of new knowledge, or the delivery of optimal health care. Instead all of these missions coexist, and indeed compete with each other for limited resources. No single mission achieves absolute priority for any extended time, and each, in fact, must contribute to the success of the others’ goals.”

“The fiscal staff of the institution, for example, needs some understanding of the environment of laboratory research, not only to anticipate the need for supplies and equipment but sometimes to accommodate rapidly to new-found opportunity . . . On the other hand, the clinician must learn to distinguish between his real needs related to promptness and urgency in patient care and the impositions he might tend to place on others through impatience, insensitivity or his own lack of foresight.”

“The various models for planning and management can be judiciously applied not only in compliance with the intrinsic needs of scientific discovery, but so as actually to facilitate scientific problem solving. In a general way they represent a spectrum from the very informal requirements for the most basic studies to the formal, more structured systems conducive to direct social utility.”

*The Cost of Medical Education – Who Should Pay?: [1975]*

This lecture was presented by Marvin R. Dunn, M.D., Dean, University of South Florida College of Medicine and the University of Texas Medical School at San Antonio.

He began, “Ten years ago there was a generally accepted proposition that there was a shortage of physicians, that medical schools needed to increase their enrollments, that medical schools required Federal assistance to meet both the cost of current educational programs and the cost of expansion.”

“Much of the discussion then centered on what was the actual cost of educating a physician, with strong implications that if precise data were available for such cost, that Federal support for some major fraction would be forthcoming.”

He said that during the past decade their had been in reversal of this opinion, i.e., the idea of a physician shortage has been challenged. As a result real incentives for increased enrollment were gone.

Many studies have been conducted to reach a consensus as to the cost of medical education in various settings and circumstances.

“Instead of the expected stable support from the Federal government for some portion of the cost of medical education, the rhetoric has shifted to the issue that students of the health professions have not been asked to assume a proportionate share of their increased educational costs.”

He went on: “Who should pay the cost of medical education? Those who benefit should pay in proportion to the benefits received.”

Next he listed the beneficiaries of medical education.

1. Individual patients.
2. Society at large.
3. States and lesser units of government.
4. Faculty and support staff benefit via their employment.
5. The local community where the medical school is located.
6. Those who sponsor biomedical research.

7. The federal government.
8. The student.

He discussed the pros and cons of increasing student tuition to pay the cost of medical education.

He concluded his remarks: “It will only be with full and precise data for both the costs and benefits that we can develop a rational solution to our present mounting dilemma, through a process by which all those who benefit from medical education also support its costs in relationship to the benefit received. The emphasis must be placed on all those who benefit and not simplistically, a few.”

*What's the Worth of a Widget? [1976]*

This lecture was presented by Richard Janeway, M.D., Dean Wake Forest University School Of Medicine.

Dr. Janeway stated in the abstract to his presentation, “The cost of medical education has been a social issue for three decades. Allocation of program (effort analysis) has historically been the method by which we represent our costs even though the method does not represent the way in which we function. Program cost finding does not allow us to define education as a process separable from the process of a profit orientated industry. The question is raised as to whether the methodology is appropriate in the current political climate. Time-series analysis is introduced as a tool of management that relates holistic rather than programmatic outputs. An aggressive approach to open accounting which emphasizes the social value of our multiple products is recommended as a partial remedy to the lack of understanding of our worth to society.”

He said that in his opinion the failure of cost allocation methodology is that it is not compatible to the manner in which most medical school deans allocate resources. He said that in his opinion most medical schools dean’s allocate resources programmatically, rather than by department.

He recommended that: “We must either change the way we budget (and work) or we must change the way we account for our actions. If we who budget do not separate function into programs because we take a holistic view of the process, why then should we present our multifaceted process in fragments to the governmental sector or to the public? It seems to me that we need to represent ourselves – account for our actions, in other words – in the form in which we believe we function. We must find a way to represent our activities, which will not leave our data helpless in the face of political interpretation. Once having done that let the chips fall where they may.”

*A Decade of Dedication: [1977]*

This lecture was presented by Joseph A. Diana, Vice Chancellor for the Urbana Campus, and Associate Vice President for Business Operations for the Urbana, Chicago Circle and Medical Center Campuses, University of Illinois.

Mr. Diana recalled the time that Gus Carroll invited seven individuals to meet with him at the Hilton hotel in New York. The purpose of the meeting was to plan the creation of an organization that would provide a forum for the growth and development of the medical school business officer.

“... an organization that hopefully would be called the Business Officer’s Section (of the AAMC), there were those who thought the ‘B.O.S.’ was an appropriate designation because spelled backwards, ‘S.O.B.’ identified the right person in the medical school.”

In his talk, Mr. Diana recalled the career of Gus Carroll and his many contributions to the organizations he served.

“This talented man, whose very life personified modesty, quietness, persistence, and tenacity with a prodigious appetite and capacity for work, had a professional eye and bent of mind that was constantly in search of answers. Often, Gus took quietly to his favorite study place, the kitchen, and with pencil and reams of scratch paper, proceeded to work out a solution to what others considered to be unsolvable or impossible to do.”

He continued: “Mr. Carroll’s most noted work, A Study of Medical College Costs, in 1958, is very misleading in terms of title. In that work there is contained a culmination of a lifetime of study and struggle with the concepts and methods of institutional management and the evaluation of management efficiency and effectiveness that intrigued and tormented Gus for more than thirty years.”

He went on to talk about the change in medical school management as part of the management boom in higher education. “Rapid expansion found the business and administrative organizations of our medical schools in an inadequate posture and finding it difficult to cope with the growing competition.”

“None of us intended that the business officer be a backroom type. Gus expected that, in time, such individuals would have a public voice with other schools, private benefactors, legislators, and government officials. The group never lost sight of its purpose. It continues to advance its membership professionally; to exchange information; to have meaningful dialogue with the key staffs of federal and state agencies and other organizations in the health care field to provide expertise to the AAMC in developing management data banks, management systems, and improvements in the other management tools.”

