

*For class*

Duke



DEPARTMENT OF  
**COMMUNITY HEALTH SCIENCES**  
DUKE UNIVERSITY MEDICAL CENTER, DURHAM, N.C.

BULLETIN OF DUKE UNIVERSITY  
PHYSICIAN'S ASSISTANT PROGRAM

1968 - 1969

Durham, North Carolina 1969

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PHYSICIAN'S ASSISTANT PROGRAM CALENDAR 1969 - 1970

September 15, 1969	Monday	Registration 8:30 a.m. Mandatory for all students 1:00 p.m. Orientation for new students
September 16, 1969	Tuesday	Classes Begin
September 29, 1969	Monday	Board Examinations Begin - 2nd Year Students
October 2, 1969	Thursday	Board Examinations End
October 3, 1969	Friday	Graduation Ceremonies
October 22, 1969	Wednesday	Classes End - Phase One
October 23, 1969	Thursday	Examinations Begin - Phase One
October 25, 1969	Saturday	Examinations End - Phase One
October 27, 1969	Monday	Classes Begin - Phase Two
November 26, 1969	Wednesday	Thanksgiving Recess Begins - 1st Year Students Only *
December 1, 1969	Monday	Classes Resume
December 19, 1969	Friday	Christmas Recess Begins - 1st Year Students
January 5, 1970	Monday	Classes Resume
March 27, 1970	Friday	Spring Recess Begins
April 6, 1970	Monday	Classes Resume
April 25, 1970	Saturday	Classes End - Phase Two
April 27, 1970	Monday	Examinations Begin - Phase Two
May 2, 1970	Saturday	Examinations End - Phase Two
May 4, 1970	Monday	Classes Begin - Phase Three
May 11, 1970	Monday	Rotation Schedule Posted
June 10, 1970	Wednesday	Classes End - Phase Three

June	11, 1970	Thursday	Examinations Begin - Phase Three
June	13, 1970	Saturday	Examinations End - Phase Three
June	22, 1970	Monday	Clinical Rotations Begin - 1st Year Students
June	26, 1970	Friday	In-hospital Rotations End - 2nd Year Students
June	29, 1970	Monday	Administrative Rotation Begins - 2nd Year Students
July	24, 1970	Friday	Administrative Rotation Ends - 2nd Year Students
July	27, 1970	Monday	Outside Physician Rotation Begins - 2nd Year Students



\* A two-week vacation period will be scheduled for each student during the clinical experience. Arrangements for time off for Thanksgiving, Christmas, New Years, Easter, Memorial Day, and Independence Day must be made with the faculty in charge of each rotation. There will be no other holidays observed during this period.



## Officers of Administration

### General Administration

Douglas Maitland Knight, Ph.D., LL.D., Litt.D., L.H.D., President of the University

Barnes Woodhall, M.D., Chancellor, Pro Tem

Robert Taylor Cole, Ph.D., Provost

Frank Leon Ashmore, A.B., Vice President for Institutional Advancement

Gerhard Chester Henricksen, M.A., C.P.A., Vice President and Treasurer

Everett Harold Hopkins, M.A., LL.D., Vice President for Regional

Programs, Assistant Provost

Charles B. Huestis, Vice President for Business and Finance

Frank Traver de Vyver, Ph.D., Vice Provost

Harold Walter Lewis, Ph.D., Vice Provost and Dean of Arts and Sciences

Richard Lionel Predmore, D.M.L., Vice Provost and Dean of the Graduate

School of Arts and Sciences

Craufurd David Goodwin, Ph.D., Assistant Provost

Robert L. Dickens, M.S., C.P.A., LL.D., Acting Assistant Provost

William J. Griffith, A.B., Assistant to the Provost in the Area of Student Affairs

Benjamin Edward Powell, Ph.D., Librarian

Richard Lovejoy Tuthill, Ed.D., University Registrar

Rufus H. Powell, LL.B., Secretary of the University

Stephen Cannada Harward, A.B., C.P.A., Assistant Secretary and Controller

Edwin Constant Bryson, LL.B., University Counsel

### Duke University Medical Center

William G. Anlyan, M.D., Associate Provost in charge of Medical Affairs

E. Harvey Estes, Jr., M.D., Professor and Chairman, Department of Community Health Sciences

D. Robert Howard, M.D., Assistant Professor and Director, Physician's Assistant Program

James C. Mau, Administrative Director, Physician's Assistant Program

David E. Lewis, Associate and Director of Education, Physician's Assistant Program

Paul S. Toth, Physician's Assistant, Coordinator of Surgical Rotations, Physician's Assistant Program

John A. Braun, Physician's Assistant, Coordinator of Medical Rotations, Physician's Assistant Program

### Technical Staff

Eugene A. Stead, Jr., M.D., Professor of Medicine, Chief Advisory Consultant

Louis R. Pondy, Ph.D., Associate Professor of Business Administration, Director of Evaluations

Kay G. Andreoli, R.N., M.S., Chief of Course Development, Physician's Assistant Program

## Faculty and Staff

W. Banks Anderson, Jr., M.D. (Harvard, 1956), Associate Professor of Ophthalmology  
Kathleen G. Andreoli, R.N., M.S.N.Ed. (Vanderbilt, 1959) Educational Coordinator, Physician's Assistant Program  
William G. Anlyan, M.D. (Yale, 1949), Professor of Surgery and Dean of the School of Medicine  
Jay Morris Arena, M.D. (Duke, 1932), Professor of Pediatrics  
Morton D. Bogdonoff, M.D. (Cornell, 1948), Professor of Medicine and Assistant Dean for Graduate Medical Education  
John A. Braun, Physician's Assistant (Duke, 1968), Rotation Coordinator, Physician's Assistant Program  
Rubin Bressler, M.D. (Duke, 1957), Professor of Medicine and Endocrinology and Pharmacology; Director, Diabetic Clinic  
George W. Brumley, Jr., M.D. (Duke, 1960), Assistant Professor of Pediatrics  
Arthur C. Chandler, Jr., M.D. (Duke, 1959), Assistant Professor of Ophthalmology  
James R. Clapp, M.D. (North Carolina, 1957), Assistant Professor of Medicine  
Franklin P. Dalton, M.D. (Duke, 1960), Associate of Community Health Sciences  
William J. A. DeMaria, M.D. (Duke, 1948), Associate Professor of Pediatrics, Professor of Community Health Sciences, and Assistant Dean in charge of Continuing Education  
William O. Dobbins, M.D. (Alabama, 1957), Associate Professor of Medicine and Chief of Medical Service, V.A. Hospital, Durham, N.C.  
E. Harvey Estes, Jr., M.D. (Emory, 1947), Professor of Community Health Sciences and Chairman of the Department; Professor of Medicine  
James F. Glenn, M.D. (Duke, 1953), Professor of Urology and Chief of the Division of Urologic Surgery  
J. Leonard Goldner, M.D. (Nebraska, 1943), Professor of Orthopaedic Surgery and Chief of the Division  
J. Caulie Gunnells, M.D. (South Carolina, 1956), Assistant Professor of Medicine  
Charles P. Hayes, M.D. (Duke, 1959), Assistant Professor of Medicine  
D. Robert Howard, M.D. (Wisconsin, 1962), Assistant Professor of Community Health Sciences, and Director, Physician's Assistant Program  
William R. Hudson, M.D. (Bowman Gray, 1951), Professor Otolaryngology and Chief of the Division of Otolaryngology  
Charles Johnson, M.D. (Howard, 1963), Clinical Associate in Medicine  
Samuel Lawrence Katz, M.D. (Harvard, 1952), Professor of Pediatrics and Chairman of the Department  
Walter Kempner, M.D. (Heidleberg, 1927), Professor of Medicine  
Grace P. Kerby, M.D. (Duke, 1936), Professor of Medicine  
Betty W. Kernodle, R.R.L., A.B. (Duke, 1940), Director, Medical Record Department  
Kaye H. Kilburn, M.D. (Utah, 1954), Associate Professor of Medicine  
Johannes A. Kylstra, M.D. (Leiden, 1952), Associate Professor of Medicine and Physiology  
Harold E. Lebovitz, M.D. (Pittsburgh, 1956), Associate Professor of Medicine and Director of Endocrinology  
John C. LeMay, D.V.M. (Georgia, 1959), Associate Professor of Veterinary Medicine and Chairman of the Department

Richard G. Lester, M.D. (Columbia, 1948), Professor of Radiology and Chairman of the Department

David E. Lewis, B.S., M.A. (Northern Michigan, 1968), Associate of Community Health Sciences and Director of Education, Physician's Assistant Program

E. Croft Long, M.B., B.S., Ph.D. (London, 1952, 1957), Associate in Pediatrics; Associate Professor of Physiology; Professor of Community Health Sciences; and Associate Dean for Undergraduate Medical Education

James C. Mau, B.S. (Iowa, 1957), Administrative Director, Physician's Assistant Program

F. Maxton Mauney, Jr., M.D. (Duke, 1959), Assistant Professor of Surgery and Assistant Professor of Community Health Sciences

James A. McFarland, M.D. (Johns Hopkins, 1956), Assistant Professor of Community Health Sciences

Henry D. McIntosh, M.D. (Pennsylvania, 1950), Professor of Medicine

John J. McQueary, Physician's Assistant (Duke, 1968), Instructor of Physician's Assistant Program

Richard A. Mladick, M.D. (Northwestern, 1959), Associate in Plastic Surgery, Department of Surgery

James J. Morris, M.D. (State Univ. of New York, 1959), Assistant Professor in Medicine

Marc J. Musser, M.D. (Wisconsin, 1934), Professor of Medicine; and Executive Director, Regional Medical Program of North Carolina

Guy L. Odom, M.D. (Tulane, 1933), Professor of Neurosurgery and Chairman, Division of Neurosurgery

Suydam Osterhout, M.D. (Duke, 1950), Ph.D. (Rockefeller Inst., 1959) Director, Microbiology Laboratories; Associate Professor of Microbiology; Assistant Professor of Medicine; and Assistant Dean, Admissions

Roy T. Parker, M.D. (Med. Coll. of Virginia, 1944), Professor and Chairman of Obstetrics and Gynecology and Professor of Endocrinology

F. M. Simmons Patterson, M.D. (Pittsburgh, 1939), Assistant Professor of Surgery

William P. J. Peete, M.D. (Harvard, 1947), Professor of Surgery

Kenneth L. Pickrell, M.D. (Johns Hopkins, 1935), Professor of Plastic and Maxillofacial Surgery and Chief of the Division of Plastic and Maxillofacial Surgery

Richard M. Portwood, M.D. (Southwestern, 1954), Director of Student Health; Assistant Professor of Medicine; and Assistant Professor of Community Health Sciences

Jose Ramirez-R!, M.D. (Yale, 1953), Associate Professor of Medicine

John B. Reckless, M.B., Ch.B. (Univ. of Birmingham, England, 1954), Assistant Professor of Psychiatry

Roscoe R. Robinson, M.D. (Oklahoma, 1954), Associate Professor of Medicine

R. Wayne Rundles, M.D. (Duke, 1940), Professor of Medicine

Jerome Ruskin, M.D. (Albert Einstein, 1960), Associate in Medicine

David C. Sabiston, Jr., M.D. (Johns Hopkins, 1947), Professor of Surgery and Chairman of the Department of Surgery

Herbert A. Saltzman, M.D. (Jefferson, 1952), Associate Professor of Medicine

B. F. Sherwood, D.V.M. (Georgia, 1959), Associate in Veterinary Medicine



William W. Shingleton, M.D. (Bowman Gray, 1943), Professor of Surgery;  
 Chief of the Division of General Surgery; and Chairman, Undergraduate  
 Cancer Training Program

James B. Sidbury, Jr., M.D. (Columbia, 1947), Professor of Pediatrics;  
 Director of Clinical Research Unit; and Professor of Endocrinology

Herbert O. Sieker, M.D. (Washington Univ., 1948), Professor of Medicine

Harold R. Silberman, M.D. (Washington Univ., 1956), Assistant Professor  
 of Medicine

William K. Sims, Manager of the Surgical Electronic Shop

C. William Smith, B.S. (Virginia, 1956), Administrative Director of  
 Community Health Sciences and Director of the Medical Center Data  
 Processing

David T. Smith, M.D. (Johns Hopkins, 1922), Professor of Community Health  
 Sciences; Associate Professor of Medicine; and James B. Duke Profes-  
 sor of Microbiology

Wirt Smith, M.D. (Texas, 1951), Associate Professor of Experimental Sur-  
 gery

George H. Spooner, Ph.D. (North Carolina, 1958), Assistant Professor of  
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Eugene Anson Stead, Jr., M.D. (Emory, 1932), Florence McAlister Professor  
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Flores Juan Tomasini, M.D. (Madrid, 1962), Associate in Medicine

Howard K. Thompson, M.D. (Columbia, 1962), Assistant Professor of Medicine  
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Barnes Woodhall, M.D. (Johns Hopkins, 1930), Professor of Neurosurgery and  
 Associate Provost, Medical Affairs

James B. Wyngaarden, M.D. (Michigan, 1948), Hanes Professor of Medicine  
 and Chairman of the Department of Medicine

## GENERAL INFORMATION

### History and Development

Duke University's concept of the Physician's Assistant Program developed in the early 1960's as a result of an unsuccessful attempt to initiate a post-graduate physician's education program. When Dr. Eugene A. Stead, who was then Chairman of the Department of Medicine at Duke University Medical Center and the founder of the Physician's Assistant Program, analyzed the reasons for the failure of the post-graduate physician education program he discovered that the practicing physicians had no time which they could reasonably set aside for the purpose of education. Dr. Stead felt that perhaps ancillary health personnel could be economically trained to competently assume many of the physician's tasks, thereby providing him with more time. After several months of research Dr. Stead began to notice ancillary personnel were already being trained to do many technical jobs within the Medical Center which has previously fallen within the realm of physician responsibility. The needs for medical guidance and coordination of these programs was immediately self-evident.

In accordance with these observations, on April 17, 1965, Dr. Barnes Woodhall, then Vice-Provost for Medical Affairs, Duke University, appointed an ad hoc committee chaired by Dr. Andrew G. Wallace, Assistant Professor of Medicine, to look into these programs. This committee met on four occasions during the spring of 1965 and came to the following conclusions: 1) the need for extensive numbers of highly trained technical personnel existed both within and outside the Medical Center. 2) Two types of allied health personnel were needed, one very highly skilled and limited to a specific area and the other a more advanced individual with a broad and sophisticated background (i.e., vocational and professional). 3) There existed the need for a core curriculum to allow for academic advancement and variation in careers. 4) There must be an attempt to define the specific needs to resolve the individual manpower problems. 5) There must be a method of attracting qualified applicants and providing them with a functional and compact curriculum. As a result of these conclusions, a report was made to the Vice-Provost and this report is reproduced, in part, in the following paragraphs.

"The situation which generated the ideas set forth in this report can be stated quite simply: personnel in the health field are too few in number and inadequately trained to meet the demands placed on the medical profession. In our view, medical schools and nursing schools, as presently structured, cannot supply sufficient numbers of doctors or career-oriented nurses to meet this demand. Furthermore, no workable solution to this problem can be predicted solely on re-shuffling of the available talent.

"The proposal to be outlined calls for the definition of a new member of the health team called a 'Physician's Assistant.' The physician's assistant is seen as a new category within the structure of the health field, designed to provide a career opportunity for men functioning under the direction of doctors and with greater capabilities and growth

potential than informally trained technicians...The physician's assistant would receive most of his training within a clinical discipline of defined scope, in order to develop quality of performance and an understanding of illnesses in the field.

"The task then is to provide an educational framework designed to attract career-oriented men and supply them with the skills to function effectively as a physician's assistant. Selection of students and curriculum should reflect this goal. It is important, we believe, to differentiate this program and its goals from previously unsuccessful attempts to develop male nurses. This program calls for intensive training in areas which complement available talents without attempting to replace available talents. Training and salary potential should be consistent with a career in the health field and should reflect the ability of trained assistants to increase the earning power of their employer by an amount appropriate to their projected salary."

On July 1, 1965, initial limited funding was made available by the National Heart Institute to further evaluate the prospect of a Physician's Assistant. On October 4, 1965, four candidates, all of whom were ex-Navy corpsmen, were chosen as initial students.

On February 1, 1966, a second ad hoc committee was appointed by Dr. William G. Anlyan, Dean of Duke Medical School, which was chaired by Dr. Stead. The purpose of this committee was to further explore the developments of Physician's Assistants, including the types of projected roles, the educational background requirements, and the scope of their responsibilities and activities. Five days later Dr. Stead read a preview of the program before the 62nd Annual Congress on Medical Education, sponsored by the American Medical Association, in Chicago.

This new committee first met under Dr. Stead's chairmanship on February 16, 1966 at which time the progress of the program was reviewed, and three primary questions were raised. These were: 1) How much of the plan for personnel training is practical and possible?, 2) What sort of certification should be given to the student?, and 3) What provisions should be made for additional training for the student, as determined by his ultimate employment?

At the committee's second meeting the following month, three criteria were cited as the main determining factors in the ultimate success of the concept. These were: 1) Physician's acceptance of Physician's Assistants, 2) Society's acceptance of Physician's Assistants, and 3) The Physician's Assistant's individual competence.

Throughout 1966, meetings of the second committee were spent in providing a continuing review of the program, researching possible sources of funding, and beginning an in-depth search into the legal aspects of the use and development of such personnel.

On April 13, 1966, in response to an inquiry from the committee, the Attorney General's office ruled in reference to the Nursing Practice Act that "Nothing in this article shall be construed in any way to prohibit



or limit performance by any person of such duties as specified mechanical acts in the physical care of a patient when such care and activities do not require the knowledge and skill of a registered nurse or licensed practical nurse, or when such care and activities are performed under the orders or directions of a licensed physician, licensed dentist, or registered nurse". It was the committee's recommendation at the time that regardless of this interpretation, efforts should be made to move in the direction of modifying the Medical Practice Act so that it would allow the physician to delegate certain tasks.

With this information in mind, tasks that could be accomplished by an assistant were defined and a seemingly appropriate curriculum was developed. Also considered in the development of the program and the curriculum was the fact that each physician is different from every other physician to a degree that the ultimate definition of the role of an assistant would be impossible. The emphasis was therefore placed on developing a training program that would provide a core vocabulary and skills for physician's assistants with the clinical emphasis on the development of an assistant for the general practitioner or general internist. It was recognized that the final training of each physician's assistant must be provided by the physician with whom he worked.

In September of 1967 the Department of Community Health Sciences assumed administration of the Physician's Assistant Program under the direction of the department chairman, Dr. E. Harvey Estes, Jr. On October 1, 1967, the program graduated its' first three students, all of whom were offered and accepted employment in the Medical Center. In July, 1968, five more students who had attended the course on a part-time basis were graduated and on September 26, 1968, the second class of nine students received certification. To date the program has seventeen graduates and has thirty-three students enrolled on a full or part-time basis.

Future plans call for an increasing enrollment each year to a total class size of 100 students to be realized by 1975.



## Relationship to the University

The students in the Physician's Assistant Program are registered as special students and are not considered as Duke University undergraduate students. At the completion of the two year training program the students are given a certificate of accomplishment by the Medical Center. This is not a degree, and though the students are given credit for their courses and receive transcripts of their grades from the university, there is as yet no means of application of these credits toward a degree through Duke University. Efforts are currently in progress toward establishing a B.S. level degree, through our own undergraduate college and other colleges in the area.



## The Legal Status

Almost every physician who considers using a physician's assistant inquires about the legal status of such individuals. There is also concern among hospitals and hospital administrators. Because of this universal interest and because of the need for an orderly program development two conferences have been held at Duke in which this was a major topic. The first meeting was attended by leaders of the Medical Society of the State of North Carolina, including representatives of the Board of Medical Examiners, the Legislative Committee, and the Medico-legal Committee. The North Carolina Nurses' Association was also represented as was the American Medical Association. Several individuals representing schools planning the development of such programs were also in attendance. The second meeting was held in the fall of 1968, and involved persons planning such programs in other hospitals and universities.

In addition to the concern of the individual physicians and hospital administrators regarding these new manpower categories, there is also a legitimate concern on the part of those considering such training programs and the medical profession as a whole. The development of such program without established guidelines, approved and supervised by the medical and nursing profession, will almost certainly lead to chaos. The graduate of one program will not be at all equivalent to the graduate of another, and the public will in all likelihood be served poorly. Because of the number of developing programs and their continuous multiplication, guidelines for curriculum and for legal control are of utmost importance.

Initially it was recognized that an assistant could serve in either a dependent or an independent capacity. It was generally conceded that on a mass scale the creation of an independent assistant would cause as many problems as it would solve. Experience has adequately demonstrated that though workable in small numbers, independent members at the intermediate level on a health care team end up competing with rather than complementing the available health services. Recognition that the development of an independent assistant would be professionally undesirable was accompanied by the realization of the increased legal complications that would also surround such a development. Consequent to these and other factors, the Physician's Assistant has evolved along the lines of a dependent professional assistant who participates in various medical and health functions. Time has demonstrated the wisdom of this choice. The legal advantages were soon realized when the Attorney General of North Carolina ruled that the Physician's Assistant could, within the confines of the law, carry out virtually every task assigned by the physician team leader and the only limitation on the assigned functions concerned diagnosis and prescription of management - two functions already ruled out by his dependent role. Beyond these functional limitations, all activity control is under the direction of the physician-employer.

Further development of the legal status, however, is of primary importance. It is clear that the physician must be responsible for the actions of his own dependent assistant, but there are certain legal precedents which make it wise to work toward a legal recognition of this and other new categories. Licensure and control are closely associated with legal definition. Since the wise or unwise use of such personnel is more likely to be a function of the physician rather than the assistant, some have suggested that the physician user should be licensed rather than the assistant. It is also true that legal definition should be broad enough to encompass a variety of new manpower categories now under development. To consider each on an independent ad hoc basis will certainly lead to chaotic rules and regulations.

A scheme suggested as a result of the 1968 conference in Durham, North Carolina seems workable, and efforts are underway for its implementation. According to this scheme, a permanent committee would be formed, having representatives from medicine, nursing, hospital administration and the public, and reporting to the State Board of Medical Examiners. This committee would be responsible for considering all new manpower training programs in the state. The director of a planned new training program would apply for approval, submitting a summary of its objectives, its faculty, its facilities, the source and selection of candidates, etc. as a part of the application. The committee would tentatively approve or disapprove the program on the basis of this application. If tentatively approved, the program director would submit twice yearly reports on the program, including names, addresses and employers of all trainees and/or graduates. Each physician (or other health care professional) utilizing one or more trainees or graduates would submit a statement regarding the performance of the assistant. After two years of such observation, the program would receive approval, and be renewed every five years. The advantages of the scheme are a) it makes each manpower innovation totally visible to all the existing professional categories, b) it allows an innovation to be eliminated if unproductive or unreliable, and c) it allows flexibility and change in a program before the program is fixed by law. Changes in the laws of the state will still be necessary, and the design of model legislation, applicable to any state, will be a part of the plan. To this time there have been no obstacles in the utilization of graduates in any state.



## Current Status and Future Goals

The Physician's Assistant Program is designed to develop a new category of personnel within the structure of the health field who will function as allied health professionals under the direct supervision of physicians. Their sole function will be to assist the physicians in their clinical and/or research endeavors.

The Physician's Assistant is trained to perform responsibly and reliably certain carefully defined skills. In the clinical setting, he learns to take patient histories, do physical examinations, start and regulate intravenous infusions, intubate the G.I. tract, do gastric lavages, biopsies, lumbar punctures, and other procedures classically performed by the doctor. He is trained to monitor vital signs, give medications and keep progress records as classically performed by nurses. He is also taught to operate certain diagnostic and therapeutic instruments, such as electrocardiographs, respirators, cardiac monitors and defibrillators, as well as to carry out extensive laboratory studies as commonly done by technicians.

The status of the Physician's Assistant can best be described as that of an intermediate level professional with sophisticated and extensive technical capabilities. The Physician's Assistant, in working as a dependent assistant to a physician, provides the physician with many services which supplement available health team talents, thus freeing the physician from those tasks which do not demand his level of education, training, and background for more valuable endeavors.

The majority of education in the program is offered at the Duke University Medical Center and the affiliated Veterans Hospital. Other hospitals located in Durham and experiences in physicians' offices and community clinics are also part of the training program.

As the Physician's Assistant Program developed under the auspices of the Department of Medicine, other departments eagerly expressed their interest in this type of intermediate level professional to fulfill the manpower needs that exist in virtually every medical and surgical speciality and subspeciality.

Students now have options open in medicine, surgery, pediatrics, obstetrics and most medical and surgical subspecialities. Further expansion into radiology and psychiatry is currently in the planning stage. By providing a generalized but comprehensive background in the didactic portion of the program it is possible to utilize the Physician's Assistant in virtually every speciality by altering only the contents of the clinical portion. Even alterations to fulfill specialty requirements can follow the same basic structure as developed in medicine, the only difference being a decrease in the scope of material covered and an increase in the depth of learning.

Currently program expansion which will reach a minimum enrollment of one hundred students per class by 1975 is anticipated.



## Malpractice Insurance

In this day of widespread litigation the question of malpractice insurance frequently arises. However, as the Physician's Assistant works as a dependent assistant he is covered under the physician's insurance that covers the rest of his employees. None of the physicians who have hired graduates of the Duke program have had to pay any increase in premiums for this service.

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## THE EDUCATIONAL PROGRAM

### Admission Requirements

New students are admitted for the academic year of school beginning in the fall. Since the enrollment is limited, the Committee on Admissions selects students who, in its judgement, are best qualified to benefit from the educational advantages which the program offers. Selection is based on the academic record of the candidate, on test scores, and on satisfactory evidence of good character and general fitness. Because of the academic demands on the student during the two year training program, certain prerequisites have been established for qualification as a candidate for the program.

Prospective students are urged to broaden their reading and to make the acquaintance of a broad variety of books and magazines. At the same time, they should take every opportunity to increase their competence in writing. Those who cannot write simple, clear, grammatical English prose will be progressively at a serious disadvantage in the competition for admission and also in the general work of the program. Careful attention to correctness in English in correspondence and on application blanks cannot be too seriously stressed for candidates for admission.

### Prerequisites

1. A high school diploma or its equivalent by examination. Preference is given to candidates with two or more years of successfully completed general college course work. All applicants should have some science courses in their academic background.
2. Previous experience in the health field with at least one year involving extensive patient contact.
3. Three character references and personal evaluations. These should be completed on the forms provided by the Committee on Admissions. One form should be completed by a physician with whom the applicant has worked, one by a Commanding Officer or supervisor, and one by an unrelated acquaintance of five years or more.
4. Completion of the Scholastic Aptitude Test and the Math Achievement Test Level I of the College Entrance Examination Board. These tests are given on the first Saturday of March, May, November and December; and on the second Saturday of January and July. Arrangements for taking these examinations can be made through the Educational Testing Service. Applicants from the west, southwest and all foreign countries should address their correspondence to: College Entrance Examination Boards, P.O. Box 1025, Berkeley, California 94701. Applicants from the east, midwest and south should address their correspondence to: College Entrance

Examination Boards, P.O. Box 592, Princeton, New Jersey, 08540. Information can also be obtained through local high schools, military education offices, and local Education Testing Service offices in many cities. When taking the examinations you have to fill in the college that is to receive the test results. Our code number is 5174. DO NOT FAIL TO TAKE THAT NUMBER WITH YOU TO THE EXAMINATION.

Candidates should allow at least three weeks for the receipt of requested information and applications must be received by the testing center one month prior to the date of the exam. Applicants should therefore begin preparation for the examinations at least two months prior to the examination date. Because preliminary student selection begins in April all applicants must take their examinations by March of the year they wish to begin.

It should be noted that the Scholastic Aptitude Test given in the mornings consists of verbal and math sections. The math section of the Scholastic Aptitude Test should not be confused with the Math Achievement Test Level One which is given in the afternoon. This latter test is required.

5. Application files must be complete by April 15th of the year for which admission is requested. To be considered complete they must contain the following:
  - a. A completed application form including a photograph.
  - b. Transcript records from high school, college, military schools, and all other academic training.
  - c. Three complete personal evaluation forms.
  - d. Appropriate College Entrance Examination Board test results.

#### Application for Admission

Application forms may be obtained by writing to the Physician's Assistant Program, Committee on Admissions, P.O. Box CHS 2914, Duke University Medical Center, Durham, North Carolina 27706. Please do not send requests before July 1. Formal applications will be accepted by the committee between July 1 and April 15 of the following year.

#### Selection

Selection is made between April 15 and July 1 for the student entering the following September. The data on each candidate are carefully screened by the Committee on Admissions. A personal interview will be arranged at Duke University for those with satisfactory credentials. Final notification will be made by July 15 as to whether or not an applicant has been accepted for admission.

## CURRICULUM

### General Information

The educational curriculum for the training of Physician's Assistants covers a period of twenty-four months. Even though applicants may have taken some similar courses in their previous training they are requested to take all of the courses in the program. The reasons for this are to insure uniformity of the graduates; because the emphasis of the content is directed towards the program goals and may therefore be different than other courses; and because experience has demonstrated that the courses serve as a good means for review. In those situations where an applicant seems so well qualified that nothing would be gained by participation in a course he is given the opportunity to take the necessary examinations and upon satisfactory completion of these is allowed to omit the course. The educational program, though similar in many respects to other medically related programs, is intended as providing the necessary background for the development of a career as a Physician's Assistant and should not be considered as a stepping stone towards the eventual realization of a Doctor of Medicine degree.

### Preclinical Curriculum

The preclinical curriculum covers an academic period of thirty-six weeks and is divided into three phases rather than two semesters. The first and third phases are each six weeks in duration and the second phase twenty-four weeks. All courses given are required courses and no elective courses are available.

### Required Preclinical Courses of Instruction

- PA 101 History, Philosophy, and Ethics of Medicine: An introductory course in the history of medicine for providing the student with a broad background and understanding of the development of modern day medicine. 1 semester hour. Howard.
- PA 103 Basic Clinical Laboratory: An introductory course to allow the students to develop proficiency in basic laboratory procedures including complete blood counts, urinalyses, Gram Stains and their clinical applications. 2 semester hours. McQueary.
- PA 105 Medical Terminology: A study of Greek and Latin etymology limited to common medical terminology so that students can develop an in-depth professional vocabulary. 1 semester hour. Kernodle.
- PA 107 Inorganic Chemistry: A rapid and concentrated review of the fundamentals of general inorganic chemistry. 1 semester hour. Spooner.



- PA 109 Introduction to Animal Experimentation: A lecture course covering applicable veterinary epidemiology and the understanding of basic techniques in the selection of handling of experimental animals. 1 semester hour. Vakilzadeh.
- PA 131 Bacteriology: An introduction into the clinical applications of bacteriology including specimen collection, handling, and identification. 1 semester hour. Osterhout.
- PA 133 Anatomy and Physiology: A coordinated, systemic approach to the understanding of normal human structure and function. 4 semester hours. Staff.
- PA 135 Essentials of Chemical Biology: A study of organic chemistry and the clinical relationship of biophysiology and physiologic chemistry. 3 semester hours. Spooner.
- PA 137 Clinical Medicine: A coordinated systemic encounter with the concept of disease processes by a study of the common clinical disease manifestations. 6 semester hours. K. Andreoli and Staff.
- PA 139 Pharmacology: A study of drug therapy related to common diseases with an emphasis on the physiologic actions of drugs in the body. 2 semester hours. Staff.
- PA 141 Physical Evaluation: A coordinated clinical seminar course for learning techniques in physical examination. 1 semester hour. Staff.
- PA 143 Clinical Chemistry: An eight week laboratory course to provide the student with the capability of accurately performing clinical laboratory studies. 2 semester hours. Staff.
- PA 145 Diagnostic Procedures: An eight week laboratory-clinical course to provide the student with an understanding of the techniques of performing technical procedures used in patient evaluation. 2 semester hours. McQueary and Staff.
- PA 147 Animal Surgery: An eight week laboratory course to allow the students the opportunity of learning minor and major surgical procedures, the care of wounds, and emergency surgical procedures. 2 semester hours. LeMay and Staff.
- PA 181 Electrocardiography: An introduction into the techniques used in obtaining electrocardiograms and their clinical indications, interpretation, and manifestations. 1 semester hour. K. Andreoli.
- PA 183 Introductory Radiology: An introduction into the clinical indications and interpretations of chest and bone roentgenograms. 1 semester hour. Staff.

- PA 185 Community Health: A broad overview of medicine and its application at the community level. 1 semester hour. Staff.
- PA 187 Basic Principles of Data Processing: An introduction into the functions of computers and their application in modern day medicine. 1 semester hour. C. W. Smith.
- PA 189 Patient Evaluation: An in-depth exposure into the methods of acquiring and recording a complete patient history and physical examination. 2 semester hours. Staff.
- PA 191 Medical Instrumentation: A lecture and demonstration course intended to provide the student with an understanding of the functions of modern electrical medical and surgical diagnostic and therapeutic equipment. 1 semester hour. Sims.

### Clinical Curriculum

The clinical curriculum of fifteen months consists of thirty-eight weeks of required rotations, twenty-four weeks of elective rotations, and two weeks for vacation. It is during this aspect of the training program that the student is expected to develop expertise in the application of his preclinical learning.

### Required Clinical Rotations

- PA 201 Medical Inpatient Service: An eight week clinical exposure to the evaluation and care of inpatients on the medical service. The student participates in all phases of work and attends appropriate seminars. 6 semester hours. Chief Medical Resident.  
OR
- PA 231 Surgical Inpatient Service: An eight week clinical exposure to the evaluation and care of inpatients on the surgical service. The student participates in all phases of work and attends appropriate seminars. 6 semester hours. Surgical Resident.
- PA 203 Medical OutPatient Clinic and Emergency Room: An eight week clinical participation in the evaluation and treatment of patients in the medical outpatient clinic and emergency room. 6 semester hours. Bogdonoff.  
OR
- PA 233 Surgical OutPatient Clinic and Emergency Room: An eight week clinical participation in the evaluation and treatment of patients in the surgical outpatient clinic and emergency room. 6 semester hours. Peete.
- PA 205 Pulmonary Function and Inhalation Therapy: A four week clinical rotation to provide the student with the ability to perform pulmonary function studies including blood gases; and to properly operate inhalation therapeutic equipment. 3 semester hours. Ramirez-R!.

PA 207 Health Administration: A four week program with participation by the North Carolina state health agencies, insurance companies and voluntary health agencies associated with student field participation for providing the student with a working knowledge of operational health services. 3 semester hours. Howard.

PA 209 Faculty Health Clinic: A four week participation in the operation of a private patient health clinic operated by the Department of Community Health Sciences. 3 semester hours. McFarland.

PA 211 Library Research: A two week concentrated program to provide the student with the opportunity of doing library research for the development of two research papers which will be used for seminar presentations to the students in the pre-clinical program. 1 semester hour. Howard.

PA 213 Outside Physician: An eight week application of services in conjunction with a community based physician. The student will have the opportunity to participate in clinical practice at the community level. 3 semester hours. Clinical Staff.

#### Elective Clinical Rotations

Students can choose any three elective rotations. During the pre-clinical year detailed accounts of the content of each rotation are made available to the students. After counseling with the students, schedules for the clinical experience are developed.

#### Department of Medicine

- PA 311 Allergy and Respiratory Disease. 6 semester hours. Sieker.
- PA 312 Cardiology. 6 semester hours. Ruskin.
- PA 313 Cardiovascular Laboratory. 6 semester hours. McIntosh.
- PA 314 Endocrinology. 6 semester hours. Lebovitz.
- PA 315 Gastroenterology. 6 semester hours. Ivor.
- PA 316 Hematology. 6 semester hours. Silberman.
- PA 317 Hyperbaric Medicine. 6 semester hours. Saltzman.
- PA 318 Lincoln Hospital. 6 semester hours. Johnson.
- PA 319 Nephrology. 6 semester hours. Robinson.
- PA 320 Neurology. 6 semester hours. Heyman.
- PA 321 Psychosomatic Medicine. 6 semester hours. Reckless.
- PA 322 Rheumatology. 6 semester hours. Kerby.

#### Department of Surgery

- PA 411 Blood Bank. 6 semester hours. W. Smith.
- PA 412 General Surgery. 6 semester hours. Mauney.
- PA 413 Neurosurgery. 6 semester hours. Odom.
- PA 414 Ophthalmology. 6 semester hours. Anderson.
- PA 415 Orthopedic Surgery. 6 semester hours. Goldner.

PA 416 Otolaryngology. 6 semester hours. Hudson.  
PA 417 Urology. 6 semester hours. Glenn.

Department of Pediatrics

PA 511 General Pediatrics. 6 semester hours. Katz.  
PA 512 Newborn Nursery. 6 semester hours. Brumley.  
PA 513 Clinical Research Unit. 6 semester hours. Sidbury.

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## RESOURCES FOR STUDY

### Medical Center Library

The Medical Center Library, located in the Davison Building, attempts to provide all services and collections necessary to further educational, research and clinical activities in the medical field. Extensive reference and bibliographical services are provided. The collection exceeds 80,000 volumes and 1600 periodicals are received currently.

The Trent Collection in the history of medicine is an unusually fine one, rich in manuscripts and rare books, and providing opportunity for study and research as well as casual reading in the field.

### Duke Hospital

Duke Hospital is an integral part of the Medical Center and currently has 700 beds and 23 bassinets. The hospital performs the dual functions of professional education and patient care. Comprehensive diagnostic and treatment facilities are provided. Different levels of patient care are provided, ranging from the intensive care units, through the conventional treatment sections to minimal care units. Private, semiprivate, and ward accommodations are available. Over 20,000 patients are admitted each year. The approximate daily census by service is as follows: Surgery, including the surgical subspecialties, 270; Medicine, 170; Pediatrics, 55; Psychiatry, 50; and Obstetrics-Gynecology, 50. Surgical facilities include 18 operating rooms where over 15,000 surgical procedures are performed annually. Four obstetrical delivery rooms are maintained. Special diagnostic and treatment units are also available such as the recovery room, cardiac catheterization laboratory, and hyperbaric oxygenation chamber.

The outpatient services comprise the public clinics, the private patient clinics, the employee health office, and the emergency service. Over 250,000 visits are made each year to these units. Close working relationships between Duke Hospital and other various outside health agencies enhance continued care of the patients.

The clinical faculty of the Duke University School of Medicine forms the medical staff of Duke Hospital. Thus this group not only participates in both undergraduate and graduate medical education but also in active medical practice within the hospital and the private diagnostic clinics. Duke Hospital is approved for internship and residency training by the Council on Medical Education and Hospitals of the American Medical Association and conducts an active educational program involving approximately 340 housestaff members. The hospital is fully accredited by the Joint Committee on Accreditation of Hospitals.

### Veterans Hospital

The Durham Veterans Administration Hospital is located within walking distance of the School of Medicine. The full-time professional staff are all members of the faculty of Duke University School of Medicine. This 489 bed general hospital provides an opportunity for closely integrated student teaching and housestaff training.

## REGISTRATION AND REGULATIONS

### Registration and Orientation

Students will be registered on the first day of classes. Registration will begin promptly at 8:30 a.m. Students who report at a later date will be required to pay a \$10.00 late registration fee. In no case will registration be considered after the end of the first week of classes. Orientation will immediately follow registration procedures and will last the remainder of the day. During orientation, each student is required to undergo a physical examination under the program's direction. Students whose condition needs further observation may be admitted tentatively, but must cancel their applications if findings prove them physically unable to pursue the program.

### Identification Cards

On Registration Day each student is issued an Identification Card which is to be carried at all times. It secures library privileges, health services, entry into certain athletic events and admission to other functions entitled by special student status. A student is expected to present the card at the request of any authorized official of the University.

ID cards are not transferable and the loss of an ID card should be reported immediately to the Program Director's office. The cost of a new ID card is \$5.00.

### Academic Regulations

An overall indication of the quality of student performance is provided by assigning quality points per semester hours of a course as follows:

Grade	Quality Points	Grade	Quality Points
A+	4.0	C	2.0
A	4.0	C-	1.7
A-	3.7	D+	1.3
B+	3.3	D	1.0
B	3.0	D-	1.0
B-	2.7	F	0.0
C+	2.3		

The course grade is not based on the examination alone but also on the quality of the student's classroom work and written work throughout the didactic phases of the program.

A - Excellent. 'A' indicates achievement of distinction. It involves excellence in several, if not all, of the following aspects of the work:

- Completeness and accuracy of knowledge
- Intelligent use of knowledge
- Independence of work
- Originality

B - Good. 'B' indicates general achievement superior to the acceptable standard defined as C. It involves excellence in some aspects of the work, as indicated in the definition of A.

C - Average. 'C' indicates the acceptable standard for graduation from this program. It involves such quality and quantity of work as may fairly be expected of a student of normal ability who gives to the course a reasonable amount of time, effort and attention. Such acceptable standards should include the following factors:

- Familiarity with the content of the course
- Familiarity with the methods of study of the course
- Full participation in the work of the course
- Ability to write about the subject in intelligible English

D - Lowest passing grade. 'D' indicates work which falls below the acceptable standard defined as C but which is of sufficient quality and quantity to be counted in the hours of certification if balanced by superior work in other courses.

F - Failure. 'F' indicates failure that may not be made up except by repeating the course. All failures in the preclinical section must be made up before the student is eligible to participate in the clinical section.

Students receiving a failing grade in any of the courses will be ineligible to continue in the next phase or clinical portion until that failure has been made up.

Students must have a quality point ratio of at least 2.0 before starting the Clinical Portion of the Physician's Assistant Program.

#### Grading

Final grades of performance in academic work are sent to students at the end of each of the three phases of the pre-clinical portion of the program and also at the end of the clinical portion of the program. Students will be notified of any unsatisfactory performance. Progress through each phase of the program is monitored by the faculty in charge. Further evaluations are based on written and oral examinations. The student is certified as a Physician's Assistant upon successful completion of all preclinical and clinical material along with passing scores on the written, oral and practical board examinations at the end of the twenty-four month period.

#### Incomplete Work

If because of illness or other emergency a student's work in a course is incomplete, he may receive an I for the course instead of a final grade. Incomplete courses must be completed before the close of the succeeding phase; otherwise, the I is converted to an F and the course must be retaken before the student can receive credit for it. In case a student whose work is incomplete is also absent from the final examination, an X is received for the course.



### Class Attendance Regulations

The attendance regulations specifically place the responsibility for class attendance upon the individual student. A student is expected to attend his classes regularly and punctually. It should be recognized that one of the most vital aspects of a residential college experience is attendance in the classroom, and that the value of this academic experience cannot be fully measured by testing procedures alone. The members of the student body are considered sufficiently mature to appreciate the necessity of regular attendance, to self-discipline essential for such performances, and, conversely, to recognize and accept the consequences of failure to attend. Instructors are privileged to refer to the Program Director for appropriate action any student who in their opinion is causing his work or that of the class to suffer because of absences or latenesses.

Absences from classes due to illness will be excused when certified by a proper medical official. Absences from classes due to authorized representation of the University may be excused. Officials in charge of groups representing the University are required to submit names of those persons to be excused to the Program Director's office forty-eight hours in advance of the hour when their absences are to commence.

### Nonacademic Regulations

Accepting admission to the Physician's Assistant Program obligates the student to all Duke University regulations. The regulations, rights, and responsibilities of the student are incorporated in The Charge, a student handbook issued to the students at the time of registration.



### Certification

Student's progress through the course is carefully monitored by the faculty. Grades, based on class participation, oral and written examinations are continually posted and updated during the preclinical curriculum. During the clinical experience the students are evaluated by the faculty and staff in charge at the completion of their rotations. The final week of the twenty-four month program is set aside to allow the student the opportunity of demonstrating his abilities in oral, written and practical evaluations. Upon satisfactory completion of the requirements the student is then certified by Duke University as a Physician's Assistant.



## STUDENT LIFE

### Housing

Students are responsible for making their own living arrangements. Even though no campus housing is available, suitable quarters can be rented in areas near the Medical Center.

### Dining Facilities

Several dining facilities located in and near the Medical Center are available to the students.

In the Duke University Union Building there are two cafeterias offering multiple choice menus and a dining area, the Oak Room, which offers full menus and a 'la carte' items.

### Student Health Services

Students are treated through the Employee Health Office during the day and in the emergency room after 5:00 p.m. They have the opportunity of obtaining additional health coverage through the North Carolina Blue Cross & Blue Shield Association policy made available to students and employees of the University and Medical Center. A complete physical examination will be accomplished on all students at the beginning of the first year. This examination includes a roentgen examination of the chest and various other laboratory studies. Annual physical examinations thereafter are also required.

### Organizations

There are two organizations open to students enrolled in the Physician's Assistant Program. Participation in one of these, the Student Government Society, is mandatory and costs ten dollars per year. In the professional organization, the American Association of Physician's Assistants, participation is on a voluntary basis by both students and graduates. Fees for participation in the latter organization are twelve dollars per year for students and twenty dollars per year for graduates.

The Student Government Society officers include the president, a secretary, and class presidents and representatives from each class elected by the student body and the individual classes respectively. An executive committee, chaired by the president and composed of the secretary and the class presidents, serves as the official student voice of the Physician's Assistant Program. The responsibilities of the Student Government Society include representation of student views and opinions on various subjects to the faculty and administration; to act as a service organization for the student body, being responsible for students services deemed feasible by the organization and approved by the Physician's Assistant Program administrators; and, orientation of the freshmen students.

A major responsibility of the Student Government Society is the preservation of the honor code which is a proud tradition of Duke University. The prevailing opinion has been that if a student cannot withstand the relatively minor stresses and temptations arising during his training, he can never be expected to act with integrity under the much greater demands and responsibilities he will encounter as a Physician's Assistant. Thus, a strong honor system exists to develop and maintain honesty during the course of training. Each student on or before entering the Physician's Assistant Program is required to sign a statement expressing his understanding and familiarity with the honor system and his willingness to abide by its provisions. The Student Government Society maintains an Honor Council, chaired by the president and comprised of the secretary and the class presidents and representatives to try students accused of any infringements of the honor code. The program administration serves to recommend the disposition of a student found guilty by the honor council.

A Professional Organization, incorporated in 1968 as the American Association of Physician's Assistants (AAPA) provides an active professional program with the cooperation of the students and graduates directed towards the objectives of program development, professional ethics and guidelines, and continuing education.

#### Motor Vehicle Registration

Each motor vehicle operated on the Duke University campuses by students must be registered at 08 Social Science Building within five calendar days after operation on the campus begins, and thereafter must display the proper registration emblem.

Students must pay an annual parking fee of \$30.00 for each motor vehicle or \$10.00 for each motorcycle, motorbike, or motor scooter.

To register a vehicle, the student must present the following documents: (1) state vehicle registration certificate; (2) valid driver's license; and (3) satisfactory evidence of automobile liability insurance as required by North Carolina law - \$10,000 per person, \$20,000 per accident for personal injuries, and \$5,000 property damage.

Parking, traffic, and safety regulations will be given each student who registers his vehicle. Students are expected to abide by these regulations.

## FINANCIAL INFORMATION

### Tuition and Fees

At the present time students of the Physician's Assistant Program are classified as Duke University Special Students and are therefore not required to pay tuition. The only required fees are the five dollar application fee, a five dollar registration fee payable at the beginning of each year and a ten dollar membership fee payable each year for participation in the Student Government Society. The application fee must accompany the application forms, and the other fees will be collected on the day of registration. An additional fee of five dollars will be charged to students who do not register at the designated time.

### Student Expenses

The following table represents an estimate of a student's necessary expenses for the twelve month academic year. Allowances for clothing, travel, and other miscellaneous expenses must be added to this estimate. These of course will vary considerably depending on the needs and tastes of the individual.

Room - single -----	\$ 720
Room - married -----	1450
Board (per adult) -----	600
Books -----	100
Equipment -----	150
Uniforms -----	30

### Financial Assistance

The Physician's Assistant Program is approved for veterans educational benefits (G.I. Bill) for those who are eligible.

Limited funds are available for student support and are granted on the basis of need as determined by application to the Director. Applications for financial assistance will be considered only after registration. Students should not anticipate financial assistance by the program as a means of support.

### Employment Opportunities

Part-time employment for students is available in many areas of the medical center. Employment that can net the student about one hundred dollars per month and yet not jeopardize his education is generally available in the medical center. Students must comply with the academic schedule and are prohibited from working more than twenty hours per week.

Employment for students' wives is available in or near the University. Typical salaries are three to five hundred dollars per month for secretaries, practical nurses, and other technically trained people; and four to seven hundred dollars per month for registered nurses, medical technologists, and other professionally trained people.



## OPPORTUNITIES FOR THE GRADUATE

### Skills and Functions

The training in the development of specific skills which the Physician's Assistant Program offers its students is directed toward making them stable and productive members of the health team and thereby provide opportunities for a career and for future growth in many health-related areas.

Graduates of the program can be employed by a physician, or a group of physicians away from the medical center. Within the Duke University Medical Center, graduates are needed in research laboratories, clinical areas, diagnostic laboratories and special areas such as the renal center, and the hyperbaric chamber. Their clinical endeavors will always be under the supervision of one or more physicians.

### Employment Opportunities

The need for the Physician's Assistant can be measured and evaluated in many ways, but perhaps one of the most significant ways is in viewing the employment opportunities. The available positions outnumber the graduates by over five-to-one. Almost daily, requests for Physician's Assistants from all over the country are received; but as with requests for physicians, these must go unfilled. Even though the primary objective of the program is to fulfill the needs of the first line community physician, it is easy to realize how every segment of medical practice can function more efficiently by utilizing these intermediate level professional assistants.

### Salary Range

At the time of the program's inception, the question of salary range was raised. It was felt that a professional person of this caliber would command an economically attractive income which in itself would be capable of encouraging career stability. Two related items were quickly realized, however: if the income of the Physician's Assistant was too far out of line with that of the nurse, hard feelings could possibly arise, and in order to command a respectable income, the Physician's Assistant would have to prove his worth. The fact that the Physician's Assistant would be on a schedule closely resembling that of a physician was also taken into account. On the basis of these and other factors it was felt that a justifiable starting salary would be in the range of eight to ten thousand dollars a year. Currently the graduates employed in the medical center receive a starting salary in the range of eight thousand dollars a year and the average starting salary offered by physicians outside the medical center is in the range of ten thousand dollars a year. The ultimate income of a Physician's Assistant will undoubtedly be based on his actual value to his employer-physician.

### Utilization and Role

One of the most frequent questions raised about the utilization of the graduate is whether he should be employed by one or more than one

physician, by an institution, or both. In the judgement of the administration, every Physician's Assistant should be employed by and responsible to a physician. Such an assistant can be used by more than one physician, but one Physician's Assistant per two physicians is felt to be the maximum ratio by all who have been instrumental in the training program to date. The reasons for this are many but are based primarily on two factors - the need for identification of the Physician's Assistant with a physician, and realization of the responsibility required on the part of the physician towards the Physician's Assistant. To be sure, many needs could be fulfilled by using this type of assistant exclusively in a hospital setting, but such a utilization must include a bond of responsibility between the Physician's Assistant and his employer-physician

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