

# LIAISON COMMITTEE ON MEDICAL EDUCATION

Council on Medical Education  
American Medical Association  
535 North Dearborn Street  
Chicago, Illinois 60610

October 26, 1971

Executive Council  
Association of American Medical Colleges  
One Dupont Circle, N.W.  
Washington, D.C. 20036

Maynard K. Hine, D.D.S.  
Chancellor  
Indiana University School of Medicine  
1100 West Michigan Street  
Indianapolis, Indiana 46202

Dear Dr. Hine:

It is a pleasure to transmit to you the final report of the Liaison Committee on Medical Education survey team, which visited Indiana University School of Medicine on May 17-20, 1971. As you know, this committee represents the Association of American Medical Colleges and the Council on Medical Education of the American Medical Association. The purpose of the visit was to evaluate and accredit the program of Undergraduate Medical Education of Indiana University School of Medicine.

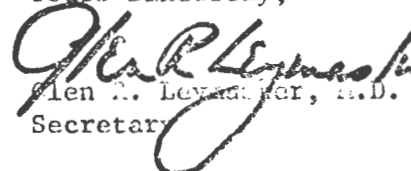
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A copy of the report is being sent to Dean Glenn W. Irwin, Jr., M.D. If there are any questions regarding this report, please get in touch with me at the American Medical Association.

The report is considered confidential by the Liaison Committee and its parent organizations. However, it is for the use of the University and the School of Medicine as dictated by their best judgements. In general, it is not proven advantageous to release the contents of the report to the public press.

Yours sincerely,

  
Glenn A. Levenson, M.D.  
Secretary

GRL/bb

cc: / Glenn W. Irwin, Jr., M.D.  
Marjorie P. Wilson, M.D.

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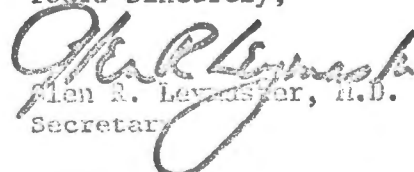
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Glen A. Lovas, M.D.  
Secretary

CRL/bb

cc: / Glenn W. Irwin, Jr., M.D.  
Marjorie P. Wilson, M.D.

Report of the Survey of

INDIANA UNIVERSITY  
SCHOOL OF MEDICINE

Indianapolis, Indiana

By the

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Representing the  
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## INTRODUCTION

The Indiana University School of Medicine was visited May 17-20, 1971 by a Survey Team representing the Liaison Committee on Medical Education of the Council on Medical Education of the American Medical Association and the Executive Council of the Association of American Medical Colleges. Since students of the School of Medicine are located in institutions in four cities in addition to the Medical Center in Indianapolis and it seemed desirable to visit these institutions, the Survey Team was enlarged to six members. It was comprised as follows:

John A. Gronvall, M.D., Dean, University of Michigan Medical School, Chairman.

William R. Drucker, M.D., Chairman, Department of Surgery, University of Toronto Faculty of Medicine.

Jack L. Kostyo, Ph.D., Chairman, Department of Physiology, Emory University School of Medicine.

Horace N. Marvin, Ph.D., Associate Dean for Academic Affairs, University of Arkansas School of Medicine.

Clark K. Sleeth, M.D., Professor of Medicine, West Virginia University School of Medicine.

Hayden C. Nicholson, M.D., Department of Undergraduate Medical Education, American Medical Association, Secretary.

The schedule followed by the Survey Team is found in the APPENDIX of this report.

## HISTORY

Following the passage in 1909 by the Indiana General Assembly of "an Act authorizing the Trustees of Indiana University to conduct a medical school in Marion County, Indiana," the School of Medicine was established. For many years, the students spent the first year on the main University campus in Bloomington, about fifty miles from Indianapolis, going at the beginning of the second year to the Medical Center in Indianapolis where they studied pathology, microbiology, pharmacology, and the clinical sciences.



In September, 1958, the work of the Bloomington Division of the School of Medicine was transferred to Indianapolis. The following year, the School of Medicine, in cooperation with the College of Arts and Sciences and the Graduate School, started a new experimental program on the Bloomington campus which developed into the present Medical Sciences Program, described in a later section of this report.

In 1967, an Act of the General Assembly authorized and provided an appropriation for "the establishment of a regional hospital affiliated internship-residency program and development of an expanded continuing education program..."

In 1968, there was inaugurated a pilot program involving the enrolling of a small number of first-year Indiana University School of Medicine students at Purdue University in Lafayette and at the University of Notre Dame in South Bend.

In January, 1969, the Boards of Trustees of Indiana University and Purdue University approved a plan to unify the two universities' Indianapolis operations to create what is known as "Indiana University-Purdue University at Indianapolis". The Indiana University Medical Center, consisting of the School of Medicine, the School of Dentistry, the School of Nursing, and the University Hospitals together with affiliated hospitals is, therefore, in the midst of a developing major University campus in Indianapolis.

In 1971, the Indiana General Assembly passed an Act, the significance of which can scarcely be over-emphasized. It established the Indiana Statewide Medical Education System to "include, but not be limited to, centers for comprehensive medical education established in cooperation with existing medical and educational institutions in Gary, Fort Wayne, Lafayette, Evansville, South Bend, Terre Haute, and Muncie, Indiana". It provided that a director for each center shall be appointed jointly by the Dean of the Indiana University School of Medicine and the local cooperating institution, the director and participating faculty members to have joint faculty appointments at the School of Medicine and the local institution. It specified that the "School of Medicine shall be responsible for selection admission, and assignment of students, curricular development and evaluation, and accreditation". The Act provides that "medical students shall be admitted in 1971 to those centers which, in the judgment of the Indiana University School of Medicine, have developed appropriate faculty, facilities, and curricula, consistent with the accreditation standards of the joint commission on accreditation of the American Medical Association and the Association of Medical Colleges".

Currently, there are medical students at Purdue, Notre Dame, and Ball State University in Muncie. It is contemplated that Indiana State

University in Terre Haute will participate, beginning in 1971, and other institutions may be added later.

Currently, senior students are located in approved electives on the Medical Center campus in Indianapolis and in community hospitals in other cities.

The last accreditation survey of the School of Medicine was in December, 1963, following which, the School was continued in full accreditation and in membership in the Association of American Medical Colleges.

#### ORGANIZATION AND ADMINISTRATION

The governing body of Indiana University is an eight-member Board of Trustees serving three-year staggered terms. Five of the members are appointed by the State Board of Education and the Governor, and three members are elected by the alumni. The most recent session of the General Assembly established a Commission on Higher Education with responsibility for reviewing budgets for higher education and reviewing plans for new programs.

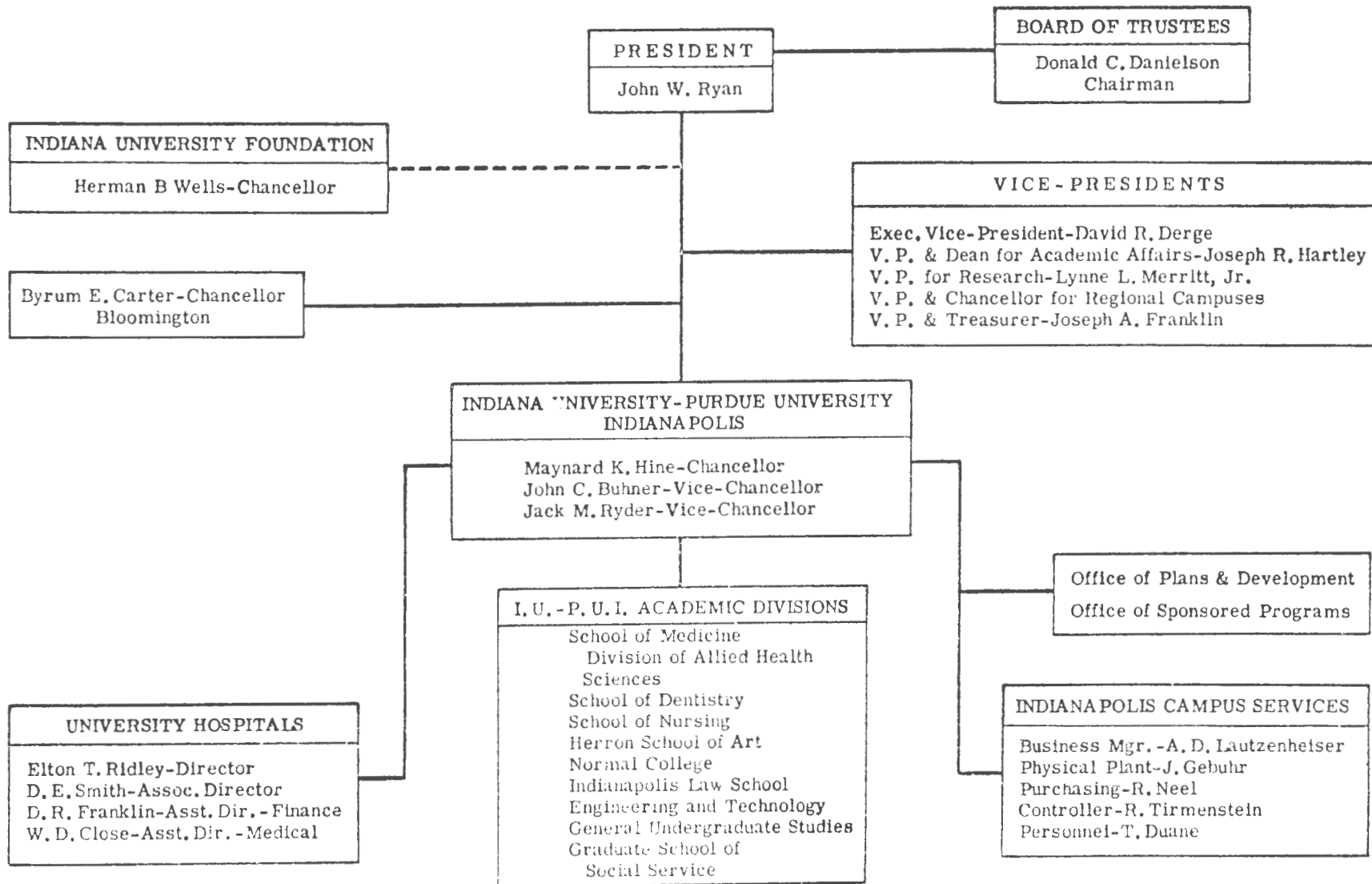
The organization of the University and the School of Medicine are pictured in the accompanying charts, pages 4 and 5.

There is no formal Medical Center organization incorporating the three professional schools (Medicine, Dentistry, and Nursing), the University Hospitals, and the affiliated hospitals (Veterans' Administration Hospital, Marion County General Hospital, and Larue D. Carter Memorial Hospital). Neither is there a formal unifying mechanism of the University-owned portion of the Medical Center.

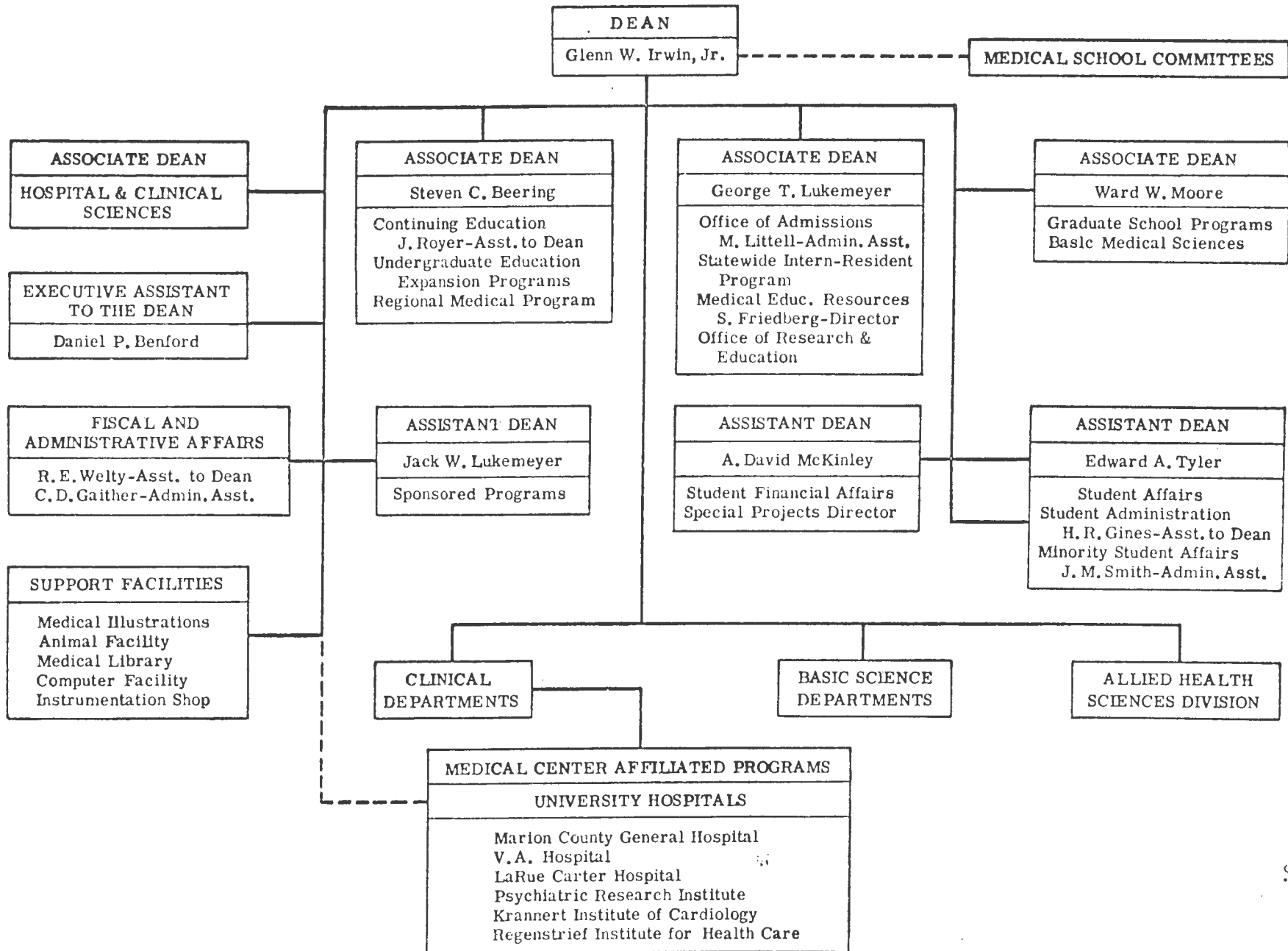
There previously existed, for a few years, a position of Provost for the Medical Center, but this position was abolished several years ago. The deans of the three professional schools and the Director of the University Hospitals meet monthly with the Chancellor of Indiana University-Purdue University at Indianapolis. The Dean of the School of Medicine and the Director of the University Hospitals also meet frequently.

There seems to be an ambiguous and rather puzzling dual responsibility of the University Hospitals to the Chancellor of Indiana University-Purdue University at Indianapolis and to the Vice President and Treasurer of Indiana University in Bloomington. In the opinion of the Survey Team, the

# INDIANA UNIVERSITY ORGANIZATION CHART



# SCHOOL OF MEDICINE - ORGANIZATION CHART



administrative staff of the University Hospital is somewhat lacking in a full understanding of the unique problems, objectives, and demands of the teaching hospital-medical school relationship. This lack of understanding and ambiguity of responsibility are creating problems in patient care and in clinical teaching.

It appears to the Survey Team that the Dean of the School of Medicine is called upon to operate essentially as a Director of the Medical Center with no clear authority to act in that capacity. It is recommended that there be undertaken a serious review of the organizational relationships of the Medical Center in order to improve administrative support for the academic (education, research, and patient care) programs. It is noted that such a study by a business management firm is already underway.

The Chancellor of Indiana University-Purdue University at Indianapolis for many years was Dean of the School of Dentistry. The operation of the Medical Center undoubtedly is being facilitated by his experience with and understanding of medical problems.

The departments of the School of Medicine are as follows:

#### Basic Science Departments

Anatomy	Pathology
Biochemistry	Pharmacology
Microbiology	Physiology

#### Clinical Departments

Anesthesiology	Orthopaedic Surgery	Radiology
Clinical Pathology	Otorhinolaryngology	Radiation Therapy
Dermatology	Pediatrics	Surgery
Medical Genetics		Urology
Medicine	Preventive Medicine	Community Health Sciences
Neurology	and Public Health	Family Practice Program
Obstetrics-Gynecology		Medical Economics
Ophthalmology	Psychiatry	Postgraduate Medical Education

#### Medical Sciences Program (Bloomington)

#### Indiana Statewide Medical Education System

South Bend Center for Medical Education  
 Lafayette Center for Medical Education at Purdue University  
 Muncie Center for Medical Education at Ball State University

## BUDGET AND FINANCES

For the current fiscal year, the total operating expenditures of the School of Medicine will approximate \$22 million, of which sum, about \$9 million can be attributed to regular operating programs and about \$13 million to sponsored programs. State appropriations will amount to almost \$8 million and tuition charges will account for about \$1 million.

The School of Medicine is in the second quartile of United States medical schools in both basic operating expenditures and sponsored program expenditures, in the first quartile in sponsored program expenditures per full-time faculty member, but the fourth quartile in basic operating expenditures per undergraduate medical student.

The 1963 accreditation report stated that "the failure of the State to provide any funds for patient service in the University Hospital is a cause of concern". Dean Irwin indicated to the present Survey Team that "There is still concern that the State of Indiana provides only token funds for patient service in the University Hospital." This concern is shared by the Survey Team.

There is no specific State appropriation to the University Hospital. The School of Medicine pays the salaries of third-, fourth-, and fifth-year residents, in addition to paying the salaries of many faculty members who devote much of their effort to the care of patients at the University Hospitals.

The primary source of income of University Hospitals is patient charges. Approximately 27 per cent of this income comes from Blue Cross, 17 per cent from the State Department of Welfare, 44 per cent directly from patients, and 12 per cent from miscellaneous sources.

In 1967, the Indiana General Assembly passed enabling legislation and authorized funds for strengthening internships, residencies, and continuing medical education programs in community hospitals throughout the State. This special State appropriation has amounted to \$5,500,000 for the period between 1967 and 1971. Approximately one-fourth of this amount is included in the \$22 million total of expenditures in the current fiscal year listed at the beginning of this section. These funds have been used for the support of salaries of community directors of medical education, stipend supplements for interns and residents, the creation and maintenance of a medical telecommunications system, a program of visiting professorships and joint clinics, and a large number of individual grants-in-aid for community hospital education programs.

### PHYSICAL PLANT

The Medical Center campus occupies some 85 acres about a mile from the center of Indianapolis.

The Medical Science Building, built in 1958 with 147,000 net square feet, houses the six preclinical departments and the Medical Library. The former School of Medicine Building, built in 1919 and 1928 with 35,000 net square feet, now called Emerson Hall, has been remodeled to accommodate the clinical departments. James William Fesler Hall, of 34,000 square feet, built in 1939, houses the clinical laboratories, offices of the Dean and other officials, and offices and laboratories of the Departments of Anesthesiology, Medicine, and Surgery.

Other buildings are: the Clinical Building of 56,000 square feet, built in 1938 and 1949; the Medicine Research Facilities Building of 10,000 square feet, built in 1971; the Institute of Psychiatric Research of 22,000 square feet, built in 1956; the Rotary Building of 20,000 square feet, built in 1931, and a student Union Building of 90,000 square feet, built in 1952. The Clinical Building houses several outpatient clinics, offices, a Stroke Center, research laboratories, some specialized operating rooms, and other miscellaneous functions. The Medicine Research Facilities Building accommodates research and project teaching laboratories of the Department of Obstetrics and Gynecology, the Section of Toxicology, and the Department of Surgery. The Rotary Building houses the Ophthalmology Department, including offices, conference rooms, and the outpatient clinic, the Speech and Audiology Section soon to be moved to Riley Hospital, the Cerebral Palsy Clinic, and some faculty and staff offices. The Robert W. Long Hospital, listed below as one of the University Hospitals, currently is being renovated and will provide for a Medicine Clinic, the Physical Therapy and Occupational Therapy Departments, a metabolic ward accommodating seven patients, Nursing classrooms, and two patient units totaling about 35 beds.

Clinical facilities in the Medical Center are the Indiana University Hospitals, the Marion County General Hospital, the Veterans' Administration Hospital, and the Larue D. Carter Memorial Hospital.

The Indiana University Hospitals comprise the William H. Coleman Hospital for Women of 88 beds built in 1928, the Robert W. Long Hospital of 80 beds built in 1914, the James Whitcomb Riley Hospital for Children of 163 beds and research wings for cancer and children's diseases, with major additions built in 1965 and 1971, the latter providing 131 beds, and the University Hospital itself, Phase I of which with 249 beds was completed in 1970.

The Marion County General Hospital has 714 beds and the Veterans' Administration Hospital has 717 beds. Larue D. Carter Memorial Hospital is a State psychiatric hospital of 225 beds. One hundred and twenty-eight beds in Marion County Hospital and 78 beds at the Veterans' Administration Hospital are psychiatric beds.

In addition to the hospitals in the Medical Center, there are two other hospitals in Indianapolis with which the School of Medicine has developed affiliation agreements involving undergraduate medical education, Methodist Hospital of 1,000 beds and St. Vincent's Hospital of 315 beds. There are elective programs for senior students in many other hospitals in the State of Indiana.

A major addition to the Medical Science Building had been planned and a grant application for aid in its construction had been submitted to and approved by the Federal Government. However, the funds for this grant have not been forthcoming. The 1971 Indiana General Assembly approved a \$3.2 million bond issue for this project and now its construction seems assured, although on a somewhat reduced scale.

Construction began recently on Phase II of the University Hospital, to cost \$19 million. It is expected that before the end of the year, construction will begin on an ambulatory care center to be known as the Regenstrief Health Center. It will cost about \$9 million and provide 155,000 square feet of space.

#### FACULTY

At the time of the 1963 accreditation survey, the Survey Team was concerned about the relatively small number of faculty members for a school with 216 entering medical students. At that time, there were 173 full-time, 49 part-time salaried, and 385 voluntary faculty members for a total of 607. The School indicated its intention to increase the number of full-time faculty by 15 men per year. The increase in the subsequent eight years has substantially exceeded that estimate. There are now 341 full-time, 108 part-time salaried, and 584 voluntary faculty members for a total of 1,033.

Although this represents significant progress, Indiana University School of Medicine still ranks in the fourth quartile of United States medical schools in the number of full-time faculty per student and per undergraduate medical student.



The faculty salary ranges are as follows:

<u>Faculty Salary Ranges</u>	<u>Basic Science Departments</u>			<u>Clinical Departments (Including Pathology)</u>		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Department Chairmen	\$30,000	\$24,000	\$27,000	\$41,000	\$19,000	\$32,469
Professors	24,000	15,000	21,135	36,000	13,500	25,127
Associate Professors	22,000	13,500	17,117	32,500	14,500	21,875
Assistant Professors	17,000	10,700	14,733	27,000	13,500	20,750
Instructors	12,800	8,800	11,275	18,000	10,000	12,775

Fringe benefits include group insurance of twice the annual salary up to \$40,000, and the retirement plan of the Teachers Insurance and Annuity Association, with the University paying 11 per cent of annual salary up to \$6,000, and 15 per cent above that amount.

A uniform policy covering the remuneration of the faculty of the clinical departments has not yet been developed. Most of the clinical faculty members are on a geographic full-time arrangement. The Departments of Radiology, Pathology, and Clinical Pathology are on strict full-time, their total remuneration being paid through the University. The remaining clinical departments have a variety of practice plans involving supplementation of income through professional activity. At the time the annual departmental budgets are negotiated each year, the chairman of each department provides the Dean with a report of the private practice activities of his department, and this information is utilized in establishing the base salaries of the faculty for the following year. The private practice activities of the clinical faculty tend to be limited by the limited number of hospital beds available to them and also by the limited outpatient facilities.

Shortly before the visit of the Survey Team, there was developed and approved by the Board of Trustees a medical service plan for the Department of Medicine which the School believes may serve as a prototype for plans in the other clinical departments. This involves the faculty of the Department of Medicine practicing as a group through the establishment of a foundation (separate from the University) known as the University Medical Diagnostic Associates. It is contemplated that there will not be separate foundations for each clinical department, but that the clinical departments might be grouped in perhaps three foundations or practice plans.

The Survey Team felt some concern that there had not been developed a uniform, schoolwide plan covering income from the professional activities of the faculty. It is hoped that the development of several, separate

plans will not be allowed to create artificial barriers between departments. It is urged also that there be developed a system through which a portion of these funds becomes available to the Dean to assist him in meeting the needs of departments and activities which would not otherwise share in them. Finally, it is urged that serious thought be given to the manner in which any system for handling professional fees may adapt to the changes which seem to be coming in the methods of paying for medical care, involving a diminished role of fee-for-service payments.

The professional staffs of the Veterans' Administration Hospital and the Marion County General Hospital are considered members of the full-time faculty and function in every way as full-time faculty members. The salaries of Veterans' Administration staff members are supplemented to a minor extent by the Medical School for their teaching services. The Veterans' Administration professional staff members are chosen by exactly the same criteria as other medical school faculty members. Larue D. Carter Memorial Hospital operates essentially as a Dean's Committee hospital, the professional staff being chosen by the Chairman of Psychiatry and holding faculty appointments.

Residency programs in the various specialties are completely integrated at the University Hospitals, Marion County General Hospital, and the Veterans' Administration Hospital. As a resident is rotated from one hospital, he is dropped from one payroll and added to another. After July 1, 1971, there will be a uniform house staff salary in the integrated residency programs.

Recently, the faculty of the School of Medicine adopted a Constitution. It provides for general faculty meetings at least three times a year, an elected Steering Committee on which the Dean serves ex-officio, the Steering Committee meeting at least once a month. It provides also for four elected faculty members on the following School of Medicine Standing Committees: Academic Standards; Faculty Promotions; Education; Admission; and Community Relations.

School of Medicine Committees, appointed by the Dean, except as mentioned above, are:

- Admissions Committee
- Animal Care Committee
- Biophysics Executive Committee
- Clinical Laboratory Advisory Committee
- Dean's Committee--Veterans' Administration Hospital
- Education Committee
- Executive Committee
- Fellowships and Scholarships Committee
- Human Users of Radioisotopes Committee
- Non-Human Users of Radioisotopes Committee

(continued)

Library Committee  
Microscope Committee  
Operating Room Committee  
Senior Elective Review Committee  
Space Utilization Review Committee  
Student Promotions Committee  
Transplant Committee  
Faculty Steering Committee  
Faculty Academic Standards Committee  
Faculty Promotions Committee

Academic and biographic records of faculty members are unusually complete and well organized.

### STUDENTS

There are 250 students in the entering class, 200 of whom are at Indianapolis and 50 at four other universities. It is said that if the Statewide Program develops as contemplated, the size of the entering class will reach 320 by 1973 with no increase in the number of first-year students at Indianapolis. The number expected to enter in 1971 is 273.

Twelve hundred and sixty-six applications were received for the 250 places in the present freshman class. Three hundred and six acceptances were sent out to fill the 250 places. Eighty-nine colleges were represented in the 250 members of the freshman class. One hundred and thirty-eight of the students came from Indiana University and 39 from Purdue. No other college provided more than eight students. Of the 250 students in the entering class, 242 are Indiana residents, seven are from other states, and one is from a foreign country. There are five Black students.

The median MCAT score of the present freshman class is 546. It has been virtually constant for the last four years. The college grade average of the last entering class was 3.3. It has been rising slowly but steadily the last five years. Student activism seems to be non-violent and to be expressed in responsible ways.

An Office of Minority Students has been established with a Black director. It is stated that in the past, there were perhaps nine or ten Black applicants with a total number of applicants of about 1,200. The number of Black applicants has now increased to about 40. The 1971 entering



The first semester of the freshman year comprises gross anatomy lectures and laboratory, biochemistry lectures and laboratory, and histology lectures and laboratory. The second semester, gross anatomy and biochemistry have been completed and their places taken by physiology lectures and laboratory, neuroanatomy lectures and laboratory, psychiatry lectures and a one-hour medical clinic. The first semester of the sophomore year comprises pathology lectures and laboratory, microbiology lectures and laboratory, and pharmacology lectures and laboratory. Each semester the classroom hours total about 30 per week.

The second semester of the second year, the students devote to the multidepartmental course, Introduction to Clinical Medicine, at the Indianapolis campus. It is stated that human disease is "introduced to the student via its primary manifestations; such as, pain, cough, hemorrhage, vomiting, paralysis, etc. These primary manifestations will be developed into the disease syndromes which serve as models of the more common diseases likely to be seen by a physician...To comprehend a model disease, the student must learn to relate symptoms, signs, laboratory and x-ray findings to the patho-physiology producing illness and the therapeutic principles involved in therapy strategy that will medically modify the patient's disability. Each committee is being requested to include the primary care of at least one commonly seen medical emergency of that organ system. Concepts and practice of preventive medicine are a basic part of class presentations."

The third year is devoted to core clinical clerkships. These comprise three months of medicine, three months of surgery, two months of pediatrics, and one-month clerkships in obstetrics-gynecology, psychiatry, and neurosensory science.

The fourth year is totally elective with both basic science and clinical electives available. The senior electives consist of units of one month each. Eight elective units are required. At the present time, about half the units are in medicine. Many of the clinical electives have been established in community hospitals throughout the State. Conceivably, a student could spend his entire senior year outside Indianapolis, although in actual practice, the amount of time spent outside Indianapolis in relation to that spent in the city is relatively small.

Originally, in the planning of the new curriculum, it was contemplated that the elective period would be of 15 months duration, divided into three five-month units, at least one of which would be required to be spent in the basic sciences and one in the clinical area. However, shortage of faculty and shortage of space in the basic sciences prevented the adoption of this provision, and it was held in abeyance until these shortages were corrected.

Many of the clinical electives have been established in community hospitals throughout the State. It is stated that "Those hospitals which have developed high quality courses for medical students have also enjoyed the by-products of attracting increasing numbers of interns and residents, improved delivery of health care, and the active involvement of larger numbers of practicing physicians from surrounding communities. Salaried medical school faculty, located in numerous community hospitals throughout the State, has been a big factor in the success of medical education in these hospitals."

A pass-fail grading system is used in the clinical years, and some concern was expressed by faculty members about the adequacy of student evaluation in the clinical departments. Concern also was expressed about the inadequacy of faculty counseling for the students in the senior elective program.

#### INDIANA PROGRAM FOR STATEWIDE MEDICAL EDUCATION

The Statewide Program had its genesis in 1965 with the establishment of a faculty committee of the Indiana University School of Medicine charged with the development of a plan for the future of medical education in Indiana. In 1965, Indiana's Medical School produced more graduates than the total number of internships in the State. In 1967, the Indiana General Assembly passed enabling legislation and authorized funds for strengthening internships, residencies and continuing medical education programs in community hospitals throughout the State. State appropriations totaling \$5,500,000 have supported this Program between 1967 and 1971. These funds have been used for the support of salaries of community directors of medical education, stipend supplements for interns and residents, the creation and maintenance of a medical telecommunications system, a program of visiting professorships and joint clinics, and a large number of individual grants in aid for community hospital education programs.

Between 1967 and 1970, a period when the number of graduates from the Indiana University School of Medicine remained constant, the number of interns and residents in the State increased by 107, a 24 per cent increase. In 1967, there were interns in only two cities, Indianapolis and South Bend. In 1970, there were, in addition, interns and residents in Fort Wayne, Evansville, Gary, and Muncie.

The second phase of the Statewide Program began in 1968 when, in cooperation with Notre Dame and Purdue Universities, there was initiated a pilot program involving the teaching of the basic sciences to a limited

number of medical students at these two universities. The School of Medicine had gained about ten years' experience in the provision of basic science teaching away from the Medical School through operation of the Medical Sciences Program at Bloomington. (Although it is not formally a part of the Statewide Program, it seems appropriate to discuss the Medical Sciences Program at Bloomington with the other programs away from Indianapolis.) This Program, begun at the main University in Bloomington shortly after the basic science portion of the School of Medicine was moved to Indianapolis, was designed primarily for the training of medical scientists. It frequently led to M.S. or Ph.D. degrees in addition to the M.D. Currently, there are 58 medical students at Bloomington, half of whom are enrolled for graduate degrees. Of these 58, 30 are in the first year, 21 in the second year, and seven in the third year. These seven are in the combined M.D./Ph.D. program. There are now ten students at Notre Dame University in South Bend, six at Purdue University in Lafayette, and four at Ball State University in Muncie. With the 200 students at Indianapolis, this makes a total of 250 in the entering class.

Two of the Survey Team members visited the programs at Bloomington and Muncie, while two others visited South Bend and Lafayette. The students receiving their basic science training at these outlying sites are enrolled in the Indiana University School of Medicine.

At each of the four outlying sites, there is a director of the medical student program who has essentially the prerogatives and responsibilities of a department chairman. As mentioned above, the program at Bloomington has been in operation since 1959. It originally was focused primarily on the training of medical scientists and usually led to a graduate degree, M.S. or Ph.D. However, in the last six years, it has included some students who are simply medical students, not enrolled for graduate degrees; of the current 30 freshman medical students at Bloomington, 12 are in the latter group. The programs at the other sites constitute respectively the South Bend Center for Medical Education, the Lafayette Center for Medical Education at Purdue University, and the Muncie Center for Medical Education at Ball State University. The director of the program at Bloomington is a pathologist who had been on the faculty there before being designated director. The directors at South Bend and Lafayette are highly qualified, young internists who previously had been in medical practice in those cities and still carry on private practices on a very limited scale. The director at Muncie is an anatomist who previously was on the faculty of the School of Medicine at Indianapolis.

The general concept of the programs at South Bend, Lafayette, and Muncie is that the medical students will take existing courses to the extent that they are available, with additional courses being organized for medical students when necessary.

At South Bend, courses in histology and physiology were added to the Notre Dame curriculum for the medical students. Adequate courses in the other basic sciences were in existence, except for gross anatomy. The medical students enrolled at Notre Dame this year will be taught gross anatomy at the School of Medicine at Indianapolis this summer. Next year, gross anatomy will be taught at Notre Dame. The medical students have a course in psychiatry taught at St. Joseph's Hospital of South Bend by a South Bend psychiatrist on the faculty of the Indiana University School of Medicine. Clinical correlation conferences for the medical students are conducted Saturday mornings at St. Joseph's and Memorial Hospitals by the director of the South Bend Center and the hospital medical staffs.

At Purdue, with its Schools of Veterinary Medicine and Pharmacy, and strong graduate programs in the physical and biological sciences, adequate courses were available in most of the basic sciences. During the first semester, the entering medical students take biochemistry, physiology, cell biology, and histology. During the second semester, they continue with biochemistry, physiology, and histology, and add neurophysiology and general pathology. Here, too, the medical students are participating in clinical correlation conferences on Saturday morning under the guidance of the Director of the program, an internist.

Ball State University is not as well established a university, particularly with respect to graduate programs in the sciences, as are Notre Dame and Purdue. In the past, the only doctoral programs there have been in education. During the current year, the four medical students at Ball State were registered in existing graduate courses which were modified for their needs, with the exception of gross and neuroanatomy which were new courses. The two latter courses are being taught by the director of the Muncie Center who has been and is a Professor of Anatomy at the Indiana University School of Medicine. For the coming year, new separate courses are under development in physiology, biochemistry, and histology. Clinical correlation conferences are conducted for the medical students at Ball Memorial Hospital under the supervision of Dr. John L. Cullison, an internist who holds an appointment as Assistant Professor of Medicine at the School of Medicine, with the cooperation of other physicians on the hospital staff.

With respect to the undergraduate phase of the Statewide Program, the Survey Team has the following comments:

It is felt that the Indiana University School of Medicine should be commended for undertaking this innovative effort to expand its medical student capacity through utilizing the resources of other universities in basic science training.



The program at Bloomington has been in operation for 12 years, during the last six of which it has included some students who are following the standard medical student curriculum, except that their basic science training is being obtained at Bloomington. This program presents no serious problem, although the frequent change of directors may reflect a need for a firmer organization and more stability.

Both Notre Dame and Purdue are well established universities and have the resources to provide adequate basic science training with relatively little adjustment. At Notre Dame, the lack of a course in gross anatomy this year posed some scheduling problems, but it is expected that this lack will be remedied next year. At both Notre Dame and Purdue, student morale is relatively high and, whereas early in the year the medical students had a little "stepchild" feeling, that has largely disappeared and a definite sense of identity has developed. At both institutions, the students are benefitting from their small numbers and the personal interest and concern of the faculty, particularly the director of the program. The students have a certain amount of apprehension about their shift next year to the large classes at Indianapolis, but this does not seem to be serious. It seems that at both institutions, the students are receiving and are benefitting from more clinical correlation than is available to the students at Indianapolis.

The program at Ball State University at Muncie gave the Survey Team serious concern. There seems to be uncertainty in the faculty and administration regarding the significance of the medical student program. Previously there had been considerable interest in establishing a medical school at Ball State University. One current view seems to be that the present program represents the first step in establishing a medical school. Another view is that this program may provide the base for a Ph.D. program in biology. The morale of the medical students at Ball State is relatively poor, and the students have a great deal of apprehension about their move to Indianapolis next year.

Indiana State University at Terre Haute seems to have characteristics somewhat similar to Ball State University, and it may be assumed that the establishment of a medical education program there, as is contemplated for next year, will give rise to somewhat the same problems and concerns as exist with respect to Ball State.

The students entering in 1970 were given an opportunity to express a preference for the Indianapolis or Bloomington campuses but not specifically to request Notre Dame, Purdue, or Ball State, and the students assigned to the latter three institutions were assigned without their having selected them. Each student entering in 1971 will have an opportunity "to state a preference as to what campus and in what program" he wishes to matriculate and an effort will be made to assign him to the program of his choice.

The following choices will be offered:

Indianapolis:	"Regular" four-year medical school program
Indianapolis:	M.D./Ph.D. Program
Bloomington:	Medical Science - M.D./Ph.D. Program
Bloomington:	First two years of "regular" four-year medical school program
South Bend (Notre Dame):	First year of "regular" four-year medical school program
Lafayette (Purdue):	First year of "regular" four-year medical program
Muncie (Ball State):	First year of "regular" four-year medical school program
Terre Haute (Indiana State):	First year of "regular" four-year medical school program

It is inevitable and is to be expected that the establishment of as new and innovative programs as those at the four outlying sites would be accompanied by a certain amount of confusion and uncertainty. Conceivably, a medical school might develop a program involving basic science training of its students in other institutions under either of two concepts:

(1) The students receiving their basic science training in another institution, after completion of that training, might be accepted by the Medical School with advanced standing.

(2) The students might be enrolled in the Medical School from the beginning and receive their basic science training in other institutions in programs developed and operated by the Medical School.

There is no question that the Indiana program is conceived primarily as of the latter type. Both the legislative Act and agreements between the School of Medicine and the cooperating institutions provide for joint

faculty appointments. A representative of each of the Centers serves on the Admissions Committee of the School of Medicine. It is said to be the policy of the School of Medicine that department chairmen in Indianapolis should pass on joint faculty appointments in their disciplines at the cooperating institutions, but there seems to be some question in the minds of the faculty members in Indianapolis that that policy is being carried out. It is stated also that faculty members at the cooperating institutions are expected to participate in overall curricular development and in faculty governance at Indianapolis, but the means of accomplishing this appear not yet to have been fully worked out.

It is realized that this arrangement presents some very complex and troublesome problems. However, it seems to the Survey Team that, if the students are enrolled in the Medical School, then the courses that they take in the outlying institutions should be under essentially the same faculty supervision and control as the courses at Indianapolis. While the Indiana program is conceived of as a single medical school with multiple campuses, the implications of this arrangement have not, as yet, been fully implemented.

Further clarification and definition are called for.

### LIBRARY

The Library, serving the Schools of Medicine and Nursing, is located on two floors of the Medical Science Building. It is under the direction of a capable Librarian, assisted by eight professional staff members and 11 non-professional staff.

It accommodates 208 readers, has about 88,000 volumes, and currently receives 2,351 serials. The hours seem reasonable.

A grant from the Regional Medical Program made it possible for the Library to establish an Extension Division for the purpose of increasing its service to physicians outside Marion County. A total of 876 physicians used this service last year.

It is said that the Library provides some 43 per cent of all interlibrary loans in Marion County.

DEPARTMENTSDepartment of Anatomy

Chairman: Warren Andrew, Ph.D., M.D.  
Age: 59 Appointed Chairman: 1958

Teaching Grants: 0  
Research Grants: \$35,400  
Total Budget (Including Grants): \$312,000

Full-time Faculty: 11  
Part-time Faculty: 1  
Volunteer Faculty: 3  
Graduate Students, Fellows, etc.: 6  
Interns and Residents: 0

Dr. Andrew, the Chairman of the Department, has resigned effective September 1, 1971 and was out of the city at the time of the survey. The team members met with Dr. C. R. Morgan, Professor of Anatomy.

Dr. Morgan felt that the relative lack of research activity could be attributed to a shortage of staff.

It is stated as a concept of the Department of Anatomy, that knowledge of the anatomical sciences is a "prerequisite to an adequate understanding of the body, organ, tissue, and cell functions and malfunctions" and that fundamental anatomical knowledge should "be acquired first and then followed by a study of functions and malfunctions of the same organ and tissue". It is stated that this approach has been followed by the Departments of Anatomy, Biochemistry, and Physiology in the synchronization of topics considered by the freshman class.

The Department seems to be characterized by a certain apathy and devotion to traditionalism. Faculty morale is low. The problems of the Department seem to be recognized by the administration. A Search Committee has been appointed to seek a successor to Dr. Andrew as Chairman, and the position should provide an exciting challenge to a new Chairman.

### Department of Biochemistry

Chairman: David M. Gibson, M.D.  
 Age: 47 Appointed Chairman: 1967

Teaching Grants: \$112,000  
 Research Grants: \$316,000  
 Total Budget (Including Grants): \$904,000

Full-time Faculty: 16  
 Part-time Faculty: 5  
 Volunteer Faculty: 11  
 Graduate Students, Fellows, etc.: 39  
 Interns and Residents: 0

Dr. Gibson, the Chairman of the Department, was out of the country during the survey. The Survey Team members met with Dr. Larry K. Steinrauf, Professor. The Department of Biochemistry is very active in research and also in graduate training. The Department does not seem to be understaffed. The contrast in this respect with Anatomy is noticeable, the Department of Biochemistry having 16 full-time faculty members compared with 11 in Anatomy, with Biochemistry having a much lighter medical student teaching load.

There seemed to be some lack of enthusiasm for the Statewide Program based largely, apparently, on fear that it might compete for funds with the regular Medical School program in Indianapolis.

In general, this appears to be a sound, scholarly faculty contributing well to the undergraduate medical program.

### Department of Microbiology

Chairman: E. W. Shrigley, Ph.D., M.D.  
 Age: 63 Appointed Chairman: 1953

Teaching Grants: \$72,000  
 Research Grants: \$108,000  
 Total Budget (Including Grants): \$500,000

(continued)

Microbiology (continued)

Full-time Faculty: 11  
 Part-time Faculty: 0  
 Volunteer Faculty: 0  
 Graduate Students, Fellows, etc.: 26  
 Interns and Residents: 0

This Department seems to provide an appropriate balance of scholarly activity and attention to the teaching of undergraduate medical students. The Department Chairman, Dr. Shrigley, is also Director of Graduate Programs for Indiana University-Purdue University at Indianapolis, in which capacity he reports to the Dean of the Graduate School in Bloomington.

There are two required courses for sophomore medical students offered by this Department, one in Microbiology, and one in Parasitology. In addition, there is an elective course in Parasitology Laboratory. There are 19 senior elective courses in various areas of Microbiology.

The Department Chairman states that the Department's objective in teaching medical students might be said to be developing "aseptic consciousness". He believes in emphasizing the infectious diseases, rather than bacterial biochemistry in teaching Microbiology to medical students.

Department of Pathology

Chairman: Joshua L. Edwards, M.D.  
 Age: 52 Appointed Chairman: 1969

Teaching Grants: \$21,000  
 Research Grants: \$67,000  
 Total Budget (Including Grants): \$585,000

Full-time Faculty: 15  
 Part-time Faculty: 4  
 Volunteer Faculty: 18  
 Graduate Students, Fellows, etc.: 3  
 Interns and Residents: 10

Neuropathology Section

(Department of Pathology)

Director: Wolfgang Zeman, M.D.  
 Age: 50 Appointed Director: 1960

Teaching Grants: \$25,000  
 Research Grants: \$30,000  
 Total Budget (Including Grants): \$75,000

Full-time Faculty: 7  
 Part-time Faculty: 0  
 Volunteer Faculty: 0  
 Graduate Students, Fellows, etc.: 2  
 Interns and Residents: 0

The faculty of the Department of Pathology seems to be capable, under competent leadership. The basic course in General Pathology for medical students is fairly traditional. Efforts are being made to make much more extensive use of audio-visual aids for individual students' use. The Pathology Department plays a prominent role in the course Introduction to Clinical Medicine in which the teaching of Pathology is closely integrated with the introduction of clinical concepts by clinicians. It involves a comprehensive review by systems of human disease with emphasis in pathological physiology and correlation of the pathology and clinical manifestations of common disease.

Dr. Zeman particularly is a strong proponent of breaking with the traditional teaching of Pathology. He believes in emphasizing mechanisms, rather than static morphology.

Department of Clinical Pathology

Chairman: C. D. Nordschow, M.D., Ph.D.  
 Age: 45 Appointed Chairman: 1969

Teaching Grants: 0  
 Research Grants: 0  
 Total Budget (Including Grants): \$1,863,000

(continued)

Clinical Pathology (cotinued)

Full-time Faculty: 16  
Part-time Faculty: 0  
Volunteer Faculty: 0  
Graduate Students, Fellows, etc.: 11  
Interns and Residents: 6

This Department seems to be performing reasonably satisfactorily in providing clinical pathology service and in the instruction of medical students and allied health students. Research is virtually absent.

There seems to be good liaison with the Departments of Medicine, Microbiology, and Pediatrics. Relations with the Department of Surgery seem to be less close, but this is expected to improve with the coming of the new Chairman of Surgery.

Department of Pharmacology

Chairman: James E. Ashmore, Ph.D.  
Age: 44 Appointed Chairman: 1960

Teaching Grants: \$159,000  
Research Grants: \$268,000  
Total Budget (Including Grants): \$745,000

Full-time Faculty: 18  
Part-time Faculty: 1  
Volunteer Faculty: 3  
Graduate Students, Fellows, etc.: 30  
Interns and Residents: 0

This seems to be a well-staffed, thoroughly capable Department. The faculty is organized into four fairly distinct, but well-integrated, functional groups, and a Pharmacology satellite group in Bloomington. The Toxicology group is moving into newly finished quarters. The Chemotherapy group is located separately in the Research Wing of the Riley Hospital. The Toxicology group operates the State Toxicology Program.



The Department is strongly oriented toward research and operates a substantial graduate training program.

The course in Medical Pharmacology is designed to provide a basis for rational therapeutics. Mechanism of action and toxicity are emphasized, rather than dosage. Laboratory exercises provide practical experience with hepatic toxicity, induction of lung metabolizing enzymes, local and general anesthetics, cardiovascular and autonomic drugs.

The Department Chairman, Dr. Ashmore, feels that the faculty is thoroughly adequate for their teaching obligations and that they are quite capable of handling a total of 300 students.

Dr. Ashmore and his Associate in Toxicology, Dr. Forney, seem interested in and enthusiastic about the Statewide Program.

#### Department of Physiology

Chairman: Ewald E. Selkurt, Ph.D.  
Age: 57 Appointed Chairman: 1958

Teaching Grants: \$60,000  
Research Grants: \$363,000  
Total Budget (Including Grants): \$693,000

Full-time Faculty: 12  
Part-time Faculty: 0  
Volunteer Faculty: 2  
Graduate Students, Fellows, etc.: 24  
Interns and Residents: 0

During the second semester of the sophomore year, there are five lectures a week in Physiology, plus a lecture emphasizing clinical applications, usually given by a clinician. Later in the week, the same clinician presents a patient, illustrating his lecture. There is one laboratory period a week of seven hours. In the course in Physiology, emphasis is on basic physiological principles and control systems, but clinical application is stressed wherever possible.

There are also senior electives in Physiology.

The Department seems to be adequately staffed and ably lead. A neurophysiologist would be a worthwhile addition to the faculty, although there is no reason to think that medical student teaching is suffering by the lack. Space and equipment seem reasonably adequate and well utilized. There is strong emphasis on research in the Department. A considerable effort has been devoted to the development of an audio-visual program to support the Statewide Program. This appears to be a capable, progressive Department with a healthy concern with interdepartmental affairs.

#### Department of Anesthesiology

Chairman: V. K. Stoelting, M.D.  
Age: 59 Appointed Chairman: 1954

Teaching Grants: \$13,500  
Research Grants: \$20,000  
Total Budget (Including Grants): \$232,000

Full-time Faculty: 10  
Part-time Faculty: 0  
Volunteer Faculty: 0  
Graduate Students, Fellows, etc.: 25  
Interns and Residents: 31

In the second year, the Department of Anesthesiology provides some lectures in Pharmacology and participates in the pulmonary portion of Introduction to Clinical Medicine. Also in the second year, they participate in demonstrations of resuscitation, intubation, and other techniques. In the third year, two-thirds of the class spend two weeks on anesthesiology as part of the one-month period in the Surgery clerkship devoted to Anesthesiology, Urology, and Orthopaedics.

The Department Chairman feels that a large increase in faculty will be required for the increase in student enrollment contemplated, but there seems to be no indication that such an increase in faculty will be forthcoming.

This seems to be a rather uninspired Department with a lack of forward planning. Research is virtually absent.

Department of Dermatology

Chairman: Victor C. Hackney, M.D.  
Age: 54 Appointed Chairman: 1963

Teaching Grants: 0  
Research Grants: \$11,000  
Total Budget (Including Grants): \$70,500

Full-time Faculty: 3  
Part-time Faculty: 0  
Volunteer Faculty: 7  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 4

This Department has three full-time faculty members and three residents. They meet with the freshmen on two occasions in discussions concerning the anatomy and physiology of the skin. Twelve hours are devoted to Dermatology in the sophomore course of Introduction to Clinical Medicine. During the junior year, a quarter of the class spends two hours on each of four occasions in Dermatology. In the senior year, there is an elective course in which two students spend a month in the Dermatology outpatient clinic. The Department Chairman, Dr. Hackney, comments that there is little opportunity to evaluate the effectiveness of their teaching, except in the senior electives. They plan to expand the production and use of film strips in teaching. The teaching programs are well received by students.

The research in this Department is limited, but the enthusiastic interest of the faculty in teaching is notable and is appreciated by the students.

Department of Medical Genetics

Chairman: A. Donald Merritt, M.D.  
Age: 45 Appointed Chairman: 1966

Teaching Grants: \$149,000  
Research Grants: \$417,000  
Total Budget (Including Grants): \$706,000

(continued)

Medical Genetics (continued)

Full-time Faculty: 8  
Part-time Faculty: 2  
Volunteer Faculty: 2  
Graduate Students, Fellows, etc.: 22  
Interns and Residents: 0

This Department is remarkably active in research and teaching, as well as in the provision of service. In addition to the eight full-time faculty members with primary appointments in Medical Genetics, there are two faculty members with joint appointments in Pediatrics and Medical Genetics. Medical Genetics has existed as a separate department about five years.

There are 18 doctoral candidates and four postdoctoral students in the Department.

During the freshman year, the Department participates in teaching Biochemistry, giving a series of lectures on basic genetic principles as related to Biochemistry. During the Introduction to Clinical Medicine in the sophomore year, a 12-hour block of time is devoted to the teaching of genetic principles as applied to medical diagnoses. In the third year, students on Outpatient Pediatrics attend various Medical Genetics clinics, and the Department occasionally participates in pediatric, neurology, urology, and medical grand rounds. During the senior year, there is offered an elective in Clinical Genetics that has been highly successful.

The Department of Medical Genetics performs a useful service function not available elsewhere in Indiana providing expert analysis of human chromosomes and detailed analysis of numerous enzymatic and other genetic factors.

A Medical Genetics clinic and outpatient consultation service receive referrals from all parts of the State, as well as from various clinical departments at the Medical Center.

There is a feeling among the faculty of the Department that the Department's influence in curricular development in the Medical School has not been as great as might be wished.

Department of Medicine

Chairman: Walter J. Daly, M.D.  
Age: 41 Appointed Chairman: 1970

Teaching Grants: \$465,000  
Research Grants: \$1,610,000  
Total Budget (Including Grants): \$3,311,000

Full-time Faculty: 60 (includes 12 VA)  
Part-time Faculty: 3  
Volunteer Faculty: 20  
Graduate Students, Fellows, etc.: 20  
Interns and Residents: 74

The impression of the Survey Team is that this Department, under the chairmanship of Dr. Daly, is continuing at the same high level of competence that characterized it under the late Dr. John Hickam.

The Department devotes a great deal of attention to the Introduction to Clinical Medicine in the second semester of the sophomore year. The class is divided into groups of eight students, each of which has a preceptor for instruction in Physical Diagnosis. There are 13 Unit Committees planning the various units of the Introduction to Clinical Medicine. The duration of the individual units varies, averaging about a week. Although there are students on the overall Education Committee, there are no students on the individual Unit Committees. However, after a Unit Committee has developed a tentative program, it is customary for the Committee to meet with student representatives and get their reaction to it.

The junior clerkship is conducted in all three hospitals, the University Hospital, Marion County General Hospital, and the Veterans' Administration Hospital. In general, the students are assigned for three months to a ward at one of these hospitals.

Department of Neurology

Chairman: A. T. Ross, M.D.  
Age: 62 Appointed Chairman: 1952

(continued)

Neurology (continued)

Teaching Grants: \$52,000  
 Research Grants: \$409,000  
 Total Budget (Including Grants): \$805,000

Full-time Faculty: 8  
 Part-time Faculty: 1  
 Volunteer Faculty: 3  
 Graduate Students, Fellows, etc.: 1  
 Interns and Residents: 12

In Introduction to Clinical Medicine, over a 13-day period, whole class morning sessions consist of live and taped patient demonstrations, discussions, and lectures designed to follow a systematic procedure of the neurological examination and the interpretation of findings. In the afternoon, the class is broken into groups of four or five students which are disseminated throughout the three affiliated hospitals of the Medical Center and assigned to examine patients under supervision of a member of the departmental faculty or one of the residents. It is said that the major drawback here is that the large size of the class permits the four- or five-student group to be assigned to ward patient workup only twice during the allotted 13-week period. The class uses a programmed text, prepared by a faculty member, primarily to assist in instruction in the neurological examination.

In the junior year, there is an integrated Neurosensory clerkship presented jointly by the Departments of Neurology, Ophthalmology, Otolaryngology, and Neurological Surgery. One-twelfth of the junior class, about 18 students, spends a month on this clerkship. This group is further subdivided so that four-fifths are assigned to the Neurology service and one-fifth to the Neurosurgery service of the affiliated hospitals. This assignment is primarily in the mornings. During the afternoons, the students are assigned to Ophthalmology for two weeks and Otolaryngology for two weeks. Splitting one clerkship among four specialties does not seem very satisfactory.

Eleven electives are available to senior students for periods of one to three months.

The teaching of the Department of Neurology is highly regarded by the students. To a major degree, the research program of the Department involves a Regional Stroke Program.

Department of Obstetrics and Gynecology

Chairman: Charles H. Hunter, M.D.  
Age: 48 Appointed Chairman: 1969

Teaching Grants: \$779,000  
Research Grants: \$11,000  
Total Budget (Including Grants): \$1,133,000

Full-time Faculty: 9  
Part-time Faculty: 3  
Volunteer Faculty: 0  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 12

This Department is devoting a great deal of attention to medical student teaching. It is only minimally involved in the Introduction to Clinical Medicine. There is a one-month Obstetrics and Gynecology clerkship in the junior year. There is a senior elective in Obstetrics and another in Gynecology. The senior students on the Obstetrics elective average 15-20 deliveries a month. The Department exercises close control over the Obstetrics-Gynecology electives offered in hospitals outside Indianapolis. An elective must be approved by the Department before it can be offered and it is approved for only one year.

Each of the last two years, the Department had weekend conferences off the campus concerned with the teaching program. There is an audio-visual unit with four full-time personnel responsible for developing the educational resources of the Department.

Some concern was expressed about the shortage of faculty and space, especially if the number of students should be increased.

The Survey Team was very much impressed by the concern of this Department with undergraduate teaching, particularly the attention to the development of and innovative uses of audio-visual aids and the close concern with and control of the quality of electives being offered in outlying hospitals.

Department of Ophthalmology

Chairman: Fred M. Wilson, M.D.  
 Age: 57 Appointed Chairman 1954

Teaching Grants: \$52,000  
 Research Grants: 0  
 Total Budget (Including Grants): \$394,000

Full-time Faculty: 6  
 Part-time Faculty: 1  
 Volunteer Faculty: 48  
 Graduate Students, fellows, etc.: 0  
 Interns and Residents: 21

This Department has six full-time and one part-time salaried faculty, and 21 residents. Very effective use is made of 48 volunteer faculty members in the care of patients and in resident training. Two one-hour lectures on Ophthalmology are given to the freshmen as part of the course in Physiology. The junior clerkship is part of the Neurosensory clerkship, the students spending afternoons for two weeks on Ophthalmology. This arrangement does not seem very satisfactory. About four hours are devoted to Ophthalmology in the Introduction to Clinical Medicine. There is a senior elective clerkship.

There is very little research underway in Ophthalmology, but the Department seems to be performing very satisfactorily in undergraduate and graduate teaching, and in clinical care.

Department of Orthopaedic Surgery

Chairman: James B. Wray, M.D.  
 Age: 45 Appointed Chairman: 1966

Teaching Grants: 0  
 Research Grants: \$60,000  
 Total Budget (Including Grants): \$524,000

(continued)



### Orthopaedic Surgery (continued)

Full-time Faculty: 7  
 Part-time Faculty: 3  
 Volunteer Faculty: 34  
 Graduate Students, Fellows, etc.: 0  
 Interns and Residents: 20

The Department of Orthopaedic Surgery has sub-departments of Orthotics and Rehabilitation.

A course in First Aid is given in the first year.

In the Introduction to Clinical Medicine, approximately one week is devoted to the musculoskeletal System, with the Departments of Medicine, Neurology, Pathology, and Orthopaedics participating. For three weeks, each afternoon is devoted to Physical Diagnosis of the Musculoskeletal System. In the junior Surgical clerkship, about two-thirds of the class spend two weeks in Orthopaedics in groups of 20.

Dr. Horwitz, who is in charge of the undergraduate teaching program, would like to see the Department involved to a greater degree in the first and second year curricula, assisting the basic sciences in bridging the gap to Clinical Medicine.

Approximately 80 students choose a senior elective in Orthopaedics.

### Department of Otorhinolaryngology

Chairman: David E. Brown, M.D.  
 Age: 61 Appointed Chairman: 1962

Teaching Grants: 0  
 Research Grants: 0  
 Total Budget (Including Grants): \$44,229

Full-time Faculty: 0  
 Part-time Faculty: 5  
 Volunteer Faculty: 24  
 Graduate Students, Fellows, etc.: 0  
 Interns and Residents: 14

There are no full-time faculty, except for the semiautonomous Section on Audiology and Speech Pathology. There are 14 residents. The otorhinolaryngologists participate in instruction in the anatomy of the head and neck during the freshman year. In the Introduction to Clinical Medicine in the sophomore year, the students spend one afternoon in Physical Diagnosis in Otorhinolaryngology. The juniors spend afternoons for two weeks in Otorhinolaryngology as part of the Neurosensory clerkship. There is an Otorhinolaryngology elective of one month's duration in the fourth year.

Office space is lacking.

The present part-time faculty members feel strongly that there is an urgent need for full-time faculty in this Department. They, themselves, apparently would be willing to consider full-time status and are reluctant to continue on the present basis, as are many of the voluntary faculty.

Reorganization of the Department is clearly called for with a nucleus of full-time staff and more adequate office space.

#### Audiology and Speech Pathology Section

(Department of Otorhinolaryngology)

Director: Francis L. Sondag, Ph.D.  
Age: 57 Appointed Director: 1967

Teaching Grants: 0  
Research Grants: \$25,500  
Total Budget (Including Grants): \$174,000

Full-time Faculty: 10  
Part-time Faculty: 0  
Volunteer Faculty: 0  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 0

The role of this Section is very largely one of service with minor activity in research. It is estimated that three per cent of faculty time is devoted to instruction of medical students. It is said that junior students during their Otolaryngology clerkship may spend a few hours in this Section, and perhaps 50 per cent of the junior students on Ambulatory Pediatrics spend some time in Audiology. There is a senior elective in which there has been little student interest.

### Department of Pediatrics

Chairman: Morris Green, M.D.  
Age: 48 Appointed Chairman: 1963

Teaching Grants: \$303,000  
Research Grants: \$106,000  
Total Budget (Including Grants): \$955,000

Full-time Faculty: 20  
Part-time Faculty: 7  
Volunteer Faculty: 48  
Graduate Students, Fellows, etc.: 6  
Interns and Residents: 17

The junior clerkships in Pediatrics consist of a four-week inpatient experience either at the Riley Hospital for Children or at the Marion County General Hospital, and a four-week Children's Ambulatory clerkship. Electives in Pediatrics are available in the senior year.

It is stated that the most serious lack is the opportunity for students to follow patients over a prolonged period of time, three or four months. The faculty are thinking of trying to remedy this by organizing a "block of clerkships", e.g., in Pediatrics, Psychiatry, and Obstetrics.

An attractive addition to Riley Hospital has been occupied very recently. An exciting feature of these facilities is a 24-room, motel-like Patient Care Unit that will permit the family to be with the child during hospitalization and make possible the teaching of family-centered care.

The Chairman of the Department, Dr. Green, says that he does not like to see separate clinics for example, Pediatrics, Medicine, Obstetrics, and would greatly prefer that patients be seen in family groups.

The Department is highly impressive, and its views on both pediatric care and its teaching are exciting.

### Department of Psychiatry

Chairman: John I. Nurnburger, M.D.  
Age: 54 Appointed Chairman: 1955

(continued)

Psychiatry (continued)

Teaching Grants: \$426,000  
 Research Grants: \$407,000  
 Total Budget (Including Grants): \$1,659,000

Full-time Faculty: 26  
 Part-time Faculty: 26  
 Volunteer Faculty: 47  
 Graduate Students, Fellows, etc.: 22  
 Interns and Residents: 24

The faculty of the Department of Psychiatry are a large, impressive, dynamic group.

There is a two-hour-per-week, full-semester course in the freshman year covering basic aspects of the Science of Human Behavior and an Introduction to Psychotherapy. Instruction in the Introduction to Clinical Medicine in the sophomore year is in three sections. In the first of these, the student is introduced to the nature, characteristics, and variations in the doctor-patient relationship. The second section, presented by members of the Department of Psychiatry, together with a multidisciplinary team of medical and non-medical specialties, is focused on a comprehensive review of sexual and reproductive biological functions.

Psychiatry experience in the junior year consists of the one-month Psychiatric clerkship.

The Department of Psychiatry has offered 35 different types of elective experience, of one to six months duration, in various inpatient and outpatient clinical facilities at Indianapolis and in community and State facilities around the entire State.

Dr. Nurnburger expressed a high opinion of the course in Psychiatry being provided the medical students at Notre Dame by a psychiatrist in practice in South Bend on the Indiana School of Medicine faculty.

Department of Radiology

Chairman: John A. Campbell, M.D.  
 Age: 56 Appointed Chairman: 1955

(continued)

Radiology (continued)

Teaching Grants: \$15,000  
 Research Grants: \$18,000  
 Total Budget (Including Grants): \$1,300,000

Full-time Faculty: 12  
 Part-time Faculty: 6  
 Volunteer Faculty: 8  
 Graduate Students, Fellows, etc.: 0  
 Interns and Residents: 25

In the first year, the Department of Radiology participates in the teaching of Gross Anatomy and in the second year, in the Introduction to Clinical Medicine. Electives are available for students in the third and fourth years.

Dr. Campbell, the Chairman of the Department, has resigned from the chairmanship and was not available to meet with the Survey Team. The Team members met with Dr. Roscoe E. Miller who has been a member of the faculty for 15 years. Dr. Miller commented bitterly on the shortages of staff, space, and equipment. Dr. Eugene Klatte, who is now Chairman of Radiology at Vanderbilt University, has been appointed Chairman at Indiana and is expected to arrive July 1, 1971. The Team was informed that a commitment of additional staff positions has been made to Dr. Klatte.

Department of Radiation Therapy

Chairman: Ned B. Hornback, M.D.  
 Age: 39 Appointed Chairman: 1970

Teaching Grants: 0  
 Research Grants: \$12,000  
 Total Budget (Including Grants): \$108,000

Full-time Faculty: 5  
 Part-time Faculty: 2  
 Volunteer Faculty: 3  
 Graduate Students, Fellows, etc.: 0  
 Interns and Residents: 2

The Department of Radiation Therapy was separated from the Radiology Department about a year ago. Four lectures in Radiation Therapy are given during the sophomore year. There are elective courses in Radiotherapy and in Radiation Physics.

#### Department of Surgery

Chairman: John E. Jesseph, M.D. (July 1, 1971)  
Age: 45 Appointed Chairman: 1971

Teaching Grants: \$34,000  
Research Grants: \$117,000  
Total Budget (Including Grants): \$410,000

Full-time Faculty: 12  
Part-time Faculty: 3  
Volunteer Faculty: 52  
Graduate Students, Fellows, etc.: 1  
Interns and Residents: 18

#### Neurosurgery Section

(Department of Surgery)

Director: Robert L. Campbell, M.D.  
Age: 45 Appointed Director: 1967

Teaching Grants: 0  
Research Grants: \$86,000  
Total Budget (Including Grants): \$232,000

Full-time Faculty: 6  
Part-time Faculty: 2  
Volunteer Faculty: 8  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 9

Plastic Surgery Section

(Department of Surgery)

Director: James E. Bennett, M.D.  
Age: 45    Appointed Director: 1964

Teaching Grants: 0  
Research Grants: \$7,500  
Total Budget (Including Grants): \$71,099

Full-time Faculty: 3  
Part-time Faculty: 6  
Volunteer Faculty: 7  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 5

During the past year, Dr. J. S. Battersby has served as Acting Chairman of the Department of Surgery, replacing Dr. H. B. Shumaker, Jr., the former Chairman of the Department, who had resigned. The Survey Team met with Dr. Battersby, Dr. James E. Bennett, Director of Plastic Surgery, Dr. Robert L. Campbell, Director of Neurological Surgery, and Dr. John E. Jesseph who will become Chairman of the Department of Surgery, July 1, 1971. Dr. Jesseph came to Indianapolis to meet with the Survey Team from his home in Columbus, Ohio where he is on the faculty of Ohio State University.

The third-year Surgery clerkship is of three months duration. One of the three months is spent in the specialty services of Anesthesiology, Urology, and Orthopaedics. The other two months of the clerkship are spent on the services of the Department of Surgery. There are four major hospitals utilized in these clerkships, the University Hospitals, the Marion County General Hospital, the Veterans' Administration Hospital, and St. Vincent's Hospital, a student spending one month in each of two of these hospitals. For the fourth-year students, there are electives offered, not only by the full-time staff but also by staff members of other hospitals in Indianapolis and throughout the State.

Since Neurosurgery now is part of the Neurosensory clerkship, time for it now need not be provided from the Surgery clerkship, as previously.

There seemed, to the Survey Team, to be some uncertainty as to the degree of autonomy enjoyed by the various divisions of the Department of Surgery. This situation is not surprising during a period in which the

Department is without a permanent Chairman. There is reason to assume that the new Chairman, Dr. Jesseph, will proceed to clarify and to unify the Department, including its teaching program, into a coordinated whole. He will need the support of the administration in this undertaking.

There is a clear need for additional full-time faculty in the Department of Surgery. It is understood that a significant commitment in this respect has been made by the administration to the incoming Chairman.

#### Department of Urology

Chairman: Robert A. Garrett, M.D.  
Age: 52 Appointed Chairman: 1954

Teaching Grants: 0  
Research Grants: \$8,000  
Total Budget (Including Grants): \$80,000

Full-time Faculty: 3  
Part-time Faculty: 0  
Volunteer Faculty: 14  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 9

In the sophomore course in Introduction to Clinical Medicine, there are 14 hours of lectures on Uro-Nephrology. Urology constitutes a part of the junior clerkship in Surgery. During this clerkship, there is a series of eight one-hour lectures dealing with specific urological diseases. These lectures are delivered 12 times a year to groups of 20-25 students. Elective urologic courses are given at six Indianapolis hospitals and at hospitals in Bloomington, Terre Haute, and Fort Wayne.

In Introduction to Clinical Medicine, the Department of Urology works closely with the Division of Nephrology of the Department of Medicine. The Department Chairman is thoroughly in favor of interdisciplinary activity in teaching.



Department of Preventive Medicine and Public Health

Chairman of the  
Executive Committee: Samuel K. Hopper, Ph.D.  
Age: 59 Appointed Chairman: 1945

Teaching Grants: 0  
Research Grants: 0  
Total Budget (Including Grants): \$110,000

Full-time Faculty: 5  
Part-time Faculty: 30  
Volunteer Faculty: 20  
Graduate Students, Fellows, etc.: 45  
Interns and Residents: 0

The major teaching activity of this Department involves the Graduate Program in Health Administration. It is said that 90 per cent of the total faculty effort of the Department represents teaching and that only ten per cent of the total involves undergraduate medical students.

The Department participates in the teaching of medical students through the Introduction to Clinical Medicine. Senior electives in this field are also available to medical students.

Department of Community Health Sciences

Chairman: Raymond H. Murray, M.D.  
Age: 45 Appointed Chairman: 1971

Teaching Grants: 0  
Research Grants: 0  
Total Budget (Including Grants): \$38,400

Full-time Faculty: 1  
Part-time Faculty: 1  
Volunteer Faculty: 1  
Graduate Students, Fellows, etc.: 0  
Interns and Residents: 0

### Family Practice Program

Chairman: A. Alan Fischer, M.D.  
 Age: 44 Appointed Chairman: 1971

The development of an Indiana University Family Practice Program has been initiated. Its objective is said to be "the development of the structure, the personnel, and the curriculum necessary for the education of students and residents in preparation for a career in Family Practice". A Department of Family Practice is contemplated. "Emphasis will be placed on ambulatory patient diagnosis and treatment, and the importance of continuity and comprehensiveness of family health care will be stressed."

The Survey Team was somewhat disturbed by the relationship between the Department of Community Health Sciences, the Department of Preventive Medicine and Public Health, and the developing program in Family Medicine. It appears that the scholarly and research activities in the field will be concentrated in the Department of Community Health Sciences, that teaching in Family Practice will be in a separate department, and that the teaching role of the Department of Preventive Medicine and Public Health will be largely limited to non-medical students.

It is felt that these relationships need to be clarified and that, perhaps, there should be more evidence of coordination of the activities of these three departments.

### Department of Medical Economics

Chairman: Donald E. Wood, M.D.  
 Age: 61 Appointed Chairman: 1964

Teaching Grants: 0  
 Research Grants: 0  
 Total Budget (Including Grants): 0  
 Full-time Faculty: 0  
 Part-time Faculty: 0  
 Volunteer Faculty: 5  
 Graduate Students, Fellows, etc.: 5  
 Interns and Residents: 0

In the Introduction to Clinical Medicine given to sophomores, five half-days are devoted to Medical Civics (Ecology of Medical Practice). The major topics covered this year were Medical Jurisprudence, Paramedical Services, Health Care Delivery, and What's Ahead for American Medicine.

Division of Postgraduate Medical Education

Director: Steven C. Beering, M.D.  
Age: 38 Appointed Director: 1969

Teaching Grants: \$825,000  
Research Grants: \$28,000  
Total Budget (Including Grants): \$1,080,000

The Division of Postgraduate Medical Education was established in 1957. Its program has derived considerable impetus from the Statewide Program for Medical Education. The program encompasses:

- (a) Postgraduate courses in Indianapolis and at hospitals throughout the State
- (b) A Visiting Professorship Program
- (c) A medical education television network
- (d) A comprehensive library service

In the period from July 15, 1970 to April 9, 1971, 23 postgraduate courses were given. Most of these were of six hours duration, but two were of 16 hours, one of 22, one of 24, and one of 112 hours. The median attendance at these courses was about 25 physicians; the total was almost 1,500. It is said that over half of the full-time Medical School faculty have participated in the Visiting Professorship Program, medical television shows, or formal postgraduate courses.

### SUMMARY AND CONCLUSIONS

The Survey Team wishes to thank the Administration and the faculty of Indiana University School of Medicine for everything they did in making the visit pleasant, as well as fruitful. The schedule was well planned, the faculty and the students were well prepared for it and, in every respect, the arrangements for the visit were superb.

The School of Medicine is to be commended for the progress it has made since the last accreditation survey in 1963 and for the extent to which it has assumed a leadership role in Indiana and nationally in meeting health manpower needs, and in improving medical care, notably through the development of Phases I and II of the Statewide Program for Medical Education in Indiana.

Since the last visit, there has been a notable improvement and expansion of facilities, including the completion of Phase I and the initiation of Phase II of the University Hospital construction, the very attractive addition to the James Whitcomb Riley Hospital for Children, and the soon to be initiated addition to the Medical Sciences Building and the Regenstrief Health Center for ambulatory care.

The curriculum has been revised, the information overload reduced, clinical relevance improved, and earlier patient contact introduced, with flexibility to accommodate to differing career goals and interests through the senior year elective program.

At the time of the last survey visit, concern was expressed over the number of faculty in relation to the number of students. There has been substantial improvement in that respect, the number of full-time faculty having increased from 173 to 341, and the total number of faculty increased from 607 to 1,033 with an increase in the entering class size only from 216 to 250. However, Indiana still is in the fourth quartile of United States medical schools in ratio of faculty to students, and also in operating expenditures per undergraduate medical student.

With respect to Phase II of the Statewide Program, the Survey Team feels that the Indiana University School of Medicine should be commended for developing this innovative program for expanding its medical student capacity in basic science training through utilizing the resources of other universities. The program at Bloomington, in existence for many years, presents no serious problems, although the frequent turnover of directors seems to reflect a lack of stability and perhaps the need for a firmer organization. The programs at Notre Dame and Purdue Universities are newer, but the universities have substantial strength in the sciences and the programs may be expected to develop soundly. The Survey Team does not feel the same confidence regarding the

program at Ball State University where the student morale seems to be poor, and where there seems to be considerable uncertainty in the institution as to the role and the future of the medical student program. Similar apprehension may be anticipated with respect to the contemplated program at Indiana State University.

With respect to Phase II of the Statewide Program in general, it is believed that there is a need for a clearer definition of faculty and organizational roles and responsibilities. This includes, for example, a clearer definition of the role of a department chairman at Indianapolis with respect to faculty appointments and promotions in his discipline in the satellite programs and in the development of those programs and, on the other hand, a definition of the roles and responsibilities of faculty members in the satellite programs in committee functioning and faculty governance at Indianapolis. It is believed also that there must be a continuing effort to create and maintain a feeling of identity as medical students among the students in the outlying programs.

With respect to general faculty operations at the School of Medicine in Indianapolis, the Survey Team has the following comments:

With the faculty constitution having been developed so recently, it is not surprising to find a certain amount of uncertainty regarding the relative roles of the general faculty, the various faculty committees and the Administration. This uncertainty is particularly noticeable with respect to the responsibilities in curricular development of the general faculty, the Education Committee, the Executive Committee, and the Dean.

It is clear that the system for counseling of students in the choice of electives and other matters is quite inadequate and needs to be strengthened greatly.

The evaluation of student performance seems to be highly variable among different clinical departments.

There seems to be no very consistent evaluation or control of the quality of the senior electives offered in outlying hospitals.

With respect to student affairs, the role of students in governance obviously is under development and at the present time seems rather ambiguous, with different individuals having widely differing perceptions.

The concern with minority student recruitment and guidance is noted. It will require continued attention, especially counseling and tutorial assistance as more educationally disadvantaged students are admitted.

It is believed that there should be a more systematic method of obtaining student reaction to curricular change.

The Survey Team feels that consideration should be given to the development of a more uniform, clearly defined system of remuneration of the faculty of the clinical departments. The development by the Department of Medicine of a plan involving a departmental Foundation is noted. It is hoped that the development of separate plans in different departments will not have the effect of artificially separating the activities and interests of the different departments and that any plan that is developed will be readily adaptable to the changes in the method of paying for medical care that seem to be on the way, involving a decrease in the role of fee-for-service payments.

The functioning of the University Hospitals in relation to the School of Medicine warrants thorough study and the hospital's role should be more clearly defined. It seems clear that the administrative staff of that hospital lacks an understanding of the unique problems, objectives, and demands of the teaching hospital-medical school relationship. There appears to be a rather ambiguous dual responsibility of the University Hospitals to the Chancellor of Indiana University-Purdue University at Indianapolis and to the Vice President and Treasurer of Indiana University at Bloomington. The uncertainty of responsibility for the nursing service at University Hospitals between the School of Nursing and the Hospital Director is creating problems in both patient care and teaching.

The failure of the State of Indiana to provide more than token funds for the support of patient service at University Hospitals is a matter of concern to the Survey Team as it was in 1963.

The following comments regarding individual departments of the School of Medicine seem warranted:

The number of departments competing for the attention of the Dean in terms of budgetary recognition and influence seems unduly large, and there is little evidence of a rationale or a set of criteria by which the School systematically evaluates departmental structure or makes decisions regarding new departments. It is understood that this is being corrected with the recently adopted Faculty Constitution.

Some concern was felt by the Survey Team at the fact that emphasis on scholarly or research activity is virtually absent in some departments. The Administration obviously recognizes this and is endeavoring to correct it.

The selection of the new Chairman for the Department of Surgery is gratifying. Additional faculty in that Department is obviously needed, and it is understood that significant commitments in that respect have been made to the new Chairman. He will need strong support from the Administration as he attempts to weld the Department into a unified structure. There seems to have been some uncertainty with respect to the

degree of autonomy of individual sections of the Department.

There is a need for coordination of the activities of the Departments of Community Health Sciences and Preventive Medicine and Public Health, and the Program in Family Practice. There seems to be an artificial separation of research from teaching, with research concentrated in the first and teaching in the last.

The Department of Anatomy is at a low ebb in many respects. This is clearly recognized by the Administration and it is understood that a Search Committee is actively seeking a new Chairman.

The Department of Radiology is characterized by low morale and shortages of faculty and space. It appears that progress in correcting this is being made with the appointment of the new Department Chairman, due to arrive July 1.

The Department of Otorhinolaryngology, with no full-time faculty except for the Audiology and Speech Therapy Section, needs attention.

In the Department of Anesthesiology, there seems to be no forward planning.

The Department of Psychiatry has developed and is carrying on an impressive, effective, and dynamic program. The program seems to involve remarkably effective integration of multiple hospitals.

The Department of Obstetrics and Gynecology has developed an innovative and apparently stimulating teaching program, making particularly effective use of audio-visual aids and self-study methods. The Survey Team was impressed also with the extent to which this Department is consistently evaluating and controlling the quality of the electives offered in outlying hospitals.

The Survey Team was very favorably impressed with the Department of Pediatrics, particularly its concern for family-centered, comprehensive care and with the innovative, new Family Care Unit in the Riley Hospital.

The Survey Team was gratified to find evidence of the Department of Medicine continuing in a position of strong academic leadership.

APPENDIXSchedule of VisitSunday, May 16

Evening

Survey Team arrived and proceeded to the Hilton Hotel, Meridian and Ohio Streets, Indianapolis.

Monday, May 17

9:00 a.m.

Conference with Dean Glenn W. Irwin, Jr., and his staff (302 Fesler Hall, Conference Room).

11:30 a.m.

Two-man subcommittees of Survey Team met with administrators and staffs of major affiliated hospitals:

Team A (Dr. Gronvall and Dr. Sleeth) met with Mr. Elton T. Ridley, Director of Hospitals at Indiana University Medical Center Hospitals (318 Fesler Hall, Conference Room).

Team B (Dr. Drucker and Dr. Marvin) met with Dr. Arvin G. Popplewell, Director of Hospitals at Marion County General Hospital (Dr. Popplewell's office).

Monday, May 17

Team C (Dr. Kostyo and Dr. Nicholson) met with Dr. Roy J. Kern, Chief of Staff, Veterans Administration Hospital, and Dr. Donald Moore, Medical Director, LaRue Carter Memorial Hospital.

12:30 p.m.

Luncheon with medical students (Roof Lounge, Union Building): Douglas Sheets, freshman; William S. Silvers, freshman; Carlton C. Greene, sophomore; Christopher G. Rehme, sophomore; Miss Jane E. Henny, sophomore; Robert J. Cates, senior; Jacob H. Goldberger, senior; Robert J. Steele, junior; Miss Victoria Smith, junior; Richard G. Schoen, junior.

2:00 p.m.

Survey Team met with President John W. Ryan, Indiana University (302 Fesler Hall, Conference Room).

Survey Team formed three subcommittees to conduct evaluation of basic medical science departments:

3:00 p.m.

Team A (Dr. Marvin and Dr. Nicholson) met with Dr. Carl R. Morgan, Professor of Anatomy, Department of Anatomy (258 Medical Science Building, Conference Room).



Monday, May 17 (continued)

Team B (Dr. Kostyo and Dr. Sleeth) met with Dr. Larry K. Steinrauf, Professor of Biochemistry, Department of Biochemistry (447 Medical Science Building).

Team C (Dr. Gronvall and Dr. Drucker) met with Dr. Edward W. Shrigley, Chairman and Professor of Microbiology, Department of Microbiology (257 Medical Science Building).

4:00 p.m.

Team A (Dr. Marvin and Dr. Nicholson) met with Dr. Ewald E. Selkurt, Chairman and Professor of Physiology, Department of Physiology (376 Medical Science Building).

Team B (Dr. Kostyo and Dr. Sleeth) met with Dr. James Ashmore, Chairman and Professor of Pharmacology, Department of Pharmacology (374 Medical Science Building); also met with Dr. Robert B. Forney, Acting Chairman and Professor of Toxicology (374 Medical Science Building).

Team C (Dr. Drucker and Dr. Gronvall) met with Dr. Joshua L. Edwards, Chairman and Professor of Pathology, and Dr. James W. Smith, Professor of Clinical Pathology, and also with Dr. Wolfgang Zeman, Professor of Pathology (Neuropathology), (158 Medical Science Building).

5:00 p.m.

Return to Hotel.

Evening

Two-man site visit team departed for South Bend with Dr. Steven C. Beering.

Tuesday, May 18

Survey Team subdivided into three subcommittees:

Team A (Dr. Drucker and Dr. Gronvall) to evaluate clinical departments in Indianapolis.

Team B (Dr. Nicholson and Dr. Sleeth) to evaluate medical education programs at Notre Dame (South Bend) and at Purdue (Lafayette).

Team C (Dr. Kostyo and Dr. Marvin) to evaluate medical sciences program (Bloomington) and the medical education program at Ball State (Muncie).

Tuesday, May 18 (continued)

Team A (Indianapolis)

- 9:00 a.m. Met with Dr. A. Donald Merritt, Chairman, Medical Genetics (135 Riley Hospital).
- 10:00 a.m. Met with Dr. Raymond H. Murray, Chairman, Community Health Sciences (4th Floor, Regenstrief); also with Dr. Alan Fisher, Director, Family Practice Program, and with Dr. Samuel H. Hopper, Chairman of the Executive Committee, Department of Preventive Medicine.
- 11:00 a.m. Met with Dr. James B. Wray, Chairman and Professor of Orthopaedic Surgery (204 Emerson, Surgery Conference Room).
- 12:00 noon Luncheon, Methodist Hospital Clinical Affiliate (Krannert Tower Dining Room, 5 South). Present were: Jack A.L. Hahn, President of Methodist Hospital; Dr. Jack H. Hall, Director of Medical Education; Dr. John E.O. Mertz, Executive Committee; Oscar Hufnagel, Director of Administration in Medical Education.
- 2:00 p.m. Met with Dr. Alexander T. Ross, Chairman and Professor of Neurology (125 Emerson Hall).
- 3:00 p.m. Met with Dr. Robert A. Garrett, Chairman and Professor of Urology, Department of Urology (246 Emerson Hall).
- 4:00 p.m. Met with Dr. Victor C. Hackney, Chairman and Professor of Dermatology, Department of Dermatology (102 Fesler Hall).

Tuesday, May 18 (continued)

Team B (South Bend and Lafayette)

8:45 a.m.	Met with Dr. Thomas A. Troeger, faculty, and students for evaluation of South Bend Center for Medical Education.
11:30 a.m.	Lunch with faculty and students.
12:15 p.m.	Departed for Lafayette.
2:30 p.m.	Met with Dr. Lindley Wagner, faculty, and students, for evaluation of Lafayette Center for Medical Education at Purdue.
5:00 p.m.	Departed for Indianapolis.

Tuesday, May 18 (continued)

Team C (Bloomington and Muncie)

8:00 a.m.	Departed from Hilton Hotel for Bloomington.
9:30 a.m.	Met with Dr. B.C. Black-Schaffer, Director and Professor of Pathology, faculty and students to evaluate the Medical Sciences Program at Bloomington.
11:45 a.m.	Lunch.
1:00 p.m.	Departed Bloomington for Muncie.
3:00 p.m.	Met with Dr. Charles C. Boyer, Director and Professor of Anatomy, faculty and students to evaluate the Muncie Center for Medical Education at Ball State.
6:00 p.m.	Dinner in Muncie.
7:30 p.m.	Departed for Indianapolis.

Wednesday, May 19

9:00 a.m. Survey Team met with Dr. Walter J. Daly, Chairman and Professor of Medicine, Department of Medicine (317 Emerson).

10:00 a.m. Survey Team met with Dr. John E. Jesseph, Chairman and Professor of Surgery, and Dr. James S. Battersby, Acting Chairman and Professor of Surgery, Department of Surgery (204 Emerson); also with Dr. James E. Bennett, Director of Plastic Surgery and Professor of Surgery, and Dr. Robert L. Campbell, Director and Professor of Neurological Surgery.

11:00 a.m. Survey Team met with Dr. Morris Green, Chairman and Professor of Pediatrics, Department of Pediatrics (A268 New Riley Wing).

12:00 noon Survey Team had luncheon with faculty members: Dr. Edward Cockerill, Radiology; Dr. Robert E. Cleary, Obstetrics and Gynecology; Dr. Joseph Fitzgerald, Pediatrics; Dr. John L. Glover, Surgery; Dr. Duke Baker, Medicine; Dr. Donald O. Allen, Pharmacology; Dr. Joe C. Christian, Medical Genetics; Dr. Ronald R. Beck, Physiology (Roof Lounge, Union Building).

Following luncheon, the Survey Team divided into two subcommittees:

Team I (Dr. Marvin and Dr. Nicholson)

Team II (Dr. Kostyo and Dr. Sleeth)

2:00 p.m. Team I met with Dr. Roscoe E. Miller, Professor of Radiology, and Dr. Ned B. Hornback, Chairman and Associate Professor of Radiation Therapy (X-18, X-Ray Conference Room, University Hospital).

Team II met with Dr. Raleigh Lingeman, Associate Professor of Otorhinolaryngology and with Dr. Francis L. Sondag, Director of Audiology and Speech Clinic and Professor of Audiology (380 Clinical Building).

Wednesday, May 19 (continued)

- 3:00 p.m.            Team I met with Dr. Fred M. Wilson, Chairman and Professor of Ophthalmology (3rd Floor, Rotary).
- Team II met with Dr. Vergil K. Stoelting, Chairman and Professor of Anesthesiology (204 Fesler Hall).
- 4:00 p.m.            Team I met with Dr. John I. Nurnberger, Chairman and Professor of Psychiatry (Institute of Psychiatric Research, Library).
- Team II met with Dr. Charles A. Hunter, Jr., Chairman and Professor of Obstetrics and Gynecology (A304 Myers Building, Marion County General Hospital).

Thursday, May 20

- 9:00 a.m.            Survey Team had conference with Dean Glenn W. Irwin, Jr. (302 Fesler Hall, Conference Room), and Associate Deans Steven C. Beering and George T. Lukemeyer.
- 10:00 a.m.           Survey Team had conference with Chancellor Maynard K. Hine (302 Fesler Hall, Conference Room), and Dean Irwin.

Conclusion of Survey Visit.



## ACCREDITATION SITE VISIT COMMENTS

May, 1971

1. Concern over number of faculty to number of students - 341 feet -  
Total 1,033 - Class size 250.
2. 4th quartile in student/faculty ratio - also operating expenditures  
per undergraduate medical student.
3. Phase II Statewide Program - need for clearer definition of faculty and  
organizational roles and responsibilities. Role of department chairmen  
in Indianapolis with respect to appointments, promotions, etc.
4. Found uncertainty regarding relative roles of the general faculty,  
various faculty committees and the administration.
5. Need to strengthen system of counseling students.
6. Need to improve evaluation of student performance.
7. Seems to be no consistent evaluation or control of the quality of senior  
electives offered in outlying hospitals.
8. Concern with minority student recruitment and guidance is noted.
9. More systematic method of obtaining student reaction to curricular  
change.
10. Development of a more uniform, clearly defined system of remuneration  
of the faculty of clinical departments.
11. Administrative staff of hospital lacks an understanding of the unique  
problems, objectives and demands of the teaching hospital/medical school  
relationship.
12. Ambiguous dual responsibility of administration of hospitals to Dean,  
Chancellor and Vice President and Treasurer of the University.
13. Uncertainty of the responsibility for the nursing service at University  
Hospital between School of Nursing and Hospital Director.



14. Dean of School of Medicine clearly is called upon to act as Director of Medical Center but has no clearly defined authority to function in that capacity.
15. The number of departments competing for the attention of the Dean in terms of budgetary recognition and influence seems almost unduly large.
16. Little evidence of a rationale or a set of criteria by which the School systematically evaluates departmental structure or makes decisions regarding new departments.
17. Concern that emphasis on scholarly or research activity is virtually absent in some departments.
18. Selection of new chairman of Surgery is gratifying. He will need strong support from the administration.
19. Need to coordinate activities of Departments of Community Health Sciences and Preventive Medicine and Public Health and the program in Family Practice.
20. Department of Anatomy is at a low ebb in many respects.
21. Department of Radiology is characterized by low morale and shortages of faculty and space.
22. Department of Otorhinolaryngology with no full-time faculty except for Audiology and Speech.
23. The Department of Anesthesiology shows no evidence of forward planning.