"Interim" history of department

3/4 - 1951 - 1952

ANNUAL REPORT OF THE DEPARTMENT OF SURGERY

University of Colorado School of Medicine

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Henry Swan, M.D.

I. Introduction: (Interim meditations)

June was hot in Denver this year, an unusually sustained period of heat which stole the white cap from Mount Evans, kept the fishermen frustrated in the face of the murky freshets, and promoted a lazy mood, ideal for reverie and taking stock. As you drive to the hospital in the early morning, the parkway is glistening green, fresh from the night's watering. The day ahead will be a busy one, as it should be, full of a variety of problems. The end of the school year is always a hectic, tiring period, winding up the year's affairs, getting squared away for the one to come. Budget and grants, curriculum and schedules, research planning, master's theses and examinations, appointments and promotions, new intern and resident assignments, equipment and space for staff, service conferences and patient problems. The list seems long - and too much at the desk. How administration has grown in the past few years! But then, how the school has grown! You think back over a period of six years and wonder if you have bitten off more than you can chew, if there is a real sense of direction in the midst of pure expansion.

Nineteen forty-six was the beginning. A new dean, assessing his resources and current activities, might have made the following tabulation. The medical school building and library were good ones, but small in size. Two teaching hospitals, the Colorado General and Psychopathic, provided a bare minimum of teaching clinical material. The pre-clinical staff was small, the clinical staff large and almost entirely volunteer. The total medical school budget was \$75,000. The graduating class was 56 strong, the product of a curriculum which had undergone no major revision in twenty years. There was little research in progress in the pre-clinical departments, and none in the clinical ones. The research budget for the entire medical school was only about \$25,000. The school engaged in few community services, including no participation in the community hospitals. Rapport with the practicing profession was at a low ebb. Graduate training was minimal, post-graduate training non-existent. A very modest effort, one must admit, for the only medical school in the large area of the Rocky Mountain west. Small wonder, too, that Colorado enjoyed a comfortable obscurity in the world of medicine and medical education.

The Department of Surgery was staffed entirely by volunteer faculty. The roster was large. Many men gave freely and generously of their time, to lectures, to ward rounds, to out-patient and in-patient services. A few were largely inactive. Colorado General Hospital was the only teaching service, with a two year residency program. There were no affiliated hospital resident programs, no graduate school activities, and, of course, no post-graduate courses. The patients received good care, although the hospital charts were sketchy, and statistical data regarding the service load was meagre. Neither clinical nor experimental research were in progress. The Department had no research laboratory. The Division of Anaesthesia was headed by a pharmacologist who gave no clinical anaesthesias; two nurse anaesthetists carried the clinical load. The operative reports showed a preponderance of abdominal and extremity procedures; thoracic and cardiovascular surgery were largely undeveloped. Apart from lectures to Sophomores and Juniors, the teaching activities were essentially limited to the surgical clerks, three interns, and the two residents. The budget for the Department that year was \$3,500; the budget for research, zero. There was no secretary to help in Department Administration; in fact, the Department scarcely had an office to call its own.

In this warm June six years later, you think over the scope of the Department's activities during the past year, - and the growth of functions and facilities, when placed in sudden comparison, seems almost appalling. Take educational activities for example.

The graduating medical school class numbered 74, up 33 per cent. Next year's class will be close to 80. These students are the product of a totally revised curriculum, developed from long hours of faculty meetings and conferences, based on a deliberate attempt to define the scope and aims of medical education in this school, and emphasizing the integration of clinical and pre-clinical studies, the use of patients and clinics for small group teaching, the importance of preventive as well as therapeutic medicine, and the development of attitudes of critical self-education and social consciousness in the student. You well know the countless hours of work which lie behind the development and function of a new curriculum, for during the past five years, you have been Chairman of the Clinical Curriculum Committee. What has this curriculum done to the under-graduate teaching load of the Department staff? It takes one instructor one hour to give a lecture to the entire class; it takes twelve instructors one hour each to meet with a group of six students! In Sophomore year, the new course in Dog Surgery meets twice a week for half a day in the spring quarter; the course in Diagnosis now includes extensive small group participation by the Department staff. These have been added to the lectures and the demonstrations in splints and dressings which were given previously. The character of the Junior year, which formerly consisted essentially of two hours daily of clinical work and six hours of lectures and demonstrations, has been radically changed. The lectures were cut to one-third, the clinical clerkship expanded until the proportions were reversed. Now the Department staff finds itself meeting small groups for three quarters of the year every morning in the out-patient clinics in surgery and the surgical specialties, and each afternoon, presenting a carefully organized series of clinics. The Senior year finds the surgical clerks on the wards of our two teaching hospitals throughout the year. The staff conducts or participates in at least twenty-two teaching conferences a week for these students.

But this increase in undergraduate teaching is nothing compared to the growth in the area of graduate training. Remember - two residents. Now, in our strictly medical center program - integrated between Denver General and Colorado General Hospitals - fourteen residents are graduating through five years of general surgical training. If one counts the specialty residents, the number is twenty-four.

Parenthetically, you can't help but think a moment about these residents, those that have recently completed their training, and those now in service. The
surgical staff has every reason to be extremely proud of these fine young surgeons:
Of the eleven men who in recent years have either completed or nearly completed
their general surgical training at the medical center, nine are now certified by the
American Board of Surgery, the other two have taken Part I. These men are practicing ethical surgery of high quality, both in this city and in other communities
in the country. One is pleased to observe that wherever possible, they have maintained a vigorous participating interest in medical education. It is also pleasing
to remember that last year our Colorado surgical residency was approved by the
Society of University Surgeons, so that from this year on, our resident graduates
will be eligible for membership in that important organization.

But this essentially intramural program is only the beginning of the story of the growth of our graduate training efforts. One remembers, with a certain whimsy, the faculty meeting some four years ago when we blandly accepted the principle that residency training is essentially university graduate study and should be recognized as such. The clinical resident is a student - and lo - what amounted to a brand new school was suddenly created. How little did we realize what a tremendous

burden this would mean in terms of administration. The class-rooms of this school, as far as our department is concerned, exist in eleven hospitals, one of which isn't even in the State of Colorado. These are our affiliated hospitals, where resident students in the graduate school are receiving their credits toward eligibility for the master's degree examination. This means registration of each student every quarter, counseling and approval of the study plan, staff participation in the many seminars, lectures, and symposia, staff counsel throughout the course of the development of a thesis, and finally, the master's examination panels. How many graduate students in the Department last year? Fifty-six! Administratively, it takes one member of the full-time staff many long hours to do the paper work alone! Yet, the effort is worthwhile. When one recalls the total absence in 1946 of any direct participation in, or contribution to, the practice of medicine in the community by the Department, and when one realizes that approval for residency training in the private hospitals of the community is entirely dependent upon their affiliation with the school, one accepts the importance of the program. But it is a large load added to the efforts of the Department staff, and, one wistfully thinks at times, that there must be some less laborious way to achieve the same result!

But this is not all. Take post-graduate education. In 1946, the Department made no contribution toward helping the practicing physician of the State in his efforts for continuing self-education. The increasing activities of the Office of Graduate and Post-Graduate Education last year involved our Department in many such teaching efforts. The staff participated in these Post-Graduate courses, and was entirely responsible for the course in "Emergent and Traumatic Surgery" given last month. Throughout the year, members of the staff, both volunteer and full-time, have left their practice or their work to join one of the many teaching teams which have gone out into the community hospitals throughout the State for a two or three day series of ward rounds, clinics, and lectures. It takes time and effort to indulge in what might be termed "field work" in post-graduate education, but surely, you think, this is an important and appropriate function of the State University in the over-all problem of medical care for the people of our State community.

Later in the morning, after student ward rounds, you are sitting at your desk, reviewing the month's statistics in preparation for the staff service meeting that evening. It is pleasing to see the careful and thoughtful analysis by the resident staff of the deaths and complications which occurred during the month. Only through careful and complete charting may we learn from experience. These have only been available since 1947. One remembers the hours spent in trying to establish record and statistical methods so that we may be constantly aware of the nature and volume of our services. How they too have grown! In 1946, the Department of Surgery as a whole took care of 1515 house patients, performing 1908 operations, with an overall mortality rate of 5.6 per cent. Last year the Department took care of 4677 house patients, performing 5848 operations, roughly a three fold increase in both categories. Not only have the operations increased in number, but a larger percentage are of considerably increased magnitude. One notes the recurrence of radical neck dissections, of pulmonary resections, of radical operations for intestinal cancer, and of cardiovascular procedures on the operating schedule. Surely the type of surgery has shown change in these six years, yet one notes the operative mortality has improved to 4.6 per cent. No doubt it can be further improved.

As one thinks over the reasons for this increased service load, one recognizes that some of the increase is an enlarged census and operative activity at

Colorado General Hospital; most of it, however, is represented by the affiliation in 1948 of the Denver General Hospital with the School of Medicine as an official teaching hospital. What an important addition to the medical center this was, and yet, how many and complex have been the problems of assimilation. A hospital with a tradition of independence and with long time political domination, the change to the service concepts and practices of a university teaching hospital has not been easy. Merely instituting adequate clinical records and patient statistics of a workable nature could not be accomplished until last year. Nonetheless, much progress has been made, and the fact remains that the Department staff now undertakes the clinical responsibility for a volume of patients three times as large as it did six years ago.

After lunch and the meeting of the Animal Quarters Committee, you are again sitting at your desk. Problems of space for and the care of animals for research! You think of the great expansion of effort in this field which the Department staff has made. The relationship between research and teaching has oft been the subject of discussion and debate. Fortunately, perhaps, this is a subject on which you have few if any qualms. The quality of teaching, the attitude of enquiry on the part of both student and instructor, and the development of the caliber of the resident staff demands an active clinical and experimental research program. No medical school department which does not add to the basic knowledge underlying its teaching has ever been recognized as worth its salt. You think with pleasure on the advances which have been made in terms of space and equipment within the Department for experimental research. The cardiovascular laboratory, with its multiple expensive electronic devices so necessary for modern clinical study, is going full steam, - a venture of multiple departments, but largely developed and financed through efforts of the Department of Surgery staff. And the new Halsted Laboratory of Experimental Surgery occupying the top floor of the Sabin building! The very thought of that beautifully equipped laboratory, second you believe to none other in the United States, swells the bosom with unseemly pride. You are sure the Freeman Library, housed within the Laboratory, is the most beautiful room in the University. The School will be eternally grateful to Mrs. Leonard Freeman for her generosity which permitted the establishment of this fitting memorial to her distinguished husband, a room for study and reflection for the surgeons-to-be. You turn to the list of the research projects which have been in progress during the year in the Laboratory. Many projects, some particularly interesting, but almost all solid basic work in a variety of areas, ranging from anoxia and cardiac function, to adrenal homografts, to wire-mesh diaphragms. You note that almost 750 dog operations were performed this year, - more than were done in general surgery in the main Hospital operating rooms! You feel confident, then, that the facilities are not standing idle, but are being used to capacity by the staff and by the young investigators in training.

Your thoughts turn to the problems involved in achieving and maintaining this broadly expanded scope of Department functions. You look at your desk. It seems as if you spend your life looking at your desk. The increase in the administrative load has been tremendous. Now it takes six secretaries to handle the vast amount of Departmental paper work. Next year we need seven. Hours and hours of staff time working on schedules, reports, committees, grant applications, correspondence, all the many details it takes to make the operation click. One hopes to get the most from the Department budget (from various sources) of close to \$100,000 and the research budget of close to \$40,000, but it takes work.

How sorely the Department has been undermanned in terms of full and parttime personnel to help carry this load. To be sure the Division of Anaesthesiology has been placed on solid footing. Two full-time staff members with a good resident program now give excellent anaesthesia coverage at both Denver General and Colorado General Hospitals. To be sure three full-time and one half-time staff members in General Surgery help share the administrative and part of the teaching load, but still the day is long, and the desk never seems to get cleared. You think with gratitude of an understanding administration which has recognized the need and made it possible for a full-time staff member in Orthopedics to join the Department this year, and which is making it possible for a full-time Associate in research, a fulltime Assistant in General Surgery, and a half-time Assistant in Neurosurgery to bolster our ranks during the coming year. And you thank God for the volunteer staff which has and must continue to carry the main brunt of the Department's teaching and service load. You have heard it rumored that some of the volunteer staff have worried, with the advent of more full-time members to the Department, that the volunteer staff would no longer be needed. How far from the truth that rumor is! With the vastly expanding functions of the Department, we are currently asking of our volunteer staff more teaching hours than ever before. We will continue to rely heavily upon them, hoping to grow in stature with the same organizational pattern which we have today - an actively participating volunteer staff functioning around and with a core of full-time men, both in General Surgery, and in those surgical specialties which carry a service and teaching load large enough to warrant parttime or full-time help. In the other specialties, the volunteer staff must continue to carry the entire program, with all the help and good-will that the rest of the Department can give them.

After the staff dinner and an hour spent in reviewing clinical problems, you are driving home. It is still light at eight-thirty, but the sun is under the mountains and the air is beginning to get comfortably cool. You mult over the events and thoughts of the day. Fundamentally, activities must be observed in the light of objectives. One presumes that our Department objectives are similar to those of any other in an ambitious state medical school. One believes certain things. For example, that with the population growth and the development of this great area of the West, our cultural institutions will grow in stature until they can take their place on a par with the much older institutions to the East and to the Far West, and that there should be and can be in this area a medical school of real caliber, recognized in the world of medicine as a partner among the leaders in medical education and research, and recognized and prized by the medical profession and by the people of the area as an important integral cog in the advancement of medical care in the community.

To this end, one believes that our Department, as one among many, must strive to develop to the best of its capacities, both as regards the individuals within it and as a unit. In retrospect, one entertains the hope that the changes which have come about so far are steps in the right direction.

II. Department Status:

The statistical sections of this report indicate the volume and nature of our clinical services. Dr. Reimers at Colorado General and Dr. White at Denver General Hospitals, in their capacities as Chief Resident, have maintained extremely smooth functioning services, to the satisfaction of both the visiting staff and the patients. Both of these men will be leaving the community to enter practice in other parts of the country, both interested in settling in the medium-sized town rather than the large city.

The great need of the Department for additional professional and clerical full-time help which was stressed in last year's report has been or is being largely met. In terms of space and equipment many improvements have occurred in the last year. With the completion of the Sabin Building, very adequate laboratory space has been made available for the Halsted Laboratory of Experimental Surgery. The Tumor Clinic office has been moved to the third floor, and space for research laboratories to be utilized next month became available next door. The operating room facilities have been much improved. The operating room, however, remains as somewhat of a bottle-neck to patient flow because of the shortage of nursing personnel. The addition of the recovery room to the operating room floor has greatly enhanced the care of the postoperative patient, and has, by adding beds to Ward G, made for smoother operation of that busy and overcrowded ward.

In terms of space, the Department, even with the addition of some full-time personnel next year, does not need additional space at this time. It does sorely need to have its office space re-oriented, to allow more efficient operation by means of centralization. Inter-departmental interchange of office space might solve this problem.

Currently, the Department can handle its clinical load within the current bed allotments. The closure of Surgical IV at Denver General Hospital is a manifestation of a recently decreased census at that hospital which, if it should prove to be a continuing trend, would be an alarming loss of clinical teaching material. At Colorado General Hospital, the tightest patient squeeze is on Ward C, shared between Pediatrics and Pediatric Surgery. Whenever both services happen to be coincidently active, the bed shortage is serious. It is strongly recommended that portions of Ward C, formerly used for patients but recently turned into office space, be restored to their former function.

The affiliated residency programs have apparently run smoothly in every instance save one. It is distressing to have to report one serious Department failure in this regard which developed during the past year. It will be recalled that approval was obtained for an affiliated residency program between Colorado General Hospital, Children's Hospital, and State Hospital in Pueblo. The success of this program hinged on the ability to establish a teaching service at State Hospital for the last two years of the program. To this end, Dr. J. C. Owens joined the clinical faculty and was appointed Chief of Service at State Hospital. Dr. Zimmerman, Administrator of the Hospital, bought much needed equipment, and attempted to develop the various services essential for the maintenance of adequate clinical standards. In this effort, however, he met apparently unsolvable problems, primarily in the matter of salaries which he could pay to fill key positions. The State Civil Service Commission lent unsympathetic ears to the cost of attracting competent

cooperative personnel to supply these teaching services, specifically in Anaesthesia and in the Laboratory Services. In spite, therefore, of the interest and efforts of Dr. Zimmerman and Dr. Owens, in spite of the splendid cooperation of the visiting staff in Pueblo, and in spite of the efforts of the Department staff in Denver, it became increasingly apparent that adequate minimal standards for a teaching program could not be maintained under these conditions, and the program had to be temporarily abandoned. Whenever a solution to these problems becomes apparent, the Department will be glad to try again.

Meanwhile, in order to preserve the approval of the year's training at Children's Hospital, direct affiliation of that Hospital into our Medical Center surgical residency has been worked out with Dr. Palmer, Dr. Packard and other members of the surgical training committee at Children's Hospital.

In the realm of graduate training the following student successfully completed his requirements for the Master of Science Degree.

Theodore Novak, M.S. in Surgery, "An Experimental Study in Small Arterial Grafts."

A few changes have been made in the roster of the faculty. Dr. James Miles joined the Department in March in the capacity of full-time Instructor in Orthopedics. Dr. Miles received his orthopedic training under Dr. Phemister in Chicago, and for the past year has been doing experimental research on the effect of denervation on the growth of cartilage. The staff of the Division of Orthopedics has long felt the need of full-time help, since this service load is the largest of any of the specialty services. Dr. Miles will have his office at Denver General Hospital.

With the resignation of Dr. Edith Roth-Kepes in September, 1951, the Division of Anaesthesia was sorely pressed. We were extremely fortunate in welcoming to the staff Dr. Hortensia Rita del Marmol, who came to us January 1, 1952, from New Orleans.

Dr. Mordant Peck will finish his full-time association with the School this year, having resigned to enter private practice. He will continue his interest in the School with an active service on the Clinical Staff of the Division of Thoracic Surgery.

Dr. H. Mason Morfit has continued to serve half-time as Chief of the Division of Oncology, and Dr. James Stapleton also has continued part-time in the Tumor Clinic.

The heavy load of administrative secretarial work has continued to fall on the competent shoulders of Mrs. Elizabeth Willins and Miss Elvira Wurch. Miss Florence Beyer moved from Anaesthesia to the General Surgical Office in September. Miss Virginia Beresford and Miss Joan Currie served helpfully in a part-time capacity during the year. We are happy to welcome Miss Anne Chambers, who joined our staff as a Senior Clerk on June 15th, having had extensive previous secretarial experience in teaching surgical offices in the East.

It is with pleasure that we announce the appointment of the following men to

the faculty of the Department of Surgery.

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Name	Rank	Date of Appointment		
Division of General Surgery				
Spencer, John R.	Clin. Instructor in Surgery	October 1, 1951		
Pollice, John A.	Clin. Assistant in Surgery	July 1, 1951		
Christensen, Scott P.	Assistant in Surgery	July 1, 1951		
Lubchenco, Michael	Assistant in Surgery	July 1, 1951		
Division of Anaesthesiolog	44. 7			
DIVISION OF MIGESTRESIONS	5. <u>/</u>			
del Marmol, Hortensia R.	Instructor in Anaesthesiology	January 1, 1952		
Division of Dentistry				
Gibson, Jr., Ralph R.	Clin. Assistant in Dentistry	January 1, 1952		
		,		
Division of Neurosurgery				
Gerber, William F.	Clin. Instructor in Neurosurgery	January 1, 1952		
Division of Ophthalmology				
	Clin. Assistant in Ophthalmology	September 1, 1951		
Hix, Jr., Ivan E.	-	•		
Kupersmith, Harry S.	Clin. Assistant in Ophthalmology	July 1, 1951		
O'Connor, John W.	Clin. Assistant in Ophthalmology	July 1, 1951		
Panter, Edward G.	Clin. Assistant in Ophthalmology	October 1, 1951		
Division of Orthopedic Surgery				
DIVIDION OF GLOSDONIO DO				
Miles, James S.	Instructor in Orthopedic Surgery	March 1, 1952		
Division of Otolaryngology				
Whistler, Carl W.	Clin. Assistant in Otolaryngology	January 1, 1952		
Division of Thoracic Surgery				

Neerken, Adrian J. Clin. Assistant in Thoracic Surgery July 1, 1951

Other changes in the Staff were as follows:

PROMOTIONS

<u>Name</u>	Rank	Effective Date of Promotion		
Division of General Surgery				
Forsee, Col. James H.	Assoc. Clin. Prof. of Surgery	July 1, 1951		
Ireland, Paul M.	Assoc. Clin. Prof. of Surgery	July 1, 1951		
Plank, Joseph R.	Assoc. Clin. Prof. of Surgery	July 1, 1951		
Barber, Edgar W.	Assist. Clin. Prof. of Surgery	July 1, 1951		
Childs, Samuel B.	Assist. Clin. Prof. of Surgery	July 1, 1951		
Reckler, Sidney M.	Assist. Clin. Prof. of Surgery	July 1, 1951		
Woodruff, Robert	Assist. Clin. Prof. of Surgery	July 1, 1951		
Reimers, Wilbur L.	Instructor in Surgery	July 1, 1951		
Akers, David R.	Clin. Instructor in Surgery	July 1, 1951		
Wood, MacDonald	Clin. Instructor in Surgery	July 1, 1951		
Division of Ophthalmology				
Long, John C.	Assoc. Clin. Prof. of Ophthalmology	July 1, 1951		
Porter, Whitney C.	Assoc. Clin. Prof. of Ophthalmology	July 1, 1951		
Shankel, Harry W.	Assoc. Clin. Prof. of Ophthalmology	January 1, 1952		
Hausmann, Gertrude S.	Assist. Clin. Prof. of Ophthalmology	July 1, 1951		
Kaplan, Morris	Assist. Clin. Prof. of Ophthalmology	January 1, 1952		
Van Bergan, Thomas M.	Assist. Clin. Prof. of Ophthalmology	July 1, 1951		
Kafka, Adolph J.	Clin. Instructor in Ophthalmology	October 1, 1951		
Muir, Bennett W.	Clin. Instructor in Ophthalmology	July 1, 1951		
Shwayder, Montimore C.	Clin. Instructor in Ophthalmology	July 1, 1951		
Swets, Edward J.	Clin. Instructor in Ophthalmology	January 1, 1952		

	-10-	Effective Date of Promotion
Name	Rank	Fromo cross
Division of Otolaryngology Greene, Laurence W. Dart, Merrill O.	Assist. Clin. Prof. of Otolaryngology Clin. Instructor in Otolaryngology	July 1, 1951 July 1, 1951
e Dlastic Surgel	Assist. Clin. Prof. of Plastic Surger	y July 1, 1951 October 1, 1951
Division of Urology Covode, William M. Ivers, William M.	Assist. Clin. Prof. of Urology Clin. Instructor in Urology	January 1, 1952 January 1, 1952
	RESIGNATIONS	Date
Division of General Surg Feehan, John J. Warner, George W.	Clin. Instructor in Surgery Clin. Instructor in Surgery	July 1, 1951 July 1, 1951
Division of Dentistry Eckland, Arthur E.	Clin. Instructor in Dentistry	August 1, 1951
Division of Otolaryngol Bowers, Abern E.	Assist. Clin. Prof. of Otolaryngol	ogy January 1, 1952
	CHANGE OF STATUS	Date
Division of General Su	To: Assistant Clinical Prof. of Thoracic Surgery From: Assist. Prof. of Surgery (full-time)	June 30, 1952

Name Rank Date Division of Orthopedic Surgery Barnard, Hamilton E. To: Assoc. Clin. Prof. of Orthopedic Surgery Assoc. Clin. Prof. of Ortho-From: March 1, 1952 pedic Surgery and Head of Division of Orthopedic Surgery Thomas, Atha To: Assoc. Clin. Prof. of Orthopedic Surgery and Head of Division of Orthopedic Surgery March 1, 1952 From: Assoc. Clin. Prof. of Orthopedic Surgery

Division of Thoracic Surgery

MacMillan, Jr., Hugh A. To: Clin. Instructor in Thoracic

Surgery

July 1, 1951

From: Clin. Instructor in Surgery

During the year, the following Residents served on the Surgical House Staff at the University Hospitals:

Anaesthesia: Dr. Teresita Aquino, Dr. Rodolfo A. Galeano, Dr. Alice J. Smith, Dr. Raymond H. Weaver, Dr. Elizabeth S. Wittenstein.

General Surgery: Dr. Guillermo E. Aragon, Dr. Robert J. Beveridge, Dr. Scott P. Christensen, Dr. Joseph B. Griffith, Dr. Edward B. Liddle, Dr. Michael Lubchenco, Dr. Patrick W. Luter, Dr. Arthur E. Prevedel, Dr. Wilbur L. Reimers, Dr. Jay P. Ruzic, Dr. Bill D. Stewart, Dr. Leon J. Tune, Dr. Hayes M. White, Jr., Dr. George Wittenstein.

Ophthalmology: Dr. Ivan E. Hix, Dr. Harold R. Peterson, Dr. Fred A. Rechnitz.

Orthopedic Surgery: Dr. Robert E. Carlton, Dr. Lynn Keys, Dr. Duane M. Kline, Jr.

Otolaryngology: Dr. Robert S. Felt.

Urology: Dr. Dale M. Atkins, Dr. Thomas E. Kilfoyle.

State Hospital, Pueblo: Dr. J. Barnwell, Dr. F. S. Rose, Dr. Lloyd W. Shannon