VANDERBILT UNIVERSITY School of Medicine

1967-68

Northanker ets. Thereaday Thualassisting Dave a ho



Containing general information, appointments and courses of study for the 1967-68 session, corrected to September 1, 1967 + NASHVILLE

School of Medicine Calendar, 1967-68

September 5-8, Tuesday-Friday September 11, Monday November 23, Thursday December 20, Wednesday January 4, Thursday January 24, Wednesday

January 25-27, Thursday-Saturday

January 27, Saturday January 29, Monday April 23-24, Tuesday-Wednesday

May 25, Saturday May 27-29, Monday-Wednesday June 2, Sunday June 18-19, Tuesday-Wednesday Registration and orientation Fall semester instruction begin

Thanksgiving Day: a holiday

Christmas holidays begin

Instruction resumes

Instruction ends for 1st and 2nd students

Examination period for 1st a 2nd year students

Fall semester ends

Spring semester begins

National Board examinations 4th year students (Part II)

Instruction ends

Examination period

Commencement

National Board examinations 2nd year students (Part I)

2 7 VANDERBILT UNIVERSITY

Table of Contents

SCHOOL CALENDAR	
INTRODUCTION. Map of the Campus. Trustees and Administrative Officers. School of Medicine Administration.	
GENERALINFORMATION Plan of Instruction Medical Center Buildings Medical Library. Student Affairs.	
EXPENSES AND FINANCIAL AID Tuition and Fees. Microscopes, Books, and Equipment Financial Assistance.	
SCHOLARSHIPS AND FELLOWSHIPS Scholarships. Student Research Fellowships.	75
HONORS AND AWARDS	
A D M I S S I O N. Minimum Requirements. Medical College Admission Test. Applications for Admission. Admission to Advanced Standing.	
REGULATIONS Honor Gode Examinations and Promotions. Requirements for Doctor of Medicine Degree. National Board Examinations Basic Science Examinations Extracurricular Work.	
INSTRUCTION LEADING TO THE M.D. DEGR Schedule of Courses. Lectureships.	
INSTRUCTION LEADING TO M.D. AND Ph.D., DE	G R E E S44
A D V A N C E D P R O F E S S I O N A L T R A I N I N G A N D Internship and Residency Training. Residencies and Fellowships. Postdoctoral Courses. Courses toward Master and Pb.D. Degrees. Endowed Research Funds and Chairs. Military and Disaster Medicine.	45 45 45 46
COURSES OF STUDY. School of Medicine Departments.	
LEGISTER OF STUDENTS	
OSPITAL ADMINISTRATION AND STAFF Staff Officers of the Outpatient Service House Staff	



ANDERBILT is an independent, privately supported university which was founded in 1873 and opened its doors for classes in October 1875. It is named for the New York shipping and railway magnate, Commodore Cornelius Vanderbilt, who gave a million dollars to build and endow the University. On the base of his statue, placed on the campus by Nashville citizens, is inscribed his wish that the University should "contribute to strengthening the ties which should exist between all sections of our common country."

The University was for forty years, until 1914, under the auspices of the Methodist Episcopal Church, South. Bishop Holland N. McTyeire, who was the man entrusted by Commodore Vanderbilt with establishing the University, was president of the Board of Trust until he died in 1889. His current successor as president of the elf-perpetuating board is Harold S. Vanderbilt, a great-grandson of the ounder.

The University's chief executive officer has the title Chancellor. The five men who have held the position are Landon C. Garland from 1875 to 1893, James H. Kirkland from 1893 to 1937, Oliver Cromwell Carmichael from 1937 to 1946, Harvie Branscomb from 1946 to 1963, and Alexander Heard since 1963.

The University includes a liberal arts college and six other schools. All re coeducational. The degrees granted are as follows:

COLLEGE OF ARTS & SCIENCE: Bachelor of Arts.

THE GRADUATE SCHOOL: Master of Arts, Master of Arts in Teaching, Master of Science, Doctor of Philosophy.

SCHOOL OF ENGINEERING: Bachelor of Engineering.

THE DIVINITY SCHOOL: Bachelor of Divinity, Master of Sacred Theology.

SCHOOL OF LAW: Bachelor of Laws.

SCHOOL OF MEDICINE: Doctor of Medicine.

SCHOOL OF NURSING: Bachelor of Science in Nursing, Master of Science in Nursing.

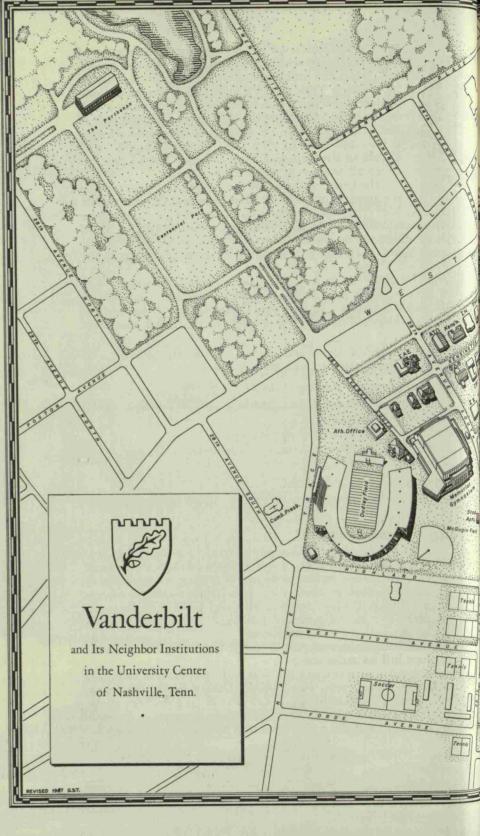
No honorary degrees are conferred.

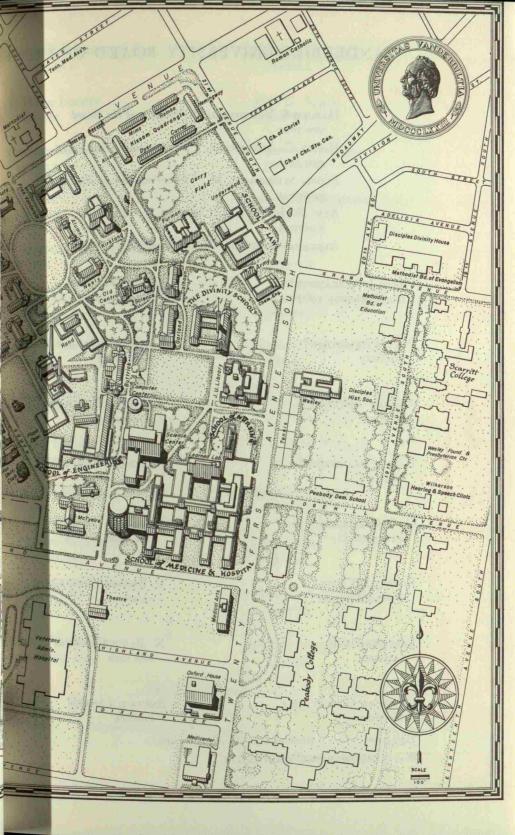
The faculties of the several schools number just over a thousand. Stuent enrollment is approximately 5,000; about a fourth of them are women. Majority of the students live on the campus which occupies 150 acres in the University Center section of Nashville. Vanderbilt's campus adjoins hose of George Peabody College for Teachers and Scarritt College for Christian Workers. The Joint University Libraries, serving all three intitutions, contain more than a million volumes.

Facilities off the campus include the Arthur J. Dyer Observatory, situted on a 1,131-foot hill six miles south.

Honorary scholarship societies and the year each chapter was chartered re: Phi Beta Kappa (liberal arts, 1901); Alpha Omega Alpha (medicine, 923); Sigma Xi (scientific research, 1944); Tau Beta Pi (engineering, 1946); Order of the Coif (law, 1948); Sigma Theta Tau (nursing, 1953).

Vanderbilt is a member of the Association of American Universities.





VANDERBILT UNIVERSITY BOARD OF TRU

HAROLD S. VANDERBILT,* President of the Board NEW YORK
HENRY C. ALEXANDER, Vice-President of the Board NEW YORK
ELDON STEVENSON, JR.,* Vice-President of the Board NASHVILLE
ALEC B. STEVENSON,* Secretary of the Board NASHVILLE
ALEXANDER HEARD, Chancellor of the University

VANCE J. ALEXANDER* (Died February 15, 1967) SAM M. FLEMING NASHVILLE

PARKES ARMISTEAD*

ANDREW BENEDICT NASHVILLE

HARVIE BRANSCOMB*

O. C. CARMICHAEL, JR.[†] south bend

ROBERT S. CHEEK* (Died August 5, 1967)

LIPSCOMB DAVIS NASHVILLE

GUILFORD DUDLEY, JR. †

Robert L. Garner*

WASHINGTON

FRANK A. GODCHAUX II

ROBERT S. HENRY* ALEXANDRIA, VA.

FRANK K. HOUSTON* NEW YORK

E. BRONSON INGRAM

N. BAXTER JACKSON*

SARTAIN LANIER[†]

*Life trustee. †Nominated by Alumni Association. 8 / VANDERBILT UNIVERSITY RUDOLPH A. LIGHT, C. B. E. JAMAICA, W. I.

E. HUGH LUCKEY NEW YORK

DELBERT MANN[†]

DAN MAY NASHVILLE

WILLIAM A. McDonnell st. louis

REAGOR MOTLOW[†] LYNCHBURG, TENN.

RALPH OWEN

DON K. PRICE CAMBRIDGE, MASS.

CHARLES S. RAGLAND*

NORFLEET H. RAND[†] ST. LOUIS

WINTHROP ROCKEFELLER MORRILTON, ARK.

VERNON SHARP

JAMES A. SIMPSON* BIRMINGHAM, ALA. CECIL SIMS*

JOHN E. SLOAN NASHVILLE

WILLIAM D. SPEARS CHATTANOOGA

JAMES G. STAHLMAN* NASHVILLE

BEN E. TATE* CINCINNATI

CHARLES C. TRABUE, JR.[†] NASHVILLE

MILTON R. UNDERWOOD HOUSTON

WILLIAM H. VANDERBILT WILLIAMSTOWN, MASS.

WILLIAM S. VAUGHN ROCHESTER, N. Y.

WILLIAM WALLER NASHVILLE

MRS. ALBERT WERTHAN NASHVILLE

MADISON S. WIGGINTON[†] NASHVILLE

JESSE E. WILLS NASHVILLE

DAVID K. WILSON NASHVILLE

*Life trustee.

†Nominated by Alumni Association.

SCHOOL OF MEDICINE 7 9

VANDERBILT UNIVERSITY ADMINISTRATIC

16th

ALEXANDER HEARD, Ph.D., LL.D., Chancellor ROB ROY PURDY, Ph.D., Senior Vice-Chancellor NICHOLAS HOBBS, Ph.D., Provost

NICHOLAS HOBBS, Ph.D., Provost DON R. ELLIOTT, M.A., Vice-Chancellor for Alumni and Development Affair WILLIAM W. FORCE, Ed.D., Vice-Chancellor for Business Affairs LEONARD B. BEACH, Ph.D., LL.D., Dean of the University for Institut Relations

Edwin S. Gardner, B.A., Treasurer Robert A. McGaw, Secretary of the University

DEANS OF SCHOOLS

EMMETT B. FIELDS, Ph.D., Dean of the College of Arts & Science ROBERT T. LAGEMANN, Ph.D., D.Sc., Dean of the Graduate School ROBERT S. ROWE, D.Eng., Dean of the School of Engineering WALTER HARRELSON, Ph.D., Dean of the Divinity School JOHN W. WADE, LL.B., LL.M., S.J.D., Dean of the School of Law RANDOLPH BATSON, M.D., Dean of the School of Medicine and Director of Mu Affairs

LUTHER CHRISTMAN, Ph.D., Dean of the School of Nursing

DEANS OF STUDENTS

SIDNEY F. BOUTWELL, M.A.T., Dean of Men MARGARET L. CUNINGGIM, Ed.D., Dean of Women

School of Medicine

MEDICAL CENTER HOSPITAL BOARD JOHN E. SLOAN, Chairman

Nelson Andrews Parkes Armistead Lipscomb Davis William W. Force Alexander Heard Thomas P. Kennedy, Jr. Mrs. Miller Kimbrough Dan May Rob Roy Purdy Winton Smith

John H. Stambaugh Bernard Werthan David K. Wilson Randolph Batson Richard O. Cannon Warren Kennedy

JOE GREATHOUSE, Secretary

BUDGET COMMITTEE OF THE MEDICAL CENTER HOSPITAL BOARD

Nelson Andrews Randolph Batson William W. Force Joe Greathouse Thomas P. Kennedy, Jr.

Warren H. Kennedy John H. Stambaugh Overton Williams

ADMINISTRATION

RANDOLPH BATSON, M.D., Director of Medical Affairs and Dean of the School of Medicine

F. TREMAINE BILLINGS, M.D., Associate Dean for Medical Center Development Programs

JOHN E. CHAPMAN, M.D., Associate Dean for Education

RICHARD O. CANNON, M.D., Dean of the Division of Allied Health Professions

WILLIAM R. COOK, B.S., Director of Personnel, Medical Center

ALFRED L. HATHCOCK, B.E., Director of Planning, Medical Center

WARREN H. KENNEDY, B.B.A., Director of Finance, Medical Center

WILLIAM LEA, B.A., Director, Alumni and Development, Medical Center

JOSEPH A. LITTLE, M.D., Director of Continuing Education

BASIL PHILLIPS, B.A., Administrator for Medical Center Programs

ELDRED REANEY, Director of Medical Illustration

ELEANOR G. STEINKE, B.S., Librarian

CLAUDIA SUTHERLAND, Ph.D., Director, Office of Sponsored Research, School of Medicine

EXECUTIVE FACULTY

RANDOLPH BATSON, Chairman

ALLAN D. BASS AMOS CHRISTIE

William J. Darby Jack Davies Donald A. Goss Joe S. Greathouse, Jr.

SCHOOL OF MEDICINE / II

Alexander Heard J. William Hillman Nicholas Hobbs Eugene C. Klatte Victor A. Najjar William F. Orr Charles R. Park Charles B. Pittinger ROBERT W. QUINN DAVID E. ROGERS H. WILLIAM SCOTI, JOHN L. SHAPIRO

STANDING COMMITTEES

(The Dean is ex officio a member of all standing and special committees.)

ADMISSIONS

JAMES W. WARD, Chairman

F. TREMAINE BILLINGS JOHN E. CHAPMAN BARTON MCSWAIN WILLIAM F. ORR WILLIAM N. PEARSO LLOYD H. RAMSEY

ANIMAL CARE

WILLIAM J. DARBY, Chairman

George H. Barney Frank R. Blood John H. Foster STANLEY R. GLASSER WALTER GOBBEL SIDNEY HARSHMAN H. C. MENG WALTER E. NANCE WILLIAM A. PETER MILDRED STAHLMAN

AWARDS

JACK DAVIES, Chairman LEON HURWITZ

FRIDOLIN SULZER

HAROLD A. COLLINS

CLINICAL INVESTIGATION

JOHN A. OATES, Chairman

A. BERTRAND BRILL WILLIAM L. CALDWELL WILLIAM S. COPPAGE RUE L. CROMWELL JOHN H. FOSTER M. GLENN KOENIG

GRANT W. LIDDLE GEORGE W. MALANEY THOMAS F. PAINE HARRY O. PAXSON FRANCIS A. PUYAU E. BLYTHE STASON FRIDOLIN SULSER LELAND E. THUNE EUGENE WEINSTEIN CHARLES ZUKOSKI CLAUDIA SUTHERLI ex officio

CLINICAL RESEARCH CENTER

ELLIOT V. NEWMAN, Chairman

F. TREMAINE BILLINGS FRANK R. BLOOD ROBERT D. COLLINS WILLIAM S. COPPAGE

John H. Foster Donald A. Gross John Griscom ROBERT K. RHAMY SARAH H. SELL ANDREW GRIMES, ex-officio

12 7 VANDERBILT UNIVERSITY

CONTINUING EDUCATION

JOSEPH A. LITTLE, Chairman

Arthur L. Brooks John E. Chapman Rollin A. Daniel Newton Griffin David H. Law

BARTON MCSWAIN JOHN L. SHAPIRO

CURRICULUM

JOHN E. CHAPMAN, Chairman

Allan D. Bass Randolph Batson Amos Christie William J. Darby Jack Davies Donald A. Goss J. William Hillman Eugene C. Klatte Victor A. Najjar William F. Orr Charles R. Park CHARLES B. PITTINGER ROBERT W. QUINN DAVID E. ROGERS H. WILLIAM SCOTT, JR. JOHN L. SHAPIRO

DEAN'S COMMITTEE FOR VETERANS ADMINISTRATION HOSPITAL

RANDOLPH BATSON, Chairman

Allan D. Bass F. Tremaine Billings Richard O. Cannon Jack Davies Lloyd Elam J. William Hillman Eugene C. Klatte William F. Orr David E. Rogers H. William Scott, Jr. John L. Shapiro

FELLOWSHIPS AND SCHOLARSHIPS

VIRGIL S. LEQUIRE, Chairman

F. TREMAINE BILLINGS JOHN E. CHAPMAN I

STANLEY COHEN ROBERT D. COLLINS Oscar Crofford B. V. Rama Sastry

GRADUATE EDUCATION

JOHN G. CONIGLIO, Chairman

Allan D. Bass John E. Chapman Oscar Crofford Jack Davies Sidney Harshman VIRGIL S. LEQUIRE EARL W. SUTHERLAND

INTERNSHIPS AND RESIDENCIES

JOHN L. SHAPIRO, Chairman

Robert W. Adams, Jr. Arthur L. Brooks Henry Burko Richard O. Cannon

John E. Chapman Roger M. Des Prez William F. Fleet John H. Foster Robert C. Franks Robert C. Hartmann G. Sydney McClellan Vernon Reynolds Paul H. Ward

SCHOOL OF MEDICINE # 13

MEDICAL LIBRARY

LEON W. CUNNINGHAM, Chairman

CRAWFORD W. ADAMS ALLAN D. BASS BENJAMIN F. BYRD, JR. ANNETTE KIRCHNER RICHARD O. CANNON WILLIAM J. CHEATHAM

WILLIAM M. COPPAGE RUE L. CROMWELL M. GLENN KOENIG

ROBERT L. POST CHARLES B. PITTING ROBERT W. QUINN SARAH H. SELL ELEANOR STEINKE

NON-TEACHING SERVICES

THOMAS G. ARNOLD A. BERTRAND BRILL WILLIAM J. CHEATHAM FRANK R. BLOOD, Chairman JOHN M. FLEXNER H. C. MENG VERNON H. REYNOLDS DEAN DRIVER, ex officio

BAILEY MOORE, ext ELDRED REANEY.

ext

PROMOTIONS (FIRST AND SECOND YEARS)

JOHN E. CHAPMAN JOHN G. CONIGLIO SIDNEY HARSHMAN LEON HURWITZ

JACK DAVIES, Chairman GEORGE V. MANN CHARLES R. PARK THOMAS GUV PENNINGTON

ROBERT M. REED B. V. RAMA SASTRY JOHN L. SHAPIRO

PROMOTIONS (THIRD AND FOURTH YEARS) WILLIAM F. ORR, Chairman

JOHN E. CHAPMAN EARL H. GINN DONALD A. GOSS

EUGENE KLATTE BARTON McSwain CHARLES B. PITTINGER

ROBERT W. QUINN LLOYD H. RAMSEY JOHN L. SHAPIRO

REHABILITATION

FRANCIS A. PUYAU

RICHARD O. CANNON RUE CROMWELL HAROLD COLLINS

J. WILLIAM HILLMAN, Chairman

WILLIAM FLEET DAVID H. LAW

SMALL GRANTS

A. BERTRAND BRILL, Chairman MILTON BUSH LEON W. CUNNINGHAM

ROGER DEZ PREZ WILLIAM PEARSON ROBERT POST

CLAUDIA SUTHERLAN ex of

STUDENT AFFAIRS

JOHN E. CHAPMAN, Chairman

ROBERT D. COLLINS JOHN G. CONIGLIO JAMES H. ELLIOTT

JOHN H. FOSTER VIRGIL S. LEQUIRE JOSEPH A. LITTLE

WILLIAM F. ORR WILLIAM N. PEARSON WARREN W. WEBB

14 7 VANDERBILT UNIVERSITY

GENERAL INFORMATION

THE first diplomas of graduation from Vanderbilt University were issued to sixty-one new Doctors of Medicine on February 25, 1875. The diplomas were in accord with an arrangement that the Vanderbilt trustees had made with the University of Nashville whereby that university's medical school was recognized as serving both institutions. The students could elect to receive their degrees from either university. Thus Vanderbilt embraced a fully-organized and functioning medical school before its own campus was ready for classes in October of that year.

The arrangement continued for twenty years, and the School of Medicine remained on the old "South Campus" for thirty more. In the beginning, the School was owned and operated as a private property of the practicing physicians and surgeons who comprised the faculty and received the fees paid by the students. This system was typical of medical education in the United States at that time. Vanderbilt made no financial contribution to the School's support and had no control over the admission requirements, the curriculum, or the standards for graduation. Even so, the catalogue proclaimed the instruction to be "inferior in no respect to that of any medical school in the country."

In 1895, the School was reorganized under the control of the Board of Trust. The requirements for admission were raised, the course of study was lengthened, and the system of instruction was changed to make way for laboratory work in the basic sciences. Subsequently there was a gradual increase in the quality of training offered.

The famous report of Abraham Flexner, which was published by the Carnegie Foundation in 1910 and was afterward credited with revolutionizing medical education in America, singled out Vanderbilt as "the institution to which the responsibility for medical education in Tennessee should just now be left." The Flexner Report declared Vanderbilt to be "the only institution in position at this juncture to deal with the subject effectively. This does not mean that Vanderbilt has now any large sums of money available . . . "

Large grants from Andrew Carnegie and his foundation and from the Rockefeller-financed General Education Board enabled Vanderbilt to carry out the recommendations of the Flexner Report. (These two philanthropies, with the Ford Foundation added in recent years, contributed altogether more than \$20,000,000 to the School of Medicine from 1911 onward.) The reorganized School drew upon the best-trained scientists and teachers in the nation for its faculty. The full benefits of the reorganization were realized when the decision was made to move the School to the main campus, thus integrating instruction in the medical sciences with the rest of the University.

PLAN OF INSTRUCTION

The objective of the program of medical education at Vanderbilt University is to produce the highest quality of medical graduate. A good medical education is best achieved by demanding excellence in performance on the part of the student, excellence in teaching, research, and service on the p of the instructors, and by providing for close contact between the studand his teachers.

During the four years of undergraduate medical education at Vanderh the student will gain an understanding of the foundations of medical scie necessary for the pursuit of any medical career, as well as a respect for responsibilities of the physician to society. After graduation, most stude continue their education by spending several years in training in clim specialties or in research fellowship programs.

The curriculum of Vanderbilt University School of Medicine provi time for all students to take courses of their own choosing. The studthereby has an opportunity to increase his knowledge in fields in which has particular interest, or to correct deficiencies in fields of importance his overall medical education.

Students bear a high level of responsibility for participation in the riculum in an effort to develop the sense of obligation for continuing schol ship necessary to keep apace of the rapid advances in medical knowledge

The College of Arts and Science and the Graduate School of Vandeh offer courses which augment the medical curriculum, particularly due the senior year. As the Medical School is located on the University came the total facilities of Vanderbilt University are available to the medistudent.

MEDICAL CENTER BUILDINGS

When the School's new quarters were opened in 1925, they were al "the best-arranged combination school and hospital to be found in: United States." The Medical Center buildings now encompass in exces 750,000 square feet of floor space due to additions to research and clim facilities.

Recent additions include:

The Andrew B. Learned Graduate Science Hall, a laboratory for research in the sciences basic to medicine and health-related research being a ducted by members of the University's Medical and Graduate faculty. I building, which joins the main building on the north, was completed in 19

The West Wing addition to Vanderbilt University Hospital, a 154patient care facility completed in 1962. This wing, which joins the m building at the southwest corner, is circular in shape with the nurs station located in the center surrounded by rooms for patients.

The Clinical Research Center, a United States Public Health Sem regional facility for research in clinical medicine. This unit contains beds and approximately 10,000 square feet of laboratory space. At time of its opening it was the largest noncategorical clinical research com in the nation.

The West Court building, completed in 1964, contains a greatly expan-X-ray department, the entrance to the University Hospital, offices admission and discharge of patients, a newborn nursery, and addition space for the Department of Pediatrics.

16 * VANDERBILT UNIVERSITY

The Northeast Wing, a multi-purpose structure housing a complete laundry, the medical storeroom, research laboratories, and the Medical Library. Stacks and reading room were occupied by the library in 1964. An outstanding collection on the History of Medicine is accommodated within the library.

Other buildings in the Medical Center include the Medical Arts Building, erected in 1955 to provide part-time members of the clinical faculty with convenient office space; Mary Henderson Hall, which houses the Vanderbilt University School of Nursing; and the Bill Wilkerson Hearing and Speech Center, a community-operated diagnostic and treatment center for audiological and speech problems.

The Medical Center contains all the equipment and facilities necessary to operate a modern teaching hospital and a school of medicine. The laboratories and clinical facilities are closely coordinated to allow a ready flow of ideas between the laboratories of the medical sciences and the wards and outpatient clinics. Teaching laboratories are provided for the major subdivisions within medical science and for the clinical departments.

The hospital contains <u>sor</u> beds and <u>45</u> bassinets divided into the following seven service units: medicine, surgery, obstetrics, gynecology, pediatrics, ophthalmology, and psychiatry.

The outpatient clinics are located on the first floor and contain a series of examining, treatment, and teaching rooms for general medicine and surgery, pediatrics, neurology, dermatology, psychiatry, dental surgery, orthopedic surgery, ophthalmology, otolaryngology, obstetrics, gynecology, and urology.

There are 10 operating rooms and three delivery rooms.

Besides the clinical facilities offered by the wards and outpatient clinics of the University Hospital, the School of Medicine has clinical privileges in the 2,300 bed Central State Hospital for psychiatric patients. Vanderbilt is closely affiliated with the 500 bed Veterans Administration Hospital, it being a Dean's Committee hospital. The Nashville Metropolitan General Hospital, containing 240 beds and outpatient facilities, is another affiliate of the School of Medicine. The chiefs-of-service of this hospital are all members of the Vanderbilt faculty.

MEDICAL LIBRARY

The Library of the School of Medicine was founded in 1906. A year later the Nashville Academy of Medicine donated the private library of Dr. Richard Douglas, consisting of 2,500 volumes. This nucleus has been augmented by generous gifts from local physicians. The library has been the recipient of many grants from the Rockefeller Foundation which made rapid development possible. The collection now contains most of the material needed for research in any of the medical sciences. It contains complete files of the important journals, both in English and foreign languages, numerous well-selected monographs and basic textbooks, and the important reference works and bibliographic indexes.

The Library on May 1, 1967 contained 70,851 volumes and received 1,251 current periodicals and serial publications.

A collection of books, journals, and memorabilia illustrating the hig and development of the literature of medicine, especially that of the Un States, is being developed. This collection is kept in a History of Medic Room provided by a generous donor. The funds for acquiring this collect have come largely through the gifts of patrons of the Library. Donab of letters, photographs, books, and money are gratefully received.

A FRIENDS OF THE MEDICAL LIBRARY FUND has been established honor faculty, students, and other friends of the School of Medicine, and the memorial donations are used for the purchase of current and histor publications.

Professional librarians provide reader assistance and instruction in the of medical literature. First year medical students are given orientationin arrangement and services of the Library, and small group seminars are for demonstration of methods of information retrieval, including pran experience in the use of medical indexes, abstracts, review publications, specialized bibliographic products of modern computer technology.

A Xerox 914 copier machine is provided for library use within the limit copyright laws, and loan services are maintained with local and out-of-to libraries. Through the facilities of the Joint University Libraries syst which contains more than a million volumes, students have ready access publications in other fields.

The Medical Library is open from 8:15 a.m. to 11:00 p.m. Monday that Friday; from 8:15 a.m. to 4:30 p.m. on Saturday, and from 9:00 a.m. 12:00 noon and 2:00 to 11:00 p.m. on Sunday; it is closed on legal holidar

STUDENT AFFAIRS

HONOR CODE

All work in the School is performed in accordance with Honor Community regulations. Suspected violations of the system are investigated by the dent Honor Committee, which is composed of representatives of all classes.

VANDERBILT SOCIETY OF HISTORICAL MEDICINE

The Society was organized by the Class of 1953 for the purpose d couraging awareness and appreciation of our medical heritage in the med school community. Regular dinner meetings are held at which spea are invited to present papers for discussion. In the interest of foste "a clear view of the panorama of medicine," membership in the Soc is open to both students and faculty. Demonstrations and displays of bu and pictures of historical significance are provided through the cour of the Medical Library.

STUDENT BODY

Number of students per class (1967/68) is as follows: Freshmer-Sophomores—55, Juniors—56, Seniors—51. The present student b comes from 27 states, the District of Columbia, and 2 foreign countries

18 7 VANDERBILT UNIVERSITY

STUDENT HEALTH SERVICE

1. A physical examination by the family physician is required of all new students, prior to registration.

2. For the protection of themselves and others against communicable diseases, all new medical students receive their chest X-rays and tuberculin skin tests during their orientation. All new students are required to have a vaccination against smallpox within three years, tetanus toxoid immunization within three years, and current polio immunization. Immunizations for typhoid and diphtheria are highly recommended, but not required.

3. The University operates the Student Health Service and Infirmary for students with mild illnesses. For major illnesses, students are admitted to Vanderbilt University Hospital. At hours when the Student Health Service is closed, students may receive medical care at the Emergency Service of the Vanderbilt University Hospital. A student identification card must be presented.

Special medications, X-ray examinations, special laboratory tests, fees to private physicians, and hospital room and board charges which are not covered by the insurance will be paid for by the student.

4. Student Insurance Plan: All full-time students will be automatically covered with hospital insurance at the time of their registration. No additional premium is required. Coverage extends from the time of registration until September 1 of the following year, whether a student remains in school or is away from the University. This plan is designed to provide certain hospital, surgical, and in-hospital medical care benefits. Married students who wish to provide hospital insurance for their families or students who are classified as part-time who wish this insurance coverage must apply and pay an additional premium. All inquiries as to details should be directed to Smith, Reed, Thompson & Ellis Co., 1322 Nashville Trust Building, Nashville, Tennessee 37203.

5. The Health Service has the policy of maintaining complete health records on all students. If a student is admitted to a hospital, seen in Emergency Room or seen by a private physician, he should request that his physician forward a summary of his illness and treatment to the Health Service.

LIVING ARRANGEMENTS

The Vanderbilt residence halls are an integral part of the University's educational facilities.

Rooms may be occupied on the day before the opening of the semester and through the last day of the semester. Basic furniture is provided by the University, and the occupant is responsible for the condition of both furniture and room, being charged with all damage. Residents furnish their own sheets, pillow cases, towels, pillows, blankets and bedspreads. These items may be rented.

Rooms are rented by the semester. All rent is payable in advance at the Bursar's Office. Students withdrawing from the University for any reason, are not entitled to return of room rent, and the University will not be liable for its return or refund. Students who plan to vacate their rooms at the of a semester must notify the Housing Office in writing thirty days in adv of the end of the semester.

Rooms for men may be reserved by application to the Housing 06 rooms for women, by application to the office of the Assistant Dea Women. A room reservation deposit of \$50 is required at the time of rese tion. Refund of the room reservation deposit will be considered if the a for the request is judged to be a matter beyond the applicant's controls if the request, in writing, is received by July 1.

Single rooms are available in air-conditioned Currey Hall for Sig semester. Single and double rooms in Wesley Hall are also available \$100 to \$115 a semester. Wesley Hall is on Twenty-first Avenue facing Joint University Libraries.

Single rooms for women are available in Mary Henderson Hall. Is range from \$175 to \$200 per semester.

NOTICE: Rates are subject to periodic review and change.

HOUSING FOR FAMILIES

A variety of apartments are available for married students inclu 240 air-conditioned units (studio, one- and two-bedroom apartments Morgan and Lewis Houses (furnished and unfurnished) and 20 two-bedr furnished units in the Highland-Forde Apartments. Inquiries should addressed to the Housing Office.

Assignments are made with the understanding that assignees are elig for occupancy only while enrolled as full-time students, and that the a ment will be vacated immediately after the occupant ceases to be a stu-Tenants are required to sign leases which are renewable sixty days prior expiration. The University reserves the right to require any occupant vacate the apartment at any time and for any reason, a reasonable of having been given.

OTHER HOUSING

Suitable living quarters in the city of Nashville are easily available students have usually found little difficulty in locating satisfactory ac modations. A list of rooms and apartments for rent is maintained at Housing Office in A-1 West Side Row.

UNIVERSITY DINING FACILITIES

The Vanderbilt Hospital cafeteria is located within the building.

The University's main cafeteria in Rand Hall serves students, faculty, employees. By the semester, students can board at Rand for approximate per cent less than the daily cash prices for meals. Students engaging boar the semester should apply at the office of the Director of Food Service

The Divinity School refectory serves meals, on a cash basis, to professionand graduate students, faculty, and staff.

20 7 VANDERBILT UNIVERSITY

AUTOMOBILES

Students driving on the campus must register their cars with the Department of Safety. Parking spaces are not available for all cars registered, and students are urged to use off-campus parking.

ATHLETIC FACILITIES

Vanderbilt Memorial Gymnasium may be used by medical students and their families. Facilities include an enclosed swimming pool. Tickets to basketball and football games may be purchased at reduced rates.

nan Allandar and All controls Adapted with the solution of which and a

the heads at the second or many lines are a thread in the second and

at the sub-remaining of the manipulation of the sub-

Budeness and drawings to an the University for any risks are not stand to atty regime of separations of horizon. Fors, room min, or any other and a charges of allocations and the Alemanian will not be fight for the

EXPENSES AND FINANCIAL AID

THE average annual expense of a student in the School of Medicine, clusive of clothes and incidentals but including living accommodate is estimated as amounting to approximately \$3,000.

TUITION AND FEES

The University reserves the right to change the schedule of tuition fees without further notice.

Tuition Fee for the Academic Year\$ 1.66	
NOTE: Effective September, 1968, tuition will be \$1,760 per academic	
Tuition and fees and other University charges are due and payable	
not later than ten days after the date of billing each semester. An	
arrearage in tuition for any session must be paid before admission to the succeeding session.	
Application Fee (To accompany Application Form)	
Contingent Deposit. This deposit will be required of first and second year students to cover breakage of apparatus and damage to building, and will be returned,	and the second s

Diploma Fee (Charged to graduating students, payable during the second semester).

less the charges, at the close of the academic year.

First-year medical students who are also three-year students at Vande University are required by the College of Arts and Science to pay a \$60k

Students who register for the regular courses in the Medical School pay the full tuition each year. There will be no exception to this require

Graduate students who enroll in regular courses in the medical curric for credit toward an academic degree and later become candidates for degree of Doctor of Medicine may be required to pay the full tuition indicated above.

Students withdrawing from the University for any reason are not end to any return or repayment of tuition, fees, room rent, or any other my charges or assessments, and the University will not be liable for them or refund of same.

MICROSCOPES, BOOKS, AND EQUIPMENT

Each student is required to possess a standard four-objective micros and a suitable substage light.

The minimal cost of books is approximately \$75 a year. Purchases at the Vanderbilt Book Store are on a cash basis.

All students must acquire hemocytometers and ophthalmoscopes of the second year.

Students also must have clean white laboratory coats.

22 7 VANDERBILT UNIVERSITY

FINANCIAL ASSISTANCE

Financial assistance for the education of the medical student at Vanderbilt University is available from two sources. The more important of these are the revolving loan funds contributed by alumni, industrial organizations, and friends which are awarded to students in financial need on a long-term basis without interest. The student is morally obligated to make a contribution to this revolving fund when he becomes financially able. The other source is the recent government appropriation allowing student loans through federal credit. Loans to students usually come from these two funds. The amount of money available is limited. Each student is expected to use his own assets to their full extent. The policy of Vanderbilt University is to supplement these assets so that no student need withdraw from medical school because of financial difficulties.

Scholarships and Fellowships are described on page 25.

ALPHA KAPPA KAPPA ALUMNI ASSOCIATION SCHOLARSHIP FUND. These funds are made available to students by alumni of the Alpha Kappa Kappa medical fraternity.

THE WILLIAM A. DIMMICK MEDICAL SCHOLARSHIP FUND. This fund has been established by friends to honor Reverend William A. Dimmick. It is to be used for the education of worthy medical students as a revolving scholarship loan fund.

GALE F. JOHNSTON LOAN FUND. The funds donated by Gale F. Johnston at the suggestion of his wife Miriam are to be used as a revolving loan fund for students in the School of Medicine.

THE IKE J. KUHN SCHOLARSHIP. This scholarship is provided by a bequest from the will of Mr. Ike J. Kuhn, and is awarded in the School of Medicine to a worthy boy or girl born and reared in any of the states commonly known as the "Southern States."

LIFE & CASUALTY INSURANCE COMPANY FUND. The funds made available to Vanderbilt University are to be used as a revolving loan fund for students in the School of Medicine.

THE THOMAS L. MADDIN, M.D. FUND. This fund is provided by a bequest from the will of Mrs. Sallie A. C. Watkins in memory of Doctor Thomas L. Maddin to be used by some worthy young man for medical education at Vanderbilt.

THE JAMES PRESTON MILLER TRUST. This trust, left by the will of James P. Miller in memory of his father, James Preston Miller, provides funds to assist in the medical education of deserving young men and women at Vanderbilt University. Residents of Overton County, Tennessee, are to be given first preference, and other residents of Tennessee to be given second preference.

\$

THE PROVIDENT PHARMACEUTICAL LOAN FUND. The funds made available to Vanderbilt University are to be used as a revolving loan fund for students in the School of Medicine. ROBERT E. SULLIVAN MEMORIAL FUND. Through the generosity of Robe E. Sullivan a fund has been established to assist worthy and deserve medical students in meeting their financial obligations.

THE THOMAS W. RHODES FELLOWSHIP. Funds provided by the will Georgine C. Rhodes were left to Vanderbilt University for the purp of establishing one or more fellowships in the School of Medicine.

THE THOMPSON AND GREEN STUDENT SCHOLARSHIP FUND. This is is to used as a revolving loan fund for students in the School of Medica Preference in making the loans is given to students from middle Tenness northern Alabama and southern Kentucky

THE JOE AND HOWARD WERTHAN FOUNDATION SCHOLARSHIP FUND. I funds made available by this foundation to Vanderbilt University are be given or loaned to those students in the School of Medicine need financial assistance.

THE HEALTH PROFESSIONS STUDENT LOAN PROGRAM. The Health Professions Educational Assistance Act of 1963 authorizes the establishment student loan funds to be administered by the School of Medicine. The maximum amount that can be borrowed during an academic year is $\$_{1,\$}$ based on demonstrated need. Loan applications and information may obtained from the Associate Dean for Education, School of Medicine.

Employment Opportunities for Wives

Nashville is a middle-sized city (500,000) affording employment of portunities common to an industrial, business, and educational can Major employers include Vanderbilt University, two national insura companies, and the state government. Every attempt is made to fan position within the University for wives of students who have dem strated skills in business, office routine, laboratory work, or patient of skills such as nursing, x-ray technology, and nursing aides. If interes in a position on the University campus, students should contact the 06 of the Director, Medical Center Personnel, Nashville, Tennessee 3720

SCHOLARSHIPS AND FELLOWSHIPS

SCHOLARSHIPS

Vanderbilt University School of Medicine has a number of scholarships available to worthy applicants with distinguished scholastic records. Information and application forms may be obtained from the Committee on Fellowships and Scholarships or from the Dean of Medical Students.

JUSTIN POTTER MERIT SCHOLARSHIPS. The Justin Potter Merit Scholarships commemorate Mr. Justin Potter, a Nashville business man, industrialist, and financier. These scholarships were established in 1963 by Mr. Potter's family and are awarded by the Committee on Admissions of Vanderbilt University School of Medicine and the Justin Potter Merit Scholarship Committee. They are awarded annually to five applicants who have legally established residences in any of the following Southern states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

Stipends of \$3,000 annually shall be awarded to successful candidates and, once awarded, shall continue at this rate for four years contingent upon satisfactory performance.

Method of selection of the Justin Potter Scholars is as follows: The Committee on Admissions of Vanderbilt University School of Medicine recommends to the Justin Potter Merit Scholarship Committee candidates who desire this scholarship and merit consideration. Selected candidates are invited to Nashville to visit with the Committee (candidates will be reimbursed for their expenses). The Committee composed of outstanding business men, physicians, and educators will make the final selection, the five successful candidates being designated "Justin Potter Merit Scholars."

THE PFIZER LABORATORIES MEDICAL SCHOLARSHIP PROGRAM. This scholarship of one thousand dollars is given each year to a medical student who needs financial assistance and who has outstanding scholastic ability.

ROANE-ANDERSON COUNTY MEDICAL SOCIETY SCHOLARSHIP. A scholarship in the amount of \$500 is allocated to a needy medical student with preference being given to students from Roane, Anderson and Morgan Counties of Tennessee where possible.

J. F. FOX SCHOLARSHIP IN MEDICINE. This scholarship was established in memory of Dr. J. F. FOX, a Vanderbilt graduate, and provides for annual acholarship assistance to students in the School of Medicine based on scholarship promise and financial need.

THE HEALTH PROFESSIONS SCHOLARSHIP PROGRAM. This program is designed to enable talented students from low-income families to undertake the study of medicine. Additional information and application forms may be obtained from the Associate Dean for Education.

STUDENT RESEARCH FELLOWSHIPS

Student research under the sponsorship of members of the faculty of pre-clinical and clinical departments is endorsed as an integral part of medical curriculum. Fellowships are usually awarded for the sum months or on a part-time basis during the academic year. Current stipe vary from \$750 to \$990 for the summer programs depending upon perience. Funds for fellowship support are available through the Ga mittee on Fellowships and Scholarships and from individual departme within the Medical School. Funds are provided from a variety of sour including the United States Public Health Service, Lederle Labora Division of American Cyanamid Company, Ford Foundation, The Toba Industry Research Foundation, and The Allergy Foundation of Ameri Research projects may be taken as electives for credit but without rem eration. Special arrangements can be made for participation in reser programs abroad or in other medical schools within the United States.

HONORS AND AWARDS

FOUNDER'S MEDAL. This medal is awarded to the student in the graduating class of the School of Medicine who has attained the highest average standing in scholarship during four years of study.

ALPHA OMEGA ALPHA. A chapter of this honor medical society was established by charter in the School of Medicine in 1923. Not more than one sixth of the students of the fourth-year class are eligible for membership and only one half of the number of eligible students may be elected to membership during the last half of their third year. This society has for its purpose the development of high standards of personal conduct and scholarship, and the encouragement of medical research. Students are elected into membership on the basis of their scholarship, character, and originality.

THE BEAUCHAMP SCHOLARSHIP. This scholarship, founded by Mrs. John A. Beauchamp in memory of her husband who was for many years superintendent of the Central State Hospital in Nashville, is awarded to the student showing the greatest progress in neurology and psychiatry and who is otherwise worthy and deserving.

THE BORDEN UNDERGRADUATE RESEARCH AWARD IN MEDICINE. Established in 1945 by the Borden Company Foundation, Inc. this award provides \$500 to the person in the graduating class of the School of Medicine who while enrolled in the School has carried out the most meritorious undergraduate research. Originality and thoroughness of research shall be of primary consideration. Candidates for the award should apply to the Committee on Fellowships and Scholarships for consideration.

THE MERRELL AWARD IN PATHOLOGY. Established in 1953 by the William S. Merrell Company, this award of \$150 is provided annually for the two most outstanding papers on research in the field of pathology by Vanderbilt University medical students. The author of the first place paper will be awarded \$100 and the author of the second place paper, \$50. Candidates for the award should submit their papers to the Committee on Fellowships and Scholarships.

THE C. V. MOSBY BOOK AWARD. The C. V. Mosby Company awards yearly one of its books to the medical student with the highest scholastic rank in each class.

THE ROCHE AWARD. This award, a gold wrist watch provided by Roche Laboratories, is presented to the medical student with the highest cumulative scholastic rank after two years of medical school.

THE ALBERT WEINSTEIN PRIZES IN MEDICINE. Three prizes, established in memory of Albert Weinstein, M.D., are awarded at graduation to senior students who, in the opinion of the faculty of the Department of Medicine, merit recognition for high scholastic attainment and the qualities which characterize the fine physician. Dr. Albert Weinstein graduated from Vanderbilt University in 1926 as Founder's Medalist from Vanderbilt University School of Medicine 1929. Following training at Vanderbilt and Johns Hopkins he returned Vanderbilt as Chief Resident in Medicine, 1933–1935, and served as a tinguished member of the faculty and Clinical Professor of Medicine w his death on October 1, 1963. Despite a busy and successful practice, Weinstein contributed regularly to the medical literature and maintain major interest in the teaching of medical students. These prizes were the lished in 1964 by contributions from friends, associates, and former pain of Dr. Weinstein.

DEAN'S AWARD FOR STUDENT RESEARCH PRESENTATION. A prize of s is awarded for the most outstanding research paper presented by a med student.

BORDEN RESEARCH PRIZE IN MEDICAL NUTRITION. This research mestablished in 1967, will be offered each year as a result of a grant by Borden Company Foundation, Incorporated. The purpose of the awardistimulate interest in nutritional problems and research by the young metal profession.

28 * VANDERBILT UNIVERSITY

ADMISSION

THE School of Medicine selects its students from those who fulfill one of the following conditions:

I. Graduates of a college or university of recognized standing.

2. Senior in absentia of a college or university of recognized standing who will be granted the Bachelor's degree by their colleges after having completed successfully one year of work in the School of Medicine. A properly accredited statement to this effect from the colleges shall accompany all applications for admission as seniors in absentia. A form is furnished for this purpose.

3. Students of foreign universities of recognized standing who have completed three years of collegiate education may be admitted to the School of Medicine at the discretion of the Committee on Admissions.

Approximately fifty-two students, both men and women, are admitted to the first year class.

As admission to the School of Medicine is competitive, students will be selected on the basis of the quality of their college work and the general fitness of the applicant for the study of medicine.

MINIMUM REQUIREMENTS

Every candidate must present evidence of having satisfactorily completed during his college course the following minimum requirements, in which a semester hour is the credit value of sixteen weeks' work consisting of one hour of lecture or recitation or at least two hours of laboratory work:

1. Biology. Eight semester hours including laboratory work. The course may be general biology, zoology, or zoology and botany, but not more than half may be botany.

2. Chemistry. A minimum of 12 semester hours is required. Eight of these must be in general inorganic chemistry including laboratory work. A minimum of 4 semester hours credit in organic chemistry is required, covering both aliphatic and aromatic compounds including laboratory work.

3. *Physics*. Eight semester hours are required including laboratory work. It is desirable that emphasis be placed on quantitative laboratory work.

4. English and Composition. Six semester hours.

Students are urged to take courses in college which will strengthen their foundation in basic natural and social sciences, mathematics and their cultural background.

MEDICAL COLLEGE ADMISSION TEST

The Medical College Admission Test is given under the auspices of the Association of American Medical Colleges, and is required of applicants to Vanderbilt. It is given twice a year at most universities and colleges. Since the examination score is used by medical schools in the selection applicants, students should take the test, at the latest, in the Spring p to the time application is submitted.

The score made on this examination will be used by the Committee Admissions in considering applications for admission to the School Medicine, together with the scholastic record and recommendations.

APPLICATIONS FOR ADMISSION

Application forms may be obtained from the Registrar, School of M icine, Vanderbilt University, Nashville, Tennessee 37203.

Applications for admission may be filed fifteen months in advance of of entrance. The Committee on Admissions begins its consideration applicants in September, and will accept new applications until the is filled.

Successful applicants are required to make a deposit of \$50. This posit is credited toward the payment of the first tuition, and is return until January 15th, in the event the student does not matriculate.

ADMISSION TO ADVANCED STANDING

Applicants who have satisfactorily completed one or two years of s at approved medical schools may be accepted for admission to the so or third year class, subject to the following requirements:

1. Application for advanced standing must be filed according to procedure described for admission to the first year. A deposit of \$5 required of successful applicants.

2. Applicants must furnish evidence of having satisfied the condit of admission and of having completed all the work required of student the class they desire to enter.

3. Applicants must present a certificate of honorable dismissal from medical school they have attended.

REGULATIONS

HONOR CODE

A LL work in this University is conducted under the Honor Code. For the successful operation of the honor system the cooperation of every student is essential. A Student Honor Committee exists for the purpose of investigating cases of violation of this system.

EXAMINATIONS AND PROMOTIONS

Successful completion of the courses of the medical curriculum and scholastic standing are determined by the character of the student's daily work and the results of examinations. Examinations may be written, oral, or practical, and may be held in conjunction with each course or at the end of the academic year. The quality of work of each student is considered, usually at the end of each semester, by a committee composed of the instructors responsible for his more important courses.

Students who fail in two major courses or fail a re-examination in a major course may be required to withdraw from the School. Students who have had no reported failures may be required to withdraw from the School if their work has been of a generally unsatisfactory quality. Students may be given credit for a subject by re-examination, but failures remain on their records, and may be counted as a cause for requesting withdrawal, provided another failure in a major course occurs.

Major Courses are as follows:

First Year-Biochemistry, Gross Anatomy, Histology, and Physiology. Second Year-Methods in Clinical Science, Microbiology, Pathology, and Pharmacology.

Third Year-Medicine, Obstetrics-Gynecology, Pediatrics, and Surgery. Fourth Year-Medicine, Obstetrics-Gynecology, Pediatrics, Psychiatry, and Surgery.

Any student who indicates by his work or his conduct that he is unfit for the practice of medicine may be requested to withdraw from the School at any time.

Any student who fails to pass a course will be required to remove the failure before being permitted to enter the courses of the next academic year.

REQUIREMENTS FOR DOCTOR OF MEDICINE DEGREE

Candidates for the degree of Doctor of Medicine must be mature and of good moral character. They must have spent at least four years of study or its equivalent as matriculated medical students. The last two years of this study must have been in this School. They must have completed satisfactorily the medical curriculum, have passed all prescribed examinations, and be free of indebtedness to the University. Students fulfilling these requirements will be recommended for the degree of Doctor of M cine.

NATIONAL BOARD EXAMINATIONS

All second-year students are required to take for credit Part I and fourth-year students are required to take for credit Part II of the Nain Board Examinations. Part II is given in April and Part I is given in J

BASIC SCIENCE EXAMINATIONS

Approximately twenty states now require examinations on the basic science subjects (anatomy, bacteriology, chemistry, pathology, and siology) as a preliminary to medical licensing examinations. Since various states are not uniform in their requirements a considerable imp ment to movement of physicians from state to state by reciprocity is cra Each student is urged to achieve certification in the basic sciences as as possible.

EXTRACURRICULAR WORK

Students engaging in outside work must report such activity to thele of Students at the beginning of the school year or at any time during school year that such work is undertaken. In those instances in which work is considered prejudical to the student's education, he may he quired to discontinue it. Outside work is not allowed in the first second years.

INSTRUCTION LEADING TO THE M. D. DEGREE

The curriculum is divided into a basic set of required courses taken by all students, and elective courses which may be chosen. Required courses constitute the nucleus of medical education at Vanderbilt; elective courses are an integral part of each student's educational experience in the Medical School, but allow considerable flexibility of individual curricula. Each student is assigned a faculty adviser to aid in the selection of elective courses, and the program of electives must be approved by the Associate Dean for Medical Education.

All electives are courses for credit, graded on the same basis as required courses, and are non-remunerative. The following types of courses may be elected: lecture series; specialty clinics; clinical clerkships or research experience, at Vanderbilt or other institutions; Vanderbilt undergraduate or graduate courses.

Two hours each week have been designated for presentation of schoolwide interest, e.g., lectureships, medical society meetings, student papers. The attendance of all students and faculty is expected.

Students are encouraged to participate in the summer research fellowship program.

The Medical School curriculum is scheduled during the conventional University nine months, and is divided on a semester basis.

First Year: Most of the year is spent in the study of anatomy, biochemistry, and physiology. All day Wednesday and Saturday morning (during the second semester) are reserved for study and electives. Electives available to the freshmen cover a wide range of subjects, e.g., Fundamental Principles in Use of Radioisotopes, Topics in General Physiology, Medicine in Families and the Community, Medical Genetics, Principles of Anthropology.

Second Year: Courses include microbiology, pathology, pharmacology, medical statistics, preventive medicine, and psychiatry. Students begin the study of patients during the second semester, when all the clinical departments cooperate in giving the student an introduction to history taking, physical examination, and laboratory study of patients through a series of lectures, demonstrations, and individual practice by the student. A variety of electives may be taken, either on Wednesday or at scattered times through the week.

Third Year: Ward clerkships in Medicine, Obstetrics-Gynecology, Pediatrics, and Surgery occupy the third year. Students have close contact with a limited number of selected patients under the supervision of attending physicians and house staff.

Fourth Year: During one semester seniors serve as clinical clerks in Psychiatry and as clerks to ambulatory patients in the Out-Patient Service. Here they have opportunity to see disease in its earlier stages, when more difficult of diagnosis, under conditions of office practice and with of tunities for follow-up examinations and observation over relatively periods.

Seniors have an entire semester designated as elective. The opportune for use of this elective semester include research fellowships in a clinic pre-clinical department, at Vanderbilt or other institutions; advanced clerkships in clinical areas; combinations of a variety of specialty d and lecture courses. The flexability of the fourth year curriculum the student maximum opportunity for individual development.

ourses	SATURDAY	Anatomy			Courses	SATURDAY				
Schedule of Courses	SATU	Ana			Schedule of Courses	SATI			1	hin.
Schee	FRIDAY	Biochemistry	Biochemistry		Scher	FRIDAY	Anatomy	Anatomy		or- nations relations
	THURSDAY	Anatomy	Anatomy	Student-Faculty Hour		THURSDAY	Physiology	Physiology	Student-Faculty Hour	 Elective time is unshaded. Most Freshmen should take 4-5 elective hours each semester. The Tresday Student-Faulty Hour will be used for lactimes on the history of medicine and the doctor, pariset relationship.
	WEDNESDAY					WEDNESDAY				iter.
FALL SEMESTER	TUESDAY	Anatomy	Anatomy	Student-Faculty Hour	SPRING SEMESTER	TUESDAY	Physiology	Physiology	Student-Faculty Hour	 Elective time is unshaded. Most Freshmen should take 4-5 elective hours each semester. The Tuesday Student-Eaculty Hour will be used for lectures of
	MONDAY	Biochemistry	Biochemistry			MONDAY	Anatomy	Anatomy		is unshaded. n should take 4-5 ele
1st YEAR	HOURS	8:00-12:00	1:00-4:00	4:00-5:00	1st YEAR	HOURS	8:00-12:00	1:00-4:00	4:00-5:00	 Elective time is unshaded. Most Freshmen should tak The Triesday Sindent-Facure

SCHOOL OF MEDICINE 7 35

2nd YEAR	1 2 3	FALL SEMESTER	Terrar Subar day	All and a second	Schedu	Schedule of Courses
HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:00						
00:6	. Pathology				Pathology	Microbology
00:01	1 41101067	Pathology		Pathology		
00:11					Microbiology	
12:00	South Station	ATTENTED FR			Nervisz	a strategy
00:I	Methods	Psychiatry		Pathology		
2:00	in Clinical	Med. Stat.		Microhiology	Microbiology	
3:00	perence	Epidemiology		19	10	
4:00		Student-Faculty Hour		Student-Faculty Hour		
r. Elective time is unshaded.	is unshaded.					

36 7 VANDERBILT UNIVERSITY

a. Most Sophomores should take 4-5 elective hours each semester.

dain Meisteast Planates: Planet.

Schedule of Courses		FRIDAY SATURDAY		Dharmacolour					Pharmacology		Radiology	alterna Constant
		THURSDAY		Prev. Med.	Psychiatry			Methods		orience	Student-Faculty Hour	tt-Faculty Hour.
K		WEDNESDAY										iester. n the Tuesday Studer
SPRING SEMESTER		TUESDAY		Methods	Clinical Science			Methods	Clinical	ociettice	Student-Faculty Hour	lective hours each sen Il routinely be given i
		MONDAY		DLamandlam	Fnarmacology			Methods	in Clinical	ocience		 Elective time is unshaded. Most Sophomores should take 4-5 elective hours each semester. Clinical-Pathological conferences will routinely be given in the Tuesday Student-Faculty Hour.
2nd YEAR	A LA LUM	HOURS	8:00	00:6	00:01	00:11	12:00	00:1	2:00	3:00	4:00	 I. Elective time is unshaded Most Sophomores should Glinical-Pathological conf

SCHOOL OF MEDICINE # 37

3rd YEAR	R	A COLUMN TWO IS NOT	No. of Street, or Stre	in the second	Schedn	Schedule of Courses
HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8:00-12:00		Wards:	12 weeks, Medicine 12 weeks, Surgery 6 weeks, Pediatrics 6 weeks, Obsterrics	 weeks, Medicine weeks, Surgery weeks, Pediatrics weeks, Obstetrics & Gynecology 	logy	
1:00-4:00						
4:00 P.M.	24 hrs Surgery 12 hrs Ortho- pedic Surgery	Student-Faculty Hour	18 hrs Medicine 18 hrs Pediatrics	Student-Faculty Hour	Student-Faculty 12 hrs Radiology Hour siology 12 hrs OB-Gyn	
 Elective time is unshaded. Minimal elective hours =0 Clinical-pathological confe 	is unshaded. tive hours=0 ological conferences w	 Elective time is unshaded. Minimal elective hours=0 Clinical-pathological conferences will routinely be given in the Tuesday Student-Faculty Hour. 	in the Tuesday Studen	t-Faculty Hour.		

				1.1.5	
Rotation, in groups of one-sixth of class	sth 6 weeks 6 weeks	Surgery	Pediatrics Ob-Gyn Ob-Gyn Pediatrics	Medicine	
1	3rd 6 weeks 6 weeks	Pediatrics Ob-Gyn Ob-Gyn Pediatrics	Medicine	Surgery	
	1st 2nd 6 weeks 6 weeks	Medicine	Surgery	Pediatrics Ob-Gyn Ob-Gyn Pediatrics	
3rd YEAR	STUDENT GROUP	г 2	% 4	65	

SCHOOL OF MEDICINE 7 39

4th YEAR	x x				Schedu	Schedule of Courses
HOURS	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
8-9						
A 9-12		Long Term	Care Clinic: on	Long Term Care Clinic: one morning per week	k	
18 I-4						
wks 4-5		Student-Faculty Hr.		Student-Faculty Hr.		
8-9						
B1 9-12	Psycl	Psychiatry 6 wks		Psychiatry 6 wks	у	
6 I-4 wks						
	and the second second	Student-Faculty Hr.		Student-Faculty Hr.	and the second se	
8-9						
B2 9-12		Long Term (Care Clinic: one	Long Term Care Clinic: one morning per week		
6 <u>1-4</u>					101 101 101 101 101 101 101 101 101 101	
4-5		Student-Faculty Hr.		Student-Faculty Hr.		
8-9		Trans	and the second second			
B, 9-12	Cli	Clinics:				
6 1-4	Pediatrics, 3 afte Long Term Care	Pediatrics, 3 afternoons per week Long Term Care, 1 morning per week				

Rotation, in groups of one-sixth of class

18 weeks, with Long Term Care Clinic required one morning per week. Semester A

4th YEAR

Semester B* B1 6 weeks: Psychiatry 18 hours per week

B₂ 6 weeks: Long Term Care Clinic (1 morning per week)
 B₂ 6 weeks: Pediatrics Clinics (3 afternoons per week— and Long Term Care Clinic (1 morning per week)

		小学品の居		1711		
		FALL SEMESTER	ER	S	SPRING SEMESTER	ßR
Student Group	ıst 6 wks	2nd 6 wks	3rd 6 wks	ıst 6 wks	2nd 6 wks	3rd 6 wks
2 н	444	V VV	A A A	B. B.	a B B B	a a a a
4 20	a a a	a B B B B B B B B B B B B B B B B B B B	a a a	বৰৰ	444	444
*Semester B also includes OB-Gyn Clinics and 3 Surgery Clinics during year. *Includes rotation at night in Emergency Room.	linics and 3 (ency Room.	Surgery Clini	cs during year.	Lunch a Lunch a Lunch a	a (pä yse haraita haraita haraita haraita haraita	n an airean An an airean An an airean An an airean

SCHOOL OF MEDICINE 7 41

LECTURESHIPS

ALPHA OMEGA ALPHA LECTURE. The Alpha Omega Alpha Honor M cal Society invites each year a scientist of prominence to deliver a len before the students, faculty, and local members of the medical profen The first lecture was given during the school year 1926-1927.

THE BARNEY BROOKS MEMORIAL LECTURESHIP IN SURGERY. In through the generosity of a Vanderbilt alumnus an annual lectureship established to honor the memory of Dr. Barney Brooks, formerly Prote of Surgery and Head of the Department and Surgeon-in-Chief of the derbilt University Hospital. As a fitting memorial to Dr. Brooks a lectures have been given by physicians who have made distinguished tributions in clinical or investigative surgery. The first Barney Bro Memorial Lecture in Surgery was given during the spring of 1953.

THE ABRAHAM FLEXNER LECTURESHIP. In the fall of 1927 Mr. Ben Flexner of New York City gave \$50,000 to Vanderbilt University to en lish the Abraham Flexner Lectureship in the School of Medicine. This tureship is awarded every two years to a scientist of outstanding attaining who shall spend as much as two months in residence in association a department of the School of Medicine. The first series of lectures given in the fall of 1928.

PAULINE M. KING MEMORIAL LECTURESHIP. This lectureship was a lished in 1962 by Mr. Robert F. King of Klamath River, California, memorial to his wife. Each year a distinguished thoracic or cardiovan surgeon is invited by the Department of Surgery to lecture at Vande University School of Medicine. The first Pauline M. King Mem Lecture was given in the spring of 1963.

PAUL DUDLEY LAMSON MEMORIAL LECTURE. This annual lectureship instituted in 1965 in memory of Dr. Lamson who was Professor of R macology and Chairman of the Department of Pharmacology at Vande University from 1925 until his retirement in 1952. A prominent phacologist is brought to the Vanderbilt campus each year under the spon ship of the alumni and staff of the Department of Pharmacology.

GLENN A. MILLIKAN MEMORIAL LECTURE. This lectureship was a lished in 1947 by the members of the then second-year class. It has sequently received support by means of a capital fund by Dr. Glenn M kan's father and mother, Dr. Robert A. Millikan and Mrs. Gretna B. M kan, and friends. Contributions have been made to the fund by mem of the founding class and other students. The lectureship is mainter to provide a distinguished lecturer in physiology

HUGH J. MORGAN VISITING PROFESSORSHIP IN MEDICINE. This vis professorship was established in 1959 through the generosity of fac former house officers, and friends of the late Dr. Hugh J. Morgan whose as Professor of Medicine and Chairman of the Department at Vand University School of Medicine from 1935 through 1959. As a tribut Dr. Morgan and his outstanding qualities as a superior clinician, the

partment of Medicine invites a distinguished physician to spend one week in residence during which time he assumes the teaching duties of the Professor of Medicine with students, house officers, and faculty. The first visiting professorship was awarded in 1959.

THE COBB PILCHER MEMORIAL LECTURE. In 1950 the Pi Chapter of the Phi Chi Medical Fraternity established the Cobb Pilcher Memorial Lecture to honor the memory of Dr. Pilcher, formerly Associate Professor of Surgery, distinguished neurosurgeon, and a member of Phi Chi fraternity. Each year a lecturer of prominence is selected. The first lecture was given in 1950.

INSTRUCTION LEADING TO THE M.D. AND PH.D. DEGREES

Interested students at Vanderbilt are encouraged toward careers in demic medicine. In order to facilitate the development of teachers medical investigators who are capable in clinical and basic medical size a combined course of study leading to the M.D. and Ph.D. degrees has instituted. Six to seven calendar years will be required for completioned combined degree program.

All candidates must meet the requirements of both the medical graduate schools for matriculation and graduation. Selection of the didates will be made by the admission committees and deans of the uate and medical schools. The graduate program of the student will planned by his major adviser, a member of the graduate faculty, in usual manner. Most students will enter the program after the sopher year in medical school, and will complete the course work for both de and much of the thesis research before entering the clinical clerkship the junior year of medical school.

Students accepted for the M.D.-Ph.D. program may receive fina support through their departmental sponsors; in addition, three sh ships per year are awarded by the Fellowships and Scholarships comm Information about the M.D.-Ph.D. program may be obtained from Chairman of the Fellowships and Scholarships Committee, Vande University School of Medicine.

ADVANCED PROFESSIONAL TRAINING AND RESEARCH

The primary responsibility of the School of Medicine is education of med cal students. In addition, there are active programs for graduate students in the pre-clinical sciences, for post-doctoral interns and residents, and for post-doctoral research trainees. At present, 715 students, trainees, technicians, and aides are receiving instruction at the School.

INTERNSHIP AND RESIDENCY TRAINING

Students preparing for the practice of medicine usually spend one or more years in house staff training. Such experiences at Vanderbilt are particularly varied and well-supervised. Applicants for positions are carefully chosen, and make up a competent and stimulating group which has considerable responsibility in medical student teaching.

The faculty of the School of Medicine have professional responsibilities in Vanderbilt, Veterans, and Nashville General Hospitals. Most patients in these hospitals are cared for by members of the intern and resident staff.

Vanderbilt University Hospital is a referral center and consequently has a patient population with complex medical and surgical problems. Nashville General Hospital is a community owned facility in which many of the patients present advanced manifestations of disease. Veterans Administration Hospital is adjacent to the Vanderbilt Medical Center, and is extensively used for student and house staff teaching.

RESIDENCIES AND FELLOWSHIPS

THE HUGH J. MORGAN RESIDENCY IN MEDICINE. In May of 1962, Mrs. Julia T. Weld of New York City generously made available a yearly gift to support the Chief Residency in Medicine named after the late Dr. Hugh J. Morgan, Professor of Medicine at Vanderbilt from 1935-1959. The awarding of the residency is announced each fall for the following July. The Hugh J. Morgan Residency allows the Department of Medicine to award an adequate salary to this important faculty position.

DR. COBB PILCHER-WILLIAM HENRY HOWE FELLOWSHIP IN NEUROSURGERY. In December 1945, the William Henry Howe Fellowship in Neurosurgery was established in the School of Medicine of Vanderbilt University. This fellowship was made available to the University by the late Dr. Pilcher and has been continued by the generosity of his family and friends.

POSTDOCTORAL COURSES

Courses in individual departments are made available by special arrangement. These courses are under the direction of the Director of Continuing Education and the head of the department concerned. Courses may be

SCHOOL OF MEDICINE ' 45

offered at any time during the year for periods of varying length. Out limited number of physicians can be admitted to any course. Inquin should be addressed to Dr. Joseph A. Little, Director of Continuing Ed cation.

Fees for special courses are decided by the Dean and the Director of G_{α} tinuing Education in cooperation with the head of the department in white the instruction is provided.

COURSES TOWARD MASTER'S AND PH.D. DEGREES

Candidates for the degree of Master of Science or of Doctor of Philosoph may pursue work in the medical sciences given in the Medical School, end in regular courses or in special elective courses, provided such students accepted by the heads of departments concerned and are registered in the Graduate School of the University. Graduate work in the medical science is regulated by the faculty of the Graduate School. Candidates for gradate degrees should apply to the Dean of the Graduate School.

Candidates for the degree of Master of Science in Audiology and Spet Pathology may pursue work in these fields in the Bill Wilkerson Heat and Speech Center and the School of Medicine. Graduate work in the division is regulated by the faculty of the Graduate School. Candidar should apply to the Registrar of the Graduate School.

ENDOWED RESEARCH CHAIRS

THE JOE AND MORRIS WERTHAN CHAIR OF EXPERIMENTAL MEDICE Through the generosity of the Werthan family of Nashville, this p fessorship was established in 1951 for the purpose of furthering research the general field of internal medicine. The present holder of the chain Dr. Elliot V. Newman.

CHAIR OF NUTRITION. In the fall of 1964, the Pet Milk Foundation of Louis, Missouri, established at Vanderbilt University School of Medicine Chair of Nutrition to further research and teaching activities in this we area of medicine. Dr. William J. Darby, Professor of Biochemistry a Chairman of the Department of Biochemistry and Director of the Division of Nutrition, presently holds the chair.

ENDOWED RESEARCH FUNDS

THE RACHAEL CARPENTER MEMORIAL FUND. This fund was established in 1933 by a gift of \$5,000 from Mrs. Mary Boyd Carpenter of Nashvilk The income derived from this fund is to be used for education in the field tuberculosis.

THE BROWNLEE O. CURRY MEMORIAL FUND FOR RESEARCH IN HEMATIC OGY. A memorial fund created by the friends of Brownlee O. Curry, the income from which is being used for the support of research in the field hematology.

THE JACK FIES MEMORIAL FUND. The sum of \$5,000 was given to Vanderbit University by Mrs. Hazel H. Hirsch as a memorial to her son, Jack Fies, the income from which is to be used to support research in the important field of neurological surgery. It is hoped that subsequent donations may be made by those who may be interested in creating a larger fund for this phase of research.

THE JOHN B. HOWE FUNDS FOR RESEARCH. In January 1946, the members of the family of the late John B. Howe established two funds in the University to be known as the John B. Howe Fund for Research in Neurosurgery and the John B. Howe Fund for Research in Medicine. The expenditures from the funds for neurosurgery and medicine are administered through the Department of Surgery and the Department of Medicine.

THE MARTHA WASHINGTON STRAUS-HARRY H. STRAUS FOUNDATION, INC. The Foundation provides support for research in the Department of Medicine in the field of cardiovascular diseases.

THE LESLIE WARNER MEMORIAL FUND FOR THE STUDY AND TREATMENT OF CANCER. This fund was established in 1932 in the memory of Leslie Warner of Nashville, Tennessee. It consists of \$7,200, of which \$3,600 was contributed by the nieces and nephews of Mrs. Leslie Warner.

MILITARY AND DISASTER MEDICINE

Vanderbilt University School of Medicine was one of the original medical schools conducting a program of military and disaster medicine under the Medical Education for National Defense plan. Separate courses in military and disaster medicine are not offered. Material on mass casualties, emergency first aid, radiation injury, radiation biology, chemical and germ watfare, and other aspects of military medicine is presented in the course material offered by the Departments of Pharmacology, Preventive Medicine, Medicine, Radiology, and Surgery.

COURSES OF STUDY

SCHOOL OF MEDICINE DEPARTMENTS

Anatomy
Anesthesiology
Audiology & Speech Pathology
Biochemistry
Medicine
Microbiology
Obstetrics & Gynecology
Orthopedic Surgery
Pathology
Pediatrics
Pharmacology
Physiology
Preventive Medicine & Public Health
Psychiatry
Radiology
Surgery

ASS -

NOTE: Required medical school courses are numbered 501 to 519. Elective multi school courses are numbered 521 to 599.

Courses in the 500 series make up the curriculum of the medical stude Those courses carrying credit in the Graduate School are indicated by ay series number before or after the title. Figures in brackets in 300 ser course descriptions indicate semester hours of credit in the Graduate Scho

Description of elective courses include the class year to which the cour is available, number of clock hours per week, semester offered, and long of course if less than a semester.

the second

Anatomy

JACK DAVIES, M. D., Professor of Anatomy and Chairman of the Department VIRGIL S. LEQUIRE, M.D., Professor of Anatomy JAMES W. WARD, Ph.D., M.D., Professor of Anatomy R. BENTON ADKINS, M.D., Assistant Professor of Anatomy ALVIN M. BURT III, Assistant Professor of Anatomy G. RODMAN DAVENPORT, Ph.D., Assistant Professor of Anatomy ROBERT L. HAMILTON, Ph.D., Assistant Professor of Anatomy LUKE H. MONTGOMERY, Assistant Professor of Anatomy JOHN LANGDON NORRIS, M.D., Assistant Professor of Anatomy

The Department of Anatomy offers courses leading to the Ph.D. degree. Courses described below which are numbered in the 300 series are offered primarily for that program but are open to medical students by special arrangements.

501. HISTOLOGY (322). This course gives the student a familiarity with the normal structure of the principal tissues and organs of the body. Fresh tissues are used wherever possible for the demonstration of normal cellular function, and in analyzing the characteristics of particular cells. SPRING. [4] Dr. Hamilton and Staff.

502. GROSS ANATOMY (321). This course is devoted to a systematic dissection of the human body. The instruction is largely individual and the work of the student is made as independent as possible. FALL. [10] Dr. Davies and Staff.

503. NEUROLOGY (323). This course covers the histological aspect of the nervous system, including the structure of nerve cells, fibers and endings, the histology and pathways of the spinal cord, the structure and connection of cerebrospinal and autonomic nerves and ganglia, and the histology of the organs of special sense. SPRING. [4] Dr. Ward and Staff.

521. DEVELOPMENTAL BIOLOGY (333). First, Second, and Fourth years. A comprehensive, multidisciplinary study in mammalian developmental biology covering gametogenesis, gamete transport, fertilization and implantation, development and functions of the placenta, uterus, parturition, and lactation. Emphasis will be placed on morphology, endocrinology, and effects of ionizing radiation. This course is presented as a fundamental aspect of biologic science rather than as a medical specialty. (Obstetrics-Gynecology 521.) Two hours per week. SPRING. [4] Drs. Soupart, Glasser, and Staff.

522. APPLICATIONS OF EMBRYOLOGY TO CLINICAL PRACTICE. Second and Fourth years. A course in human embryology with special reference to the genesis of congenital defects. Clinical cases will be presented. Two hours per week. FALL. Drs. Davies and Norris. 523. ADVANCED NEUROLOGY (324). Second and Fourth years. An intensive systemic study of the relations, structures, and function of the various parts of the central nervous system is made with the aid of group specimens and dissections, serial sections of brain stems, and experiment demonstrations. The lectures are a guide to the laboratory work and present the type of evidence on which the present conceptions of the nervous g tem are based. Three hours per week; first fifteen weeks. FALL. [2] b Ward and Staff.

527. LESSONS IN SURGICAL ANATOMY. Fourth year. Weekly review surgical anatomy for medical students and for interns and surgical residem Special areas of surgical interest will be reviewed with the aid of program tions and demonstrations. Embryological implications will be explain Two hours per week. SPRING. Dr. Adkins.

528.1. BIOMEDICAL ELECTRONICS 1. First, Second, and Fourth years. A ba course of twelve lectures and demonstrations in electronics for those wi little or no experience in the field. Electronic fundamentals including the of vacuum tubes, solid state devices, amplifiers, etc., are included. On hour per week; twelve weeks. FALL. Mr. Montgomery.

528.2. BIOMEDICAL ELECTRONICS II. First, Second, and Fourth years. L tures and demonstrations illustrating application of electronic equipment the biomedical area. This course covers a wide range of instrumental including special measurement and recording equipment, special stimutors, simple computers ("averagers"), etc. Prerequisite: Biomedical E tronics I. One hour per week; twelve weeks. Spring. Mr. Montgom

581. RESEARCH FELLOWSHIP IN ANATOMY. Fourth year. Research of portunities are available by arrangement in the following: (1) Elect microscopy, (2) Histochemistry and histology, (3) Embryology, (4) Hum development. Full time for twelve or eighteen weeks. Dr. Davin & Staff.

599. SEMINAR IN DEVELOPMENTAL BIOLOGY. First, Second, and For years. One-hour-weekly seminar including lectures and discussion the full-time faculty, visiting lecturers, and participating students. (stetrics-Gynecology 599.) One hour per week. FALL & SPRING. D Davies and Glasser.

327. EXPERIMENTAL METHODS IN NEUROLOGY. Conferences and result upon special phases of the structure and function of the nervous system. This course is designed to meet the needs of students desiring special ming in neurology. [1-6] Dr. Ward.

329. EXPERIMENTAL METHODS IN HISTOLOGY. Research and conferm in special phases of the techniques and their principles of histology. I work is designed for the particular student's interests and includes gene histological methods and special methods such as those of the elect microscope. [1-6] Dr. Davies and Staff.

330. SEMINAR IN ANATOMY. SPRING & SUMMER. [1-2] Staff. 399. Research. Staff.

Anesthesiology

CHARLES B. PITTINGER, M.D., Professor of Anesthesiology and Chairman of the Department

ALEJANDRO BERBA, M.D., Assistant Professor of Anesthesiology YILMAZ ERYASA, M.D., Assistant Professor of Anesthesiology JOANNE L. LINN, M.D., Assistant Professor of Anesthesiology BASEL M. MIXON, JR., M.D., Assistant Professor of Anesthesiology PAULA F. CONAWAY SANDIDGE, M.D., Assistant Professor of Anesthesiology GISELA SCHULLER, M.D., Instructor in Anesthesiology GULEN TANGORIN, M.D., Instructor in Anesthesiology ILDEFONSO A. ALCANTARA, M.D., Clinical Instructor in Anesthesiology

501. ANESTHESIOLOGY. This course for third year students consists of a series of lectures on some aspects of anesthesiology applicable to the general practice of medicine. Among the topics presented will be: preoperative evaluation of the patient; premedication, selection of anesthetic agent and technique; local anesthesia, resuscitation, and oxygen therapy. One hour per week for twelve weeks. Dr. Pittinger and Staff.

502. OPERATIVE SURGERY AND ANESTHESIOLOGY. A laboratory course for third year students offered jointly by the Departments of Surgery and Anesthesiology to provide experience in anesthesia and experimental surgery. Students work in groups of four, rotating responsibilities so that each receives experience in anesthesia. (See Surgery 502.) Three hours per week for twelve weeks. Dr. Pittinger and Staff.

521. PHARMACOLOGY OF ANESTHESIA (325). Fourth year. A course related to pharmacologic principles involved in the action of anesthetic agents. This will include discussions of: the chemistry of anesthetic agents; physico-chemical principles of absorption, distribution, and elimination; theories of anesthesia; factors modifying drug responses; biotransformation toxicity and modifications of anesthesia under hyperbaric conditions. (Pharmacology 530.) One hour per week. FALL. Dr. Pittinger.

361. CLERKSHIP IN ANESTHESIOLOGY. Fourth year. Didactic and operating room experience in the conduction of anesthesia, including pre- and postanesthetic care. Full time, six week units. Dr. Pittinger and Staff.

399. ANESTHESIOLOGY SEMINAR. Fourth year. A series of lecture presentations and discussions of basic scientific principles related to anesthesiology. Students may register for one or two semesters. One hour per week. FALL & SPRING. Dr. Pittinger and Staff.

Audiology & Speech Pathology

FREEMAN McConnell, Ph.D., Professor of Audiology and Chairman of Division

RONALD GOLDMAN, Ph.D., Associate Professor of Speech Pathology JAY SANDERS, Ph.D., Associate Professor of Audiology PAUL H. WARD, M.D., Associate Professor of Otolaryngology JOHN COOPER, M.A., Assistant Professor of Audiology VICENTE HONRUBIA, M.D., Assistant Professor of Otolaryngology KATHRYN B. HORTON, M.S., Assistant Professor of Speech Pathology RUSSELL LOVE, Ph.D., Assistant Professor of Speech Pathology RICHARD STREAM, Ph.D., Assistant Professor of Audiology MARY E. DOWNING, M.S.S.W., Instructor in Medical Social Service M. ANN GANNAWAY, M.S., Instructor in Speech Pathology MARTHA E. LYNCH, M.S., Instructor in Speech Pathology MARLIN PHYTHYON, M.S., Instructor in Clinical Audiology ANN B. SITTON, M.S., Instructor in Clinical Audiology

Here and the Master's degree. Information on regulations and real ments may be found in the Bulletin of the Graduate School.

COURSE OF STUDY

The courses listed below with their related clinical and research activity are taught at the Bill Wilkerson Hearing and Speech Center located jacent to the Vanderbilt University campus on 19th Avenue South at H hill.

The student may elect a program of study with emphasis in either diology or speech pathology. Certain courses are basic to both are study and may be counted for credit in either. These courses are is below in the first section and are followed by those which can be com for credit only in the specific area noted in the heading.

I. AUDIOLOGY & SPEECH PATHOLOGY

220. ANATOMY AND PHYSIOLOGY OF THE CENTRAL NERVOUS SYSTEM. Let and demonstrations designed to acquaint the student with the basic struand function of the central nervous system. Emphasis on integra activity as related to both normal and deviate oral communication. (Not offered 1967/68.)

221. ANATOMY AND PHYSIOLOGY OF SPEECH. Structure and function the neuromuscular system involved in breathing, phonation, resourand articulation. Emphasis on fundamental physiological principle speech production. FALL. [2] Mr. Love.

222. ANATOMY AND PHYSIOLOGY OF HEARING. Structure, function, and pathology of hearing. Psychoacoustic theories. FALL. [2] Mr. Sanders.

223. EXPERIMENTAL PHONETICS. Study of research methods, instrumentation, and findings in the field of experimental phonetics. [3] (Not offered 1967/68.)

227. DIAGNOSTIC PROCEDURES IN AUDIOLOGY AND SPEECH PATHOLOGY. Diagnostic tests and procedures for children and adults with impaired heating or defective speech. Techniques for screening areas important to normal speech and language development. Case history techniques. Clinical observation and report writing required. Prerequisite: consent of instructor. FALL. [3] Mrs. Horton.

228. LANGUAGE DISORDERS OF CHILDREN. A study of the language, behavioral symptomatology, and treatment of language-impaired children. Consideration of differential diagnostic techniques for aphasia, central auditory disturbances, hearing loss, mental retardation, and emotional disturbances. SPRING. [3] Mrs. Horton.

II. AUDIOLOGY

240. TESTING OF HEARING. A study of the theory and practice of hearing measurement with emphasis on basic pure-tone audiometric techniques. Consideration of causative factors in hearing loss and evaluation of audiometric results. FALL. [3] Mr. Cooper.

241. SPEECH AND LANGUAGE DEVELOPMENT OF THE ACOUSTICALLY HANDI-CAPPED. A consideration of the theories and problems encountered in the development of speech and language in acoustically handicapped children. SPRING. [3] (Offered on demand.)

245. PRINCIPLES OF SPEECHREADING. Study and analysis of various methods for developing visual communication skills in handling hearing impaired children and adults. FALL. [2] Mrs. Phythyon.

246. AURAL REHABILITATION. Principles, methods and electroacoustic instrumentation involved in the use of residual hearing for optimum speech and language functioning in the hearing impaired. SPRING. [2] Mrs. Phylopon.

247. PSYCHOLOGY AND EDUCATION OF THE DEAF. History of education of the deaf. Study of the research literature on the effects of hearing impairment on the social, intellectual, and psychological development of the individual. Societal reactions to deafness. FALL. [3] Mr. Stream.

322. ADVANCED CLINICAL STUDY AND PRACTICE: AUDIOLOGY. Assigned readings and written reports combined with participation in the clinical program in audiology. Course may be repeated for credit. FALL, SPRING, SUMMARR. [2] Mrs. Sitton. 340. THE SELECTION AND USE OF HEARING AIDS. A study of the rescan and theory of clinical selection of hearing aids. The principles of speciaudiometry in assessing the usefulness of residual hearing. Clinical a servation required. Prerequisite: 240. SPRING. [3] Mr. Stream.

340. SEMINAR IN AUDIOLOGY. Review of significant literature in the ful of audiology. Directed study in assigned subject areas. SUMMER. [Mr. Sanders.

342. ADVANCED CLINICAL AUDIOLOGY. Special tests and explorate techniques in audiologic assessment; instrumentation and testing room and conduct of the audiologic clinic. SPRING. [3] Mr. Sanders.

343. SEMINAR: MILITARY AND INDUSTRIAL AUDIOLOGY. Hearing consensuiton principles in the armed forces and in industry. Programs for employs protection and the reduction of noise hazard in the environment. Spring [3] Mr. McConnell.

352. SPECIAL PROBLEMS IN AUDIOLOGY. Study of areas and problems n included in other courses in audiology, chosen to fit the students' inters and the needs of their programs. FALL, SPRING, SUMMER. [Variable credit 1 to 3 each semester] Staff.

389. INDEPENDENT STUDY AND READINGS IN AUDIOLOGY. [3] Staff.

III. SPEECH PATHOLOGY

230. ARTICULATION DISORDERS. A study of the etiology, evaluation, a management of articulatory defects in children and adults. FALL. Miss Gannaway.

231. STUTTERING. A review of the significant research in the field stuttering, with emphasis on etiology and therapy. Consideration the management of fluency disturbances. FALL. [3] Mr. Goldman.

232. CLEFT PALATE AND RELATED DISORDERS. A study of the ctiolog diagnosis and management of speech defects associated with structura anomalies and physiological dysfunction, with major emphasis on depalate. FALL. [2] Mr. Love.

233. CEREBRAL PALSY AND RELATED DISORDERS. A study of speech distribunces related to neurological dysfunction with major emphasis on cerebralsy. SPRING. [3] Mr. Love.

234. ALARYNGEAL SPEECH. A study of speech defects resulting from loss the larnyx. Etiology, rehabilitative management, and a review of the petinent research literature. SPRING. Mr. Love.

321. ADVANCED CLINICAL STUDY AND PRACTICE: SPEECH PATHOLOGY. As signed readings and written reports combined with participation in the clinical program in speech pathology. Courses may be repeated for credit FALL, SPRING, SUMMER. [2] Staff.

331. APHASIA. A study of the aphasic language disturbances including symptomatology, etiology, differential diagnosis, and training. Emphasis on adult problems. Prerequisite: 230 and 240. SPRING. [3] Mrs. Horton.

335. SEMINAR IN SPEECH PATHOLOGY. Review of significant literature in the field of speech pathology. Directed study in assigned subject areas. SUMMER. [2] Mr. Goldman.

336. SEMINAR: VOICE DISORDERS. Study of theories of voice production, with emphasis upon pathology and malfunctions which produce voice defects. Procedures for group and individual management. Prerequisite: 230 and 232. SPRING. [3] Mr. Sanders.

351. SPECIAL PROBLEMS IN SPEECH PATHOLOGY. Study of areas and problems not included in other courses in speech pathology, chosen to fit the students' interests and the needs of their programs. FALL, SPRING, SUMMER. [Variable credit: 1 to 3 each semester] Staff.

288. INDEPENDENT STUDY AND READINGS IN SPEECH PATHOLOGY. [3] Staff.

Biochemistry

WILLIAM J. DARBY, M.D., Ph.D., Professor of Biochemistry and Chairman of the Department; Professor of Nutrition FRANK R. BLOOD, Ph.D., Professor of Biochemistry STANLEY COHEN, Ph.D., Professor of Biochemistry JOHN G. CONIGLIO, Ph.D., Professor of Biochemistry LEON W. CUNNINGHAM, Ph.D., Professor of Biochemistry V. N. PATWARDHAN, Ph.D., Professor of Nutrition E. NEIGE TODHUNTER, Ph.D., Visiting Professor of Nutrition WILLIAM N. PEARSON, Ph.D., Professor of Biochemistry OSCAR TOUSTER, Ph.D., Professor of Biochemistry GEORGE V. MANN, M.D., Sc.D., Associate Professor of Biochemistry GUILFORD G. RUDOLPH, Ph.D., Associate Professor of Biochemistry ARTHUR R. SCHULERT, Ph.D., Associate Professor of Biochemistry JAN VAN EYS, Ph.D., Associate Professor of Biochemistry BENJAMIN J. WILSON, Ph.D., Associate Professor of Biochemistry JAMES P. CARTER, M.D., Assistant Professor of Nutrition JAMES T. DAVIS, Ph.D., Assistant Professor of Biochemistry TADASHI INAGAMI, Ph.D., Assistant Professor of Biochemistry ROBERT A. NEAL, Ph.D., Assistant Professor of Biochemistry HAROLD H. SANDSTEAD, M.D., Assistant Professor of Nutrition CONRAD WAGNER, Ph.D., Assistant Professor of Biochemistry (V. A. Hospital)

SCHOOL OF MEDICINE 7 55

LAKEN G. WARNOCK, Ph.D., Assistant Professor of Biochemistry (V. A. H. pital)

A. WALLACE HAYES, Ph.D., Research Associate in Biochemistry H. GAYLE JACOBS, Ph.D., Research Associate in Biochemistry LUDEK JIROUSEK, Ph.D., Research Associate in Biochemistry MILOS STASTNY, Ph.D., Research Associate in Biochemistry

The Department of Biochemistry offers courses leading to the Phi degree. Courses described below which are numbered in the 300 sm are offered primarily for that program but are open to medical stude by special arrangement.

501. BIOCHEMISTRY (321). Lectures on the chemistry and metabolism carbohydrates, proteins, lipids, nucleoproteins, and on the chemistry a function of enzymes, vitamins, and other factors related to cellular meta olism and body processes. FALL. [3] Staff.

502. BIOCHEMISTRY LABORATORY (322). This laboratory course accur panies Biochemistry 501 and emphasizes chemical, physical, and physical aspects of topics presented there. FALL. [4] Staff.

521. FUNDAMENTAL PRINCIPLES IN THE USE OF RADIOISOTOPES. First ye A presentation for medical students of fundamental principles of nuch physics and tracer methodology necessary for understanding the us radioisotopes in biology and medicine. Lectures will review: element nuclear physics; basic principles of tracer methodology; the design of periments illustrating different types of radioisotopes; safety practices handling isotopes, and the use of necessary instrumentation. Laborat work includes experiments with different beta and gamma emitters in typ physiological or biological experiments. Four hours per week; first twe weeks. FALL. Dr. Coniglio.

522. TOXICOLOGY (336). Second and Fourth years. Lectures, discuss and assigned reading on the principles of toxicology with emphasis metabolic and biochemical considerations. Subjects covered indenaturally occurring toxicants, mycotoxins, bacterial toxins, chemiadditives, residues of agricultural chemicals and other environmecontaminants. Two hours per week. FALL. [2] Drs. Wilson, Ba-Neal, and Darby.

523. FUNDAMENTALS OF HUMAN NUTRITION (328). Second and For years. This course presents the physiologic basis of clinical nutrition health and disease. Deficiency diseases and nutrient requirements of a are considered, as well as the basis of diet therapy. Lectures and assign readings. (Medicine 523). One hour per week: SPRING. [1] Dr. Ma

524. ADVANCED METABOLISM (334). First, Second, and Fourth ye Lectures and discussions of energy metabolism and regulatory mechanis Among the topics to be considered will be: thermodynamics and met

olism of high energy compounds, energy yielding reactions, oxidative phosphorylation, photosynthesis and the tricarboxylic acid cycle. Two hours per week. SPRING. [2] Drs. Wagner and Warnock. (Not offered 1967 68.)

526. BIOCHEMISTRY AND DIFFERENTIATION. First, Second, and Fourth years. Formal lectures and student seminars. A course designed to acquaint the student with the biochemical aspects of development and differentiation. One hour per week. SPRING. Dr. Cohen.

527. NUTRITIONAL BIOCHEMISTRY (335). Second and Fourth years. A course in comparative nutritional biochemistry with emphasis on the whole animal. Prerequisite: a course in biochemistry or permission of the instructor. Two hours per week. FALL. [2] Dr. Pearson.

518. CLINICAL BIOCHEMISTRY. Fourth year. Seminars on developments in biochemistry in relation to medicine and applications of biochemical principles to the study of disease. One hour per week. SPRING. Staff.

529. LIPID CHEMISTRY AND METABOLISM (329). Second and Fourth years. Lectures and discussions on the chemistry, metabolism, detection, and separation of fatty acids, glycerides, phospholipids, and sterols. Prerequisite: a course in general biochemistry. Two lectures per week. SPRING. [2] Dr. Coniglio.

530. NUTRITION CLINICS. Fourth year. Topics of current interest in clinical medicine will be selected for discussion. Examples include: cardiac cachexia, uremia and diet therapy, iron deficiency, gastrointestinal malabsorption and obesity. Patients will be selected from the Hospital and Clinics for presentation by a student. Various aspects of the topic will be discussed. One hour per week. FALL. Dr. Sandstead.

581. RESEARCH FELLOWSHIP IN BIOCHEMISTRY. Fourth year. Research opportunities under the guidance of appropriate staff members in any of the broad areas represented in the Department of Biochemistry. The time and schedule of presentations will be arranged and can be individualized to a considerable extent. Students are encouraged to pursue research on a continuing basis and for a minimum of three months. Longer periods are more desirable. Full time for twelve or eighteen weeks. Dr. Darby and Staff.

582. RESEARCH FELLOWSHIP IN NUTRITION. Fourth year. Clinical and metabolic research in man or experimental animals conducted under the direction of members of the staff. Students are encouraged to pursue research on a full-time basis for a minimum of three months. Selected students may participate in studies abroad (in the Middle East or elsewhere) in the current research program of the Division of Nutrition. Full time for twelve or eighteen weeks. Dr. Darby and Staff.

583. Special Problems in NUTRITION. First, Second, and Fourth years. Individualized study of advanced topics or research in nutrition. Experimental laboratory and clinical studies will be offered under the guidan of a member of the staff of the Division. Six hours per week. FALL SPRING. Drs. Darby, Mann, and Pearson.

584. PRECEPTORSHIP IN BIOCHEMISTRY. Fourth year. An opportunity for intensive review of basic biochemistry. Students will participate instructors in the teaching of the course to freshman medical students r at the same time participate in graduate experiences, seminar, and researe in the department. Full time for twelve or eighteen weeks. Dr. Date and Staff.

599. BIOCHEMISTRY SEMINAR (327). First, Second, and Fourth year This is a student seminar designed to familiarize medical and gradue students with current research developments in biochemistry, to affer the students an opportunity to review critically a variety of subjects a to gain experience in presenting and critically appraising such investing tions. One hour per week. FALL & SPRING. [1] Dr. Darby and Staff.

323. SPECIAL PROBLEMS AND EXPERIMENTAL TECHNIQUES. Among the fill available are: (a) advanced work in lipid metabolism, Dr. Coniglio; (b) is metabolism of carbohydrates and nucleotides, Dr. Touster; (c) prote chemistry, Dr. Cunningham; (d) metabolic toxicology, Dr. Blood; (e) eazy of metabolism, Dr. van Eys; (f) chemical embrology, Dr. Cohen; (g) mine and vitamin metabolism, Dr. Pearson; (h) metabolism of foreign compound Dr. Neal; (i) steroids, Dr. Rudolph; and (j) special biochemical preparation Admission to course, hours, and credit by arrangement. [2-4] Staff.

324. USE OF RADIOACTIVE TRACERS IN METABOLISM. This course is introductory one in the application of radioisotopes to the study of meta olism, and is intended for graduate students in biochemistry, biolog physiology, and related fields. Two lectures and one three-hour labor tory. Prerequisite: permission of instructor. spring. [3] Dr. Coniglia (Not offered 1967/68.)

325. MICRO-PHYSIOLOGIC TECHNIQUES IN BIOCHEMISTRY. A course signed to give experience in the techniques of animal experimentati Lectures, discussions, and demonstrations on care, feeding, injection, sample collection in small animals. Application of micro techniq of mammalian physiology to biochemistry. Lectures and laborate Prerequisite: permission of instructor. spring. [3] Dr. Blood.

326. BIO-ORGANIC CHEMISTRY. Lectures and discussion on the isolati structural chemistry, and synthesis of biochemically important substant and on the relation of structure to biological activity. Prerequisite: advanced course in organic chemistry or permission of instructor. In lectures per week. FALL. [2] Dr. Touster. (Not offered 1967/68.)

327. SEMINAR IN BIOCHEMICAL LITERATURE. Admission to course by rangement. Prerequisite: a course in fundamental biochemistry. E & SPRING. [1] Staff.

333. PROTEIN CHEMISTRY. A course describing the physical and chemical methods employed in the study of macro-molecules of biological importance and the relation of protein structure to protein function. Prerequisite: Biochemistry 321 and elementary physical chemistry or permission of instructor. SPRING. [2] Dr. Cunningham. (Not offered 1967/68.)

299. RESEARCH. Staff.

Medicine

DAVID E. ROGERS, M.D., Professor of Medicine and Chairman of the Department

WILLIAM J. DARBY, M.D., Ph.D., Professor of Medicine in Nutrition

ROBERT CARL HARTMANN, M.D., Professor of Medicine

RUDOLPH H. KAMPMEIER, M.D., Professor of Medicine, Emeritus

GRANT W. LIDDLE, M.D., Professor of Medicine

ANN STONE MINOT, Ph.D., Professor of Medicine, Emeritus ELLIOT V. NEWMAN, M.D., Joe and Morris Werthan Professor of Experimental Medicine

STANLEY W. OLSON, M.D., Professor of Medicine

THOMAS F. PAINE, JR., M.D., Professor of Medicine

JAMES W. WOODS, M.D., Visiting Professor of Medicine

JOHN B. YOUMANS, M.D., Professor of Medicine, Emeritus

THOMAS BOWMAN ZERFOSS, M.D., Professor of Medicine, Emeritus

F. TREMAINE BILLINGS, M.D., Clinical Professor of Medicine

LAURENCE A. GROSSMAN, M.D., Clinical Professor of Medicine

SAMUEL S. RIVEN, M.D., C.M., Clinical Professor of Medicine

HARRISON J. SHULL, M.D., Clinical Professor of Medicine

W. DAVID STRAYHORN, M.D., Clinical Professor of Medicine

CLARENCE S. THOMAS, M.D., Clinical Professor of Medicine

WILLIAM L. ALSOBROOK, M.D., Associate Professor of Medicine (Died August 31, 1967).

A. BERTRAND BRILL, M.D., Associate Professor of Medicine

THOMAS E. BRITTINGHAM, M.D., Associate Professor of Medicine

WILDIAM S. COPPAGE, M.D., Associate Professor of Medicine

ROGER M. DES PREZ, M.D., Associate Professor of Medicine

ERIC ENGEL, M.D., Associate Professor of Medicine

ZOHER FARID, M.D., Visiting Associate Professor of Medicine in Tropical Disease and Nutrition

RICHARD FRANCE, M.D., Associate Professor of Medicine

H. EARL GINN, M.D., Associate Professor of Medicine

ROBERT A. GOODWIN, M.D., Associate Professor of Medicine

ROBERT M. HEYSSEL, M.D., Associate Professor of Medicine

M. GLENN KOENIG, M.D., Associate Professor of Medicine

DAVID H. LAW, M.D., Associate Professor of Medicine

GEORGE V. MANN, Sc.D., M.D., Associate Professor of Medicine in Biochemistry JOHN A. OATES, M.D., Associate Professor of Medicine

LLOYD H. RAMSEY, M.D., Associate Professor of Medicine; Investigator, Howard Hurbes Medical Institute

WILLIAM D. SALMON, JR., M.D., Associate Professor of Medicine BRUCE SINCLAIR-SMITH, M.D., Associate Professor of Medicine CRAWFORD W. ADAMS, M.D., Associate Clinical Professor of Medicine THOMAS F. FRIST, M.D., Associate Clinical Professor of Medicine J. ALLEN KENNEDY, M.D., Associate Clinical Professor of Medicine ADDISON B. SCOVILLE, JR., M.D., Associate Clinical Professor of Medicine EDWARD J. BATTERSBY, M.D., Assistant Professor of Medicine RICHARD E. BRYANT, M.D., Assistant Professor of Medicine JOHN R. COLLINS, M.D., Assistant Professor of Medicine OSCAR B. CROFFORD, M.D., Assistant Professor of Medicine; Investign Howard Hughes Medical Institute PHILIP W. FELTS, M.D., Assistant Professor of Medicine JOHN M. FLEXNER, M.D., Assistant Professor of Medicine DAVID E. JENKINS, JR., M.D., Assistant Professor of Medicine WILLIAM W. LACY, M.D., Assistant Professor of Medicine BILLY J. MATTER, M.D., Assistant Professor of Medicine L. CLIFFORD MCKEE, M.D., Assistant Professor of Medicine WALTER E. NANCE, M.D., Assistant Professor of Medicine; Markle Scholar DAVID N. ORTH, M.D., Assistant Professor of Medicine HAROLD H. SANDSTEAD, M.D., Assistant Professor of Medicine STEPHEN SCHILLIG, M.D., Assistant Professor of Medicine JAMES D. SNELL, JR., M.D., Assistant Professor of Medicine SAMUEL S. WRIGHT, M.D., Assistant Professor of Medicine BENJAMIN J. ALPER, M.D., Assistant Clinical Professor of Medicine WILLIAM J. CARD, M.D., Assistant Clinical Professor of Medicine ORRIE A. COUCH, JR., M.D., Assistant Clinical Professor of Medicine FREDERIC E. COWDEN, M.D., Assistant Clinical Professor of Medicine ROBERT M. FINKS, M.D., Assistant Clinical Professor of Medicine FRED GOLDNER, JR., M.D., Assistant Clinical Professor of Medicine JOHN H. GRISCOM, M.D., Assistant Clinical Professor of Medicine THOMAS B. HALTOM, M.D., Assistant Clinical Professor of Medicine AUBREY B. HARWELL, M.D., Assistant Clinical Professor of Medicine WILDER WALTON HUBBARD, M.D., Assistant Clinical Professor of Medicine HERMAN J. KAPLAN, M.D., Assistant Clinical Professor of Medicine ALVIN E. KELLER, M.D., Assistant Clinical Professor of Medicine RALPH W. MASSIE, M.D., Assistant Clinical Professor of Medicine THOMAS GUV PENNINGTON, M.D., Assistant Clinical Professor of Medicina W. ANDERSON SPICKARD, M.D., Assistant Clinical Professor of Medicine JAMES N. THOMASSON, M.D., Assistant Clinical Professor of Medicine CHARLES B. THORNE, M.D., Assistant Clinical Professor of Medicine RUSSELL D. WARD, M.D., Assistant Clinical Professor of Medicine JOHN LANIER WYATT, M.D., Assistant Clinical Professor of Medicine KAORU ABE, M.D., Instructor in Medicine ROBERT H. ALFORD, M.D., Instructor in Medicine THOMAS G. ARNOLD, JR., B.S., Martha Washington Straus-Harry H. Sm Instructor in Biophysics in Medicine

WINTON D. BATSON, M.S.S.W., Instructor in Medical Social Service JAY S. GOODMAN, M.D., Instructor in Medicine

ADELAIDE HOHANNESS, M.S.S.W., Instructor in Medical Social Service DONALD P. ISLAND, B.S., Instructor in Medical Research DOUGLAS J. JONES, JR., M.D., Instructor in Medicine

ZELL A. McGEE, M.D., Instructor in Medicine MARIAN ANN MELLY, B.S., Instructor in Medical Research ROBERT METCALFE, M.D., Instructor in Medicine ANDREW M. MICHELAKIS, M.D., Instructor in Medicine ROBERT C. NORTHCUTT, M.D., Instructor in Medicine C. McGAVOCK PORTER, M.D., Instructor in Medicine CONSTANTINE POTANIN, M.D., Instructor in Medicine JOHN N. STIEL, M.D., Instructor in Medicine T. EUGENE TEMPLE, M.D., Instructor in Medicine JOHN R. WOODS, M.D., Instructor in Medicine ARTHUR RAY ANDERSON, M.D., Clinical Instructor in Medicine EDWIN B. ANDERSON, M.D., Clinical Instructor in Medicine H. R. ANDERSON, M.D., Clinical Instructor in Medicine IAMES E. ANDERSON, JR., M.D., Clinical Instructor in Medicine WILLIAM C. ANDERSON, M.D., Clinical Instructor in Medicine LACK M. BATSON, M.D., Clinical Instructor in Medicine ROBERT T. COCHRAN, M.D., Clinical Instructor in Medicine RAYMOND R. CROWE, M.D., Clinical Instructor in Medicine FRED M. DOWNEY, JR., M.D., Clinical Instructor in Medicine IRWIN B. ESKIND, M.D., Clinical Instructor in Medicine E. WILLIAM EWERS, M.D., Clinical Instructor in Medicine HOWARD R. FOREMAN, M.D., Clinical Instructor in Medicine MILTON GROSSMAN, M.D., Clinical Instructor in Medicine JOSIAH B. HIBBITTS, M.D., Clinical Instructor in Medicine ROBERT M. HOLLISTER, M.D., Clinical Instructor in Medicine JOSEPH E. HURT, M.D., Clinical Instructor in Medicine IRA T. JOHNSON, M.D., Clinical Instructor in Medicine JOHN P. KINNARD, JR., M.D., Clinical Instructor in Medicine OTTO MORSE KOCHTITZKY, M.D., Clinical Instructor in Medicine ALEXANDER C. McLEOD, M.D., Clinical Instructor in Medicine CARL E. MITCHELL, M.D., Clinical Instructor in Medicine FRED D. OWNBY, M.D., Clinical Instructor in Medicine HARRY L. PAGE, M.D., Clinical Instructor in Medicine LENOR S. RIBEIRO, M.D., Clinical Instructor in Medicine MARVIN J. ROSENBLUM, M.D., Clinical Instructor in Medicine Sol A. ROSENBLUM, M.D., Clinical Instructor in Medicine ROBERT M. Roy, M.D., Clinical Instructor in Medicine HERBERT J. SCHULMAN, M.D., Clinical Instructor in Medicine ABRAM C. SHMERLING, M.D., Clinical Instructor in Medicine LUTHER E. SMITH, M.D., Clinical Instructor in Medicine PAUL R. STUMB, M.D., Clinical Instructor in Medicine W. DAVID STRAYHORN, JR., M.D., Clinical Instructor in Medicine EDWARD L. TARPLEY, M.D., Clinical Instructor in Medicine W. CARTER WILLIAMS, JR., M.D., Clinical Instructor in Medicine R. EUGENE JOHNSON, Ph.D., Research Associate in Medicine EDWIN G. STANT, Ph.D., Research Associate in Medicine MARIE T. WASSON, B.S., Research Associate in Medicine

DERMATOLOGY

ROBERT N. BUCHANAN, M.D., Clinical Professor of Dermatology and Hud the Division

FRANK G. WITHERSPOON, M.D., Assistant Clinical Professor of Dermatolog JAMES R. HAMILTON, M.D., Clinical Instructor in Dermatology BERNARD J. PASS, M.D., Clinical Instructor in Dermatology

NEUROLOGY

WILLIAM M. CLARK, M.D., Assistant Clinical Professor of Neurology and Anternation Head of the Division

BERTRAM E. SPROFKIN, M.D., Clinical Professor of Neurology CHARLES E. WELLS, M.D., Associate Professor of Neurology (On leave 1966, ERIC BELL, JR., M.D., Assistant Clinical Professor of Neurology JOHN SLOAN WARNER, M.D., Clinical Instructor in Neurology

501. METHODS IN CLINICAL SCIENCE. An interdepartmental course design to acquaint the student with the techniques, methods, and basic princh necessary to take careful histories, perform thorough physical examination and to understand and utilize basic laboratory procedures employed clinical medicine. Students are divided into small tutorial groups intensive work with patients on the wards at Vanderbilt University pital, the Veterans Administration Hospital, and Nashville General H pital. Similar tutorial groups are utilized in the laboratory where a dents learn methods for examining urine, blood, sputum, gastric conter feces, and body fluids. An introduction to neurologic diagnostic methi is included in the course. Additional training is given in special proble which relate to examination of pediatric, surgical, and obstetrical patier Radiological techniques are correlated with instructional sessions. G relative sessions are interspersed with the above. In these sessions, me ods by which the history, physical examination, and laboratory aidsu be used to arrive at diagnosis and decisions regarding further studya treatment are conducted by interdepartmental groups. Drs. Rogers, I nington, Hartmann, Wells, Minot, and the faculty of the Department of M icine; Dr. Christie and members of the Department of Pediatrics; Dr. He and members of the Department of Surgery; Dr. Goss and members of the partment of Obstetrics-Gynecology; Dr. Hillman and members of the Departm of Orthopedics: Dr. Klatte and members of the Department of Radiology; Dr. 04 and members of the Department of Pharmacology

502. CLINICAL CLERKSHIP. One-third of the third year class are assigned to the medical wards for twelve-week periods. During the medical deship, time is divided equally between the Vanderbilt University Hosp and the Veterans Administration Hospital. The medical wards at a derbilt University Hospital comprise 75 ward beds used in teaching plus an additional 21 beds in the Clinical Research Center. The Veter Administration Hospital has approximately 80 teaching beds. At a derbilt University Hospital these services include patients with dises of the nervous system and the skin in addition to general medical patients.

At the Veterans Administration Hospital there is a separate neurologic ward to which clinical clerks are assigned for two weeks during their medical clerkship. In addition, there is an active pulmonary service which functions within the medical service at the Veterans Administration Hospital. Patients are under the care of members of the faculty of medicine. Sub-departmental areas are organized for teaching and clinical research as well as management of patients. The clinical clerkship is regarded as the back bone of the student's training in medicine, and represents the most intensive in-patient experience offered within the Department. It is believed that learning is most vivid through direct experience with patients, obtaining histories, doing physicals and laboratory studies. amplified by reading and by intensive contact with members of the house staff and teaching staff. Students are given considerable responsibility under the close supervision of the teaching staff. Additional instruction is carried out during rounds with the Chief of Service. In these sessions, clinical clerks present cases for discussion and criticism and the more important fields of internal medicine are covered. Instruction in dermatology consisting of a series of clinics and clinic demonstrations are held once weekly within the Veterans Administration Hospital. Ward work is supplemented by numerous teaching and subspecialty conferences held throughout the academic year. Drs. Rogers, Brittingham, Clark, Des Prez, Salmon, Coppage, Buchanan, and members of the faculty of the Department of Medicine.

503. CLINICAL LECTURES AND DEMONSTRATIONS. A series of 18 amphitheater clinics held bimonthly throughout the year. Cases and discussions on diseases of importance in medicine are presented. One hour per week. Drs. Rogers, Brittingham, and Staff.

504. MEDICAL OUT-PATIENT CLINIC. During the fourth year, each student is assigned one morning clinic period a week in the out-patient department. This experience gives the fourth year student major responsibilities for patient work-up and care in an environment that provides supervision and consultation from many branches of medicine. The long term care and follow-up of ambulatory patients and further refinement of skills in history taking and physical examination are stressed. During this period the student becomes acquainted with the resources which other services can bring to bear in the cooperative management of patients with chronic disease. Experiences with orthopedics, physiotherapy, social service, and psychiatry are included. Dr. Law and Staff.

ELECTIVES IN MEDICINE. The Department of Medicine has many subspecialty divisions. Students in the third and fourth years may elect special clinical research work within any division of the Department of Medicine. In general, these electives follow the lines noted in the courses below. It should be indicated, however, that flexible arrangements can be worked out on an individual basis through consultation with the faculty member who will assume responsibility for supervision and guidance of the student. Such special electives must be cleared through Dr. Rogers and the Associate Dean for Medical Education. 522. MEDICAL GENETICS. First and Fourth years. A series of lectures human genetics. Topics discussed will include Mendelian inheritan cytogenetics, genetic linkage, population genetics, biochemical genetic mutation, the genetic control of protein synthesis, evolution, and gene counciling. One and one-half hours per week. SPRING. Dr. Nana

523. FUNDAMENTALS OF HUMAN NUTRITION. Second and Fourth year The biochemical and physiological basis of nutrition with special e phasis upon human subjects. It consists of lectures and assigned reading (Biochemistry 523.) One hour per week. SPRING. Dr. Mann.

525. CLINICAL HEMATOLOGY. Fourth year. A detailed, correlative clink laboratory course. Each session will open with presentation of a pair followed by microscopic study, demonstration of pertinent specialis tests, and lastly an informal correlative discussion of the entire disc process. Three hours per week. SPRING. Drs. Flexner, Hartmann, a Heyssel.

526. CLINICAL PHARMACOLOGY. Fourth year. Lectures and clinical se inars on the pharmacological basis of therapeutics and on the clinical and evaluation of drugs. (Pharmacology 522.) One hour per wa FALL. Dr. Oates and Staff.

527. CLINICAL ELECTROCARDIOGRAPHY. Fourth year. A course of letter and workshops dealing with the interpretation of clinically import electrocardiographic abnormalities. One hour per week. FALL I Battersby.

528. CORRELATION OF CLINICAL AND PHYSIOLOGIC DATA IN HEART I EASE. Fourth year. A case of heart disease from the wards will be sented at each session. Auditory and visual aids in the form of elect cardiograms, phonocardiograms, intracardiac pressure tracings, dyc. lution curves, and cineangiograms will be used to emphasize the clim findings. One hour per week. FALL & SPRING. Drs. France and Aria.

529. TOPICS IN INFECTIOUS DISEASES. Fourth year. A lecture course de ing with selected topics in infectious diseases. This course will se pathogenesis, host-parasite relationships, diagnosis, and treatment. I hour per week. FALL. Drs. Koenig and Rogers.

531. INTRODUCTION TO ELECTROCARDIOGRAPHY. Second year. Fur mentals of electrocardiography emphasizing lead systems, vector ther and the mechanisms of arrhythmias. A programmed text for self-teach will be provided to each student. One hour per week. FALL. Dr. Batter

532. LECTURES ON RENAL PATHOPHYSIOLOGY. Second and Fourth yer Twelve informal seminars will concern renal-electrolyte pathophysiology The first lecture will survey the history of renal physiology and the an valence of current attitudes toward the relevance of science. Basic rephysiology and hydrogen ion and electrolyte metabolism will be rent

ed. These parameters will then be related to clinical situations with particular emphasis on sodium, water, and hydrogen ion imbalances. Two hours per week; first twelve weeks. FALL. Dr. Ginn.

543. MEDICAL SPECIALTY CLINICS. Fourth year. Clinical experience in the following specialities is available to the student:

Allergy, Cardiology, Dermatology, Diabetes, Endocrinology, Gastroenterology, Hematology, Neurology, Chest and Infectious Disease. Three hours per week; six week units. Dr. Rogers and Staff.

561. CLERKSHIP IN MEDICINE. Fourth year. A clinical clerkship on the wards of Nashville General Hospital for those who wish to extend their third year experience. Under supervision of the faculty and housestaff. Full time; six week units. Dr. Paine.

562. GASTROENTEROLOGY CLERKSHIP. Fourth year. This clerkship offers a broad experience in all clinical phases of gastroenterology including diseases of the hepato-biliary system and pancreas. Participation in endoscopy, biopsy procedures and radiology is coupled with evaluation of patients and participation in one of the on-going research projects. Seminars, rounds, and evaluation of current literature are regularly scheduled. Full time; six week units. Drs. Law, Shull, and Collins.

563. HEMATOLOGY CLERKSHIP. Fourth year. Active participation in Hematology OPD, journal clubs, seminars, marrow conferences, and ward rounds at Vanderbilt University Hospital, Veterans Administration Hospital, and Nashville General Hospital. Laboratory experience in specialized hematologic, radioisotope and blood banking techniques. Optional research experience. Program can be tailored to needs and desires of individual student. Each student will have an adviser on the senior faculty. Full time; six week units. Dr. Hartmann.

564. CLERKSHIP IN NEUROLOGY. Fourth year. Advanced clinical clerkship experience on the neurology wards of Vanderbilt University Hospital, Veterans Administration Hospital, and Nashville General Hospital. Neurology outpatient experience, plus conferences and seminars in neurology. Special research projects optional. Full time; six week units. Dr. Clark.

565. CLERKSHIP ON CLINICAL RESEARCH CENTER WARD. Fourth year. The Clinical Research Center ward is operating at full strength with 21 beds under the aegis of all divisions of the Hospital. Most of the patients are medical and are a particularly selected and complicated group with a wide variety of diseases. Regular rounds will be made with the housestaff and investigators, and there will be an opportunity to attend the Clinical Research Conferences. Full time; six week units. Dr. Newman

and Staff

566. CLERKSHIP IN PULMONARY DISEASES. Fourth year. The basic form foof the clerkship will be that of a substitute internship. Student responmissibilities will include initial work-up and continuing treatment of new patients under the supervision of the full time staff on the Pulmonary, ease Service, Veterans Administration Hospital. Full time; six weeks Dr. Goodwin.

567. CLERKSHIP IN RENAL PATHOPHYSIOLOGY. Fourth year. This d ship offers active participation in the evaluation of patients with k disease and fluid-electrolyte imbalance, in biopsy procedures, and in a electrolyte rounds as well as experience in the hemodialysis progra acute and chronic renal failure. Optional pathophysiology semi research experience, and Journal Club. Six week units. FALL & SH Drs. Ginn and Matter.

568. CLERKSHIP IN INFECTIOUS DISEASES. Fourth year. During the d ship the student will evaluate patients with problems of infection a wards of Vanderbilt University Hospital. He will be an active per pant in the management and follow-up of these patients and will a all the regularly scheduled rounds, conferences, and seminars of the fectious Disease Division. Full-time; six-week units. Dr. Koenie.

Research opportunities are available in all divisions of the Deportunities of Medicine for selected students. Certain specific opportunities outlined below.

581. RESEARCH FELLOWSHIPS IN INFECTIOUS DISEASES. Fourth yes program consisting of approximately 70 per cent time on a research ject, 30 per cent in clinical work with problems related to infection. time for twelve or eighteen weeks. Drs. Koenig, Rogers, and Staff.

582. RESEARCH FELLOWSHIP IN SELECTED METABOLIC AND END DISEASES. Fourth year. Course covers selected topics in endocrin and metabolism by means of an assigned reading program, labor work, clinical demonstration, and seminar. The student has an tunity to examine and discuss patients and perform appropriate labor procedures utilizing enzymatic, colorimetric, spectrophotometric, iso chromatographic and bioassay techniques. A weekly seminar ro the assigned reading in the area of a single disease or group of relate orders of metabolism. Full time for six weeks. Drs. Salmon and Cr

583. RESEARCH FELLOWSHIP IN QUANTITATIVE CLINICAL CARDIOLOGY. In year. The students accepted for this course must be interested in study of cardiovascular disease and will be incorporated during their experiod into the full activities of this Division. Projects will in (1) Instruction in elementary hemodynamics and intracardiac prewave analysis; (2) Acquisition of basic techniques such as arterial mpuncture, right heart catheterization, familiarization with standard siological recording equipment; (3) Participation in work conference ward consultations. Twelve hours per week, for six or twelve m-Dr. Sinclair-Smith.

584. RESEARCH FELLOWSHIP IN NUCLEAR MEDICINE. Fourth year. I lems in hematology and new applications of radioisotopes in me

will be selected in accordance with the student's interest and background. Twelve hours per week, or full time for twelve weeks. Drs. Heyssel and Brill.

585. RESEARCH FELLOWSHIP IN CLINICAL PHYSIOLOGY. Fourth year. Students interested in participating in any research project being conducted by the staff members of the Division of Clinical Physiology (cardiac, pulmonary, and renal) are offered training on a selective basis. These fellowships provide undergraduate trainees with excellent early exposure and experience in the foundation and methodology of research work. Full time for twelve or eighteen weeks. Dr. Newman and Staff.

587. RESEARCH FELLOWSHIP IN GASTROENTEROLOGY. Fourth year. Students are offered the opportunity of participating in the on-going research studies of the Division of Gastroenterology involving investigations in gastric secretion, intestinal absorption, protein metabolism and bilirubin metabolism. Full time for twelve or eighteen weeks. Drs. Law and Collins.

588. RESEARCH FELLOWSHIP IN HEMATOLOGY. Fourth year. A program consisting of approximately 80 per cent time on a specific research project and 20 per cent time in correlative clinical work. Full time for twelve or eighteen weeks. *Dr. Hartmann and Staff.*

598. SEMINARS AND SELECTED TOPICS IN THE HISTORY OF MEDICINE. Fourth year. Students will participate in a seminar-type discussion of events and personalities in the history of medicine, each six week period being distinct from others. One hour per week. FALL & SPRING. Drs. Adams and Sheller.

399. MEDICINE SEMINAR. Fourth year. Discussion with the house staff and fellows of cases selected to focus on the major acute problems of hospitalized patients. Students will prepare case presentations, perform preassigned and elective reading, and participate in discussions aimed at a deeper understanding of pathophysiologic mechanisms and principles of treatment, as well as a practical approach to management. Two hours pet week. FALL & SPRING. Chief Medical Residents, Drs. Cleaveland, Stevens, and Staff.

Microbiology

VICTOR A. NAJJAR, M.D., Professor of Microbiology and Chairman of the Department

SIDNEY P. COLOWICK, Ph.D., American Cancer Society-Charles Hayden Foundation Professor of Microbiology

JOHN H. HASH, Ph.D., Associate Professor of Microbiology

SIDNEY HARSHMAN, Sc.D., Assistant Professor of Microbiology

WILLIAM M. MITCHELL, M.D., Ph.D., Assistant Professor of Microbiology

JOHN P. ROBINSON, Ph.D., Assistant Professor of Microbiology

MARYDA COLOWICK, M.S., Instructor in Microbiology MADAN GOIL, Ph.D., Research Associate in Microbiology FRANCES C. WOMACK, Ph.D., Research Associate in Microbiology

The Department of Microbiology offers courses leading to the h degree. Courses described below which are numbered in the 300 R are offered primarily for that program but are open to medical student special arrangement.

501. MICROBIOLOGY (324). Lectures and laboratory exercises. The portant bacterial, mycotic, parasitic, and viral infections are considfrom the standpoint of etiology, epidemiology, pathogenesis, immundand laboratory diagnosis. Ten hours of lectures, seminars, and labora exercises. Prerequisite: Biochemistry 501-502 or equivalent. FAIL Staff.

521. ADVANCED TOPICS IN MICROBIOLOGY (328). Second and Fourth_R Consists of a lecture series of selected topics of advanced nature in regulation of bacterial metabolism; (b) bacterial and viral structur, immunochemistry; (d) enzymology. The content is changed comple from year to year. Students may take the course no more than three Prerequisite: 501. Two hours per week. SPRING. [2] Staff.

522. LECTURES ON RESEARCH PROGRESS IN MOLECULAR BIOLOGY (3504)5 Second and Fourth years. A course co-sponsored by the Department Microbiology, Physiology, and Molecular Biology, in which member these and other departments present their own research activities lation to current problems in their field. First semester: bioph aspects will be stressed, including the application of modern phy chemical techniques to studies of macromolecules and enzyme and Second semester: physiological aspects will be stressed, including molecular basis of the function of specialized tissues, and the mecha for metabolic control of gene action and multi-enzyme systems and second semesters may be taken independently. FALL & SPRING.

581. EXPERIMENTAL METHODS IN MICROBIOLOGY (327). Second and h years. A rotating program of laboratory work concerned with: (a) m tion of bacterial metabolism, (b) structural studies on bacteria, bacteria mammalian viruses, (c) techniques in immunochemistry involving body synthesis, mechanism of antibody-antigen reaction and asso antibody reactions, (d) enzyme studies involving physicochemical erties, kinetics, thermodynamics and mechanisms of action. Prerep 501. Six hours per week. FALL & SPRING. Staff.

582. RESEARCH FELLOWSHIP IN MICROBIOLOGY. Fourth year. A rest fellowship with one member of the staff, involving an intensive station one of the areas listed under course 581. Full time for twelve or eige weeks. FALL, SPRING, OR SUMMER. Staff.

331. SPECIAL SEMINARS. Selected topics of current interest. [1] ³⁴ 399. RESEARCH. Staff.

Obstetrics & Gynecology

DONALD A. Goss, M.D., Professor of Obstetrics and Gynecology and Chairman of the Department

IOHN C. BURCH, M.D., Professor of Gynecology, Emeritus

FRANK E. WHITACRE, M.D., Professor of Obstetrics and Gynecology, Emeritus

D. SCOTT BAYER, M.D., Clinical Professor of Obstetrics and Gynecology

G. SYDNEY MCCLELLAN, M.D., Clinical Professor of Obstetrics and Gynecology EDWIN LEA WILLIAMS, M.D., Clinical Professor of Obstetrics and Gynecology

- STANLEY R. GLASSER, Ph.D., Associate Professor of Obstetrics and Gynecology (Research)
- PIERRE SOUPART, M.D., Ph.D., Associate Professor of Obstetrics and Gynecology (Research)
- EVERETT M. CLAYTON, JR., M.D., Associate Clinical Professor of Obstetrics and Gynecology

WILLARD O. TIRRILL, M.D., Associate Clinical Professor of Obstetrics

NEWTON B. GRIFFIN, M.D., Assistant Professor of Obstetrics and Gynecology

- MARIE-CLAIRE ORGEBIN-CRIST, Ph.D., Assistant Professor of Obstetrics and Gynecology (Research)
- RUSSELL T. BIRMINGHAM, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- Roger B. BURRUS, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- ROBERT L. CHALFANT, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- GEORGE B. CRAFTON, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- JAMES WOOD ELLIS, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- B. KIMBROUGH HIBBETT III, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- JAMES W. JOHNSON, M.D., Assistant Clinical Professor of Obstetrics and Gynecology

ROLAND D. LAMB, M.D., Assistant Clinical Professor of Gynecology

- HORACE T. LAVELY, JR., M.D., Assistant Clinical Professor of Gynecology
- HOMER M. PACE, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- Roy W. PARKER, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- ROBERT C. PATTERSON, JR., M.D., Assistant Clinical Professor of Obstetrics and Gymcology

C. GORDON PEERMAN, JR., M.D., Assistant Clinical Professor of Obstetrics and Gymcology

SIDNEY C. REICHMAN, M.D., Assistant Clinical Professor of Obstetrics and Gymcology

- HOUSTON ŠARRATT, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- ROBERT H. TOSH, M.D., Assistant Clinical Professor of Obstetrics and Gynecology
- THOMAS F. WARDER, M.D., Assistant Clinical Professor of Obstetrics and Gynecology

SCHOOL OF MEDICINE 7 69

LARRY ARNOLD, M.D., Clinical Instructor in Obstetrics and Gynecology HARRY BAER, M.D., Clinical Instructor in Obstetrics and Gynecology JAMES M. BRAKEFIELD, M.D., Clinical Instructor in Obstetrics and Gynecology BENJAMIN H. CALDWELL, JR., M.D., Clinical Instructor in Obstetrics and Gynecology cology

CHARLES M. GILL, M.D., Clinical Instructor in Obstetrics and Gynecolog PAUL A. GREEN, JR., M.D., Clinical Instructor in Obstetrics and Gynecolog ROBERT GRIFFON, M.D., Clinical Instructor in Obstetrics and Gynecolog CHARLES JOE HOBDY, M.D., Clinical Instructor in Obstetrics and Gynecolog CHARLES H. HUDDLESTON, M.D., Clinical Instructor in Obstetrics and Gynecolog ORRIN LESTER JONES, JR., M.D., Clinical Instructor in Obstetrics and Gynecolog RALPH R. KLING, JR., M.D., Clinical Instructor in Obstetrics and Gynecolog JAMES B. MILLIS, M.D., Clinical Instructor in Obstetrics and Gynecolog WILLIAM D. SUMPTER, JR., M.D., Clinical Instructor in Obstetrics and Gynecolog WILLIAM D. SUMPTER, JR., M.D., Clinical Instructor in Obstetrics and Gynecolog NORMAN E. WITTHAUER, M.D., Clinical Instructor in Obstetrics and Gynecolog

502. CLINICAL CLERKSHIP. One-sixth of the third year class is assigned: one-third of a semester. An introductory experience in inpatient obster and gynecology is obtained. Approximately one-third of the experie will be at the Nashville General Hospital. Drs. Goss, Griffin, and John

521. DEVELOPMENTAL BIOLOGY. First, Second, and Fourth years. A comp hensive, multidisciplinary study in mammalian developmental biologya reproductive physiology. This course is presented as a fundamental ap of biologic science and includes discussion of such topics as: gametogene ovulation (hypothalamic-hypophysial interrelationships), fertilizan implantation, placentation (functional and morphological), induce organogenesis, maternal-fetal relationships, fetal endocrinology, part tion, and lactation. Two hours of lecture per week. SPRING. (Anam 521.) Drs. Soupart, Glasser, and Staff.

522. OBSTETRICAL AND GYNECOLOGICAL PATHOLOGY. Fourth year. series of laboratory exercises in which the gross and microscopic character tics of the more important obstetrical and gynecological conditions demonstrated. (Pathology 526.) One hour per week. FALL. Drs. Ju son, Thomison, and Parker.

541. OBSTETRICS CLINIC. Fourth year. All obstetrical patients are see this clinic. Includes initial work-up, management, and postpartum de ups. Ordinarily, all new patients have a student work-up which is cheat by the house officer or consultant. Three hours per week; six-week up FALL & SPRING.

542. GYNECOLOGY CLINIC. Fourth year. Both new Gyn. and follow patients are seen-during this period. New Gyn. patients are worked by the students and checked by the house officer or consultant. Dur this time, post-operative cases are also seen. Three hours per week; s week units. FALL & SPRING.

543. OBSTETRICAL AND GYNECOLOGICAL CLINICS. Fourth year. Experience in the following clinics is available to the student: Tumor, Medical Obstetric, Contraceptive, Endocrine, RH Obstetrical, or Routine. These clinics count toward Ob-Gyn requirements for graduation. Three hours per week; six-week units. FALL & SPRING. Staff.

561. CLERKSHIP IN OBSTETRICS AND GYNECOLOGY. Fourth year. Clinical clerkship in Obstetrics-Gynecology at Vanderbilt University Hospital or Nashville General Hospital. Inpatient and outpatient services on both obstetrics and gynecology, night call on rotational basis. Weekly clinical and pathology conferences. Full time: six-week units. Drs. Goss, Griffin, Johnson, and Staff.

581. RESEARCH FELLOWSHIP IN OBSTETRICS AND GYNECOLOGY. Fourth year. Students may work with any member of the faculty on a problem relating to experimental aspects of reproductive biology. The laboratories and animal quarters of the department will be made available to the student. A written and oral report of the research will be required. Twelve hours per week; six-week units. Dr. Glasser and Staff.

582. CLINICAL RESEARCH IN OBSTETRICS AND GYNECOLOGY. Fourth year. Students will work with a member of the faculty on any problem relating to the diagnosis or treatment of an obstetrical-gynecological disease. Research will be carried out in the library, medical records room, outpatient and inpatient areas, and laboratories of the department. A written and oral report of the research will be required. Three hours per week; six week units. Staff.

599. SEMINAR IN DEVELOPMENTAL BIOLOGY. First, Second, and Fourth years. Weekly seminar including lectures and discussion by the full-time faculty, visiting lecturers, and participating students. (Anatomy 599.) One hour per week. FALL & SPRING. Drs. Glasser and Davies.

Orthopedic Surgery

J. WILLIAM HILLMAN, M.D., Professor of Orthopedic Surgery and Chairman of the Department

EUGENE M. REGEN, M.D., Clinical Professor of Orthopedic Surgery

¢ſ

d'

ed

ARTHUR LEROY BROOKS, M.D., Associate Professor of Orthopedic Surgery

GEORGE K. CARPENTER, M.D., Associate Clinical Professor of Orthopedic Surgery, Emeritus

S. BENJAMIN FOWLER, M.D., Associate Clinical Professor of Orthopedic Surgery WILLIAM J. MILLS, JR., M.D., Assistant Professor of Orthopedic Surgery

J. JEFFERSON ASHBY, M.D., Assistant Clinical Professor of Orthopedic Surgery, Emeritus

DON L. EYLER, M.D., Assistant Clinical Professor of Orthopedic Surgery JOHN GLOVER, M.D., Assistant Clinical Professor of Orthopedic Surgery

SCHOOL OF MEDICINE / 71

ARNOLD HABER, JR., M.D., Assistant Clinical Professor of Orthopedic Surgers ANDREW H. MILLER, M.D., Assistant Clinical Professor of Orthopedic Surgers THOMAS F. PARRISH, M.D., Assistant Clinical Professor of Orthopedic Surgery JOE G. BURD, M.D., Clinical Instructor in Orthopedic Surgery GEORGE K. CARPENTER, JR., M.D., Clinical Instructor in Orthopedic Surgery CHARLES M. HAMILTON, M.D., Clinical Instructor in Orthopedic Surgery JERRY CHEEK HUNT, M.D., Clinical Instructor in Orthopedic Surgery FRANK E. JONES, M.D., Clinical Instructor in Orthopedic Surgery JOHN R. JONES, M.D., Clinical Instructor in Orthopedic Surgery JOHN M. MILLER, M.D., Clinical Instructor in Orthopedic Surgery EUGENE M. REGEN, JR., M.D., Clinical Instructor in Orthopedic Surgery JOHN M. MILLER, M.D., Clinical Instructor in Orthopedic Surgery JOHN M. MILLER, M.D., Clinical Instructor in Orthopedic Surgery EUGENE M. REGEN, JR., M.D., Clinical Instructor in Orthopedic Surgery JOHN M. MILLER, M.D., Clinical Instructor in Orthopedic Surgery EUGENE M. REGEN, JR., M.D., Clinical Instructor in Orthopedic Surgery JOHN M. MILLER, M.D., Clinical Instructor in Orthopedic Surgery EUGENE M. REGEN, JR., M.D., Clinical Instructor in Orthopedic Surgery EUGENE M. REGEN, JR., M.D., Clinical Instructor in Orthopedic Surgery JOHN M. WAMPLER, M.D., Clinical Instructor in Orthopedic Surgery

501. METHODS IN CLINICAL SCIENCE: INTRODUCTION TO ORTHOPEDIC SURGE A series of lectures is presented in association with the course Methi in Clinical Science. Emphasis is placed upon the examination of musculoskeletal system, assessment of normal and abnormal gait, stand measurement and recording of ranges of joint motion and muscle streng Case presentations illustrate the basic mechanism of deformity and a ability. SPRING. Dr. Hillman and Staff.

502. INTRODUCTION TO CLINICAL ORTHOPEDIC SURGERY. A series of two lectures is presented in the third year, covering trumatic and non-traum musculoskeletal conditions. Emphasis is placed upon the physiological proach to the treatment of these problems. SPRING. Dr. Hillman & Staff.

503. ORTHOPEDIC INPATIENT SERVICE. During the third year sup clerkship, there are ten-day assignments of groups of two students to Orthopedic Ward of the Hospital. Combined resident-student rounds held each day with attending staff. (See Surgery 502.) Dr. Hillman Staff.

504. ORTHOPEDIC OUTPATIENT SERVICE. Outpatient experience in Ord pedic Surgery is coordinated with the general surgery and other dim (See Surgery 504.)

521. EMERGENCY CARE OF THE INJURED. Fourth year. This course emergency care of the injured includes discussion and demonstration of major concepts of care of the injured. It is a multidepartmental con coordinated by Orthopedic Surgery. It is particularly designed to fill gap of the current curriculum in a systematic and concentrated review of care of major injuries. It is also slanted toward both military and civil problems. One hour per week. spring. Drs. Hillman, Brooks, Millis representatives of other departments.

543. ORTHOPEDIC SURGERY SPECIALTY CLINICS. Fourth year. Experience in the following specialty clinics is available to the student: Cerebral Palsy, Hand, Crippled Children. Three hours per week, six-week units. Dr. Hillman and Staff.

561. CLERKSHIP IN ORTHOPEDIC SURGERY. Fourth year. An intensive clinical experience in Orthopedic Surgery including inpatient, outpatient and operating room assignments. Supervision is by the resident staff and the Orthopedic Department staff. The clerk will participate in the full activities of the department and may be assigned to: 1) Children's Orthopedics (State Crippled Children's Clinics and Vanderbilt), 2) Nashville General Hospital, Veterans Administration Hospital and Vanderbilt University Hospital. Full time; six week units. Dr. Hillman and Staff.

562. REHABILITATION CLERKSHIP. Fourth year. This clerkship is an integral part of the rehabilitation teaching program. Participation in programs providing long-term multidisciplinary medical care for inpatients and outpatients. Includes attendance at Birth Defects Clinic, Amputee Clinic, Cerebral Palsy Clinic, Arthritis Clinic, field trips to the Bill Wilkerson Hearing and Speech Clinic and the State Vocational Rehabilitation. The medical conditions which require team type care are demonstrated. In addition, the effective functioning of medical and paramedical participants will be in evidence. (Preventive Medicine 561.) Twelve hours per week; six week units. Drs. Hillman, Quinn, and Brooks.

581. RESEARCH FELLOWSHIP IN ORTHOPEDIC SURGERY. Fourth year. An opportunity for supervised experience in research related to the musculoskeletal system. Elements of project design and methods of assessment, development and application of laboratory equipment, controlled small animal experiments, and background correlative study will be emphasized. Currently active research projects in areas of biomechanics of bone, biochemical-biomechanical correlation, acute circulatory disorders in the extremities, scoliosis, and fat embolism are suggested topics, although other projects of particular interest to the fellow are equally acceptable. Each student will be given individual supervision by a staff member. Full time for twelve or eighteen weeks. Dr. Hillman and Staff.

Pathology

JOHN L. SHAPIRO, M.D., Professor of Pathology and Chairman of the Department VIRGIL S. LEQUIRE, M.D., Professor of Experimental Pathology BARTON MCSWAIN, M.D., Professor of Surgical Pathology FRANK R. BLOOD, Ph.D., Associate Professor of Pathology WILLIAM J. CHEATHAM, M.D., Associate Professor of Pathology ROBERT D. COLLINS, M.D., Associate Professor of Pathology

SCHOOL OF MEDICINE 7 73

DAVID L. BEAVER, M.D., Associate Clinical Professor of Pathology WILLIAM A. DEMONBREUN, M.D., Associate Clinical Professor of Pathole

Emeritus BERTRAM E. SPROFKIN, M.D., Associate Clinical Professor of Neuropatholog JOHN BROWN THOMISON, M.D., Associate Clinical Professor of Pathology FRANK C. WOMACK, M.D., Associate Clinical Professor of Pathology GEORGE BARNEY, D.V.M., Assistant Professor of Comparative Pathology

RICHARD D. BUCHANAN, M.D., Assistant Professor of Pathology (Military la of absence)

ALY FAHMY, M.D., Assistant Professor of Pathology

RUFUS JACK FREEMAN, M.D., Assistant Professor of Pathology (Military lass absence)

MARY E. GRAY, Ph.D., Assistant Professor of Experimental Pathology ROBERT G. HORN, M.D., Assistant Professor of Pathology

HARRY G. BROWNE, M.D., Assistant Clinical Professor of Pathology

FRED W. RYDEN, M.D., Ph.D., Assistant Clinical Professor of Pathology

THOMAS C. LITTLEJOHN, M.D., Assistant Clinical Professor of Forensic Patha

JERRY K. HUMPHREYS, M.D., Clinical Instructor in Pathology

JAMES M. PHYTHYON, M.D., Clinical Instructor in Pathology

The Department of Pathology offers courses leading to the Master and the Ph.D. degrees.

501. GENERAL AND SPECIAL PATHOLOGY (321). General and special path ogy presented by lectures, demonstrations, discussions, and laboran work. Gross and microscopic lesions characteristic of various diseases studied and correlated. The class assists with post-mortem examination performed during the course. [10] Dr. Shapiro and Staff.

521. PATHOLOGY OF DISEASES OF LABORATORY ANIMALS. Second and For years. A course providing training in the interpretation of lesion experimental animals, designed particularly to aid in recognition and im pretation of natural diseases which could influence results and to evalue laboratory animals as to their suitability for experimental purposes. In hour per week; six week units. Dr. Barney.

522. NEUROPATHOLOGY AND ITS CLINICAL CORRELATION. First, Second, Fourth years. In a series of weekly lectures and clinic-pathologic dem strations the anatomic, physiologic, and pathologic aspects of nerv system disease will be integrated. Designed for medical students at level. One hour per week. SPRING. Dr. Sprofkin.

523. VIRAL DISEASES OF IMPORTANCE TO MAN. Second and Fourth ya Major viral diseases of importance to man, their pathogenesis, patholog and laboratory diagnosis will be discussed in a series of lectures and se nars. One hour per week. SPRING. Drs. Cheatham and Ryden.

74 * VANDERBILT UNIVERSITY

524. GROSS PATHOLOGY OF THE NERVOUS SYSTEM. Second and Fourth years. A limited number of students will be accepted for participation in the weekly examination of current specimens obtained at necropsy and subsequent study of the pertinent microscopic specimens. One hour per week. FALL & SPRING. Dr. Sprofkin.

525. SURGICAL PATHOLOGY. Third year. Each session is initiated by a lecture to be followed by presentation of pertinent microscopic lesions and roentgenograms. In the laboratory, fresh gross specimens and loan collections of slides are studied under supervision of resident and senior staff. The course correlates the clinical manifestations and the gross and microscopic changes of the common surgical diseases. (Surgery 521.) Three hours per week for year. Dr. McSwain and Staff.

526. OBSTETRICAL AND GYNECOLOGICAL PATHOLOGY. Fourth year. A series of lectures and laboratory exercises concerning the more important gross and microscopic lesions of the female reproductive system. The morphologic and functional aspects of the lesions and their clinical significance are emphasized. (Obstetrics-Gynecology 522.) One hour per week. FALL. Drs. Thomison and Parker.

527. TROPICAL DISEASES. Fourth year. To stimulate interest in global medicine, the pathogenesis and diagnosis of infectious diseases (primarily tropical and subtropical in distribution) will be emphasized. Two hours per week. SPRING. Drs. Thomison and Ryden.

561. CLERKSHIP IN PATHOLOGY. Fourth year. Senior students will participate in all departmental activities, with responsibility in teaching and autopsy service. Investigative work as desired. Full time; six week units. Dr. Shapiro and Staff.

581. RESEARCH FELLOWSHIP IN ELECTRON MICROSCOPY. Fourth year. Techniques of electron microscopy as applied to specific research problems in pathology. Full time for twelve or eighteen weeks. Dr. Horn.

582. RESEARCH FELLOWSHIP IN PATHOLOGY (399). Fourth year. Opportunities for research are offered to properly qualified students. Hours by arrangement. Staff.

Pediatrics

AMOS CHRISTIE, M.D., Professor of Pediatrics and Chairman of the Department RANDOLPH BATSON, M.D., Professor of Pediatrics JAMES C. OVERALL, M.D., Clinical Professor of Pediatrics WILLIAM D. DONALD, M.D., Associate Professor of Pediatrics JOSEPH A. LITTLE, M.D., Associate Professor of Pediatrics

SCHOOL OF MEDICINE 7 75

SARAH H. SELL, M.D., Associate Professor of Pediatrics MILDRED STAHLMAN, M.D., Associate Professor of Pediatrics JOE M. STRAYHORN, M.D., Associate Clinical Professor of Pediatrics WILLIAM O. VAUGHAN, M.D., Associate Clinical Professor of Pediatrics THOMAS S. WEAVER, M.D., Associate Clinical Professor of Pediatrics WILLIAM F. FLEET, M.D., Assistant Professor of Pediatrics ROBERT C. FRANKS, M.D., Assistant Professor of Pediatrics FRANCIS A. PUYAU, M.D., Assistant Professor of Pediatrics LUTHER A. BEAZLEY, M.D., Assistant Clinical Professor of Pediatrics EUGENE L. BISHOP, JR., M.D., Assistant Clinical Professor of Pediatrics HEARN G. BRADLEY, M.D., Assistant Clinical Professor of Pediatrics, Emmi T. FORT BRIDGES, M.D., Assistant Clinical Professor of Pediatrics, Emeritus HARRY M. ESTES, M.D., Assistant Clinical Professor of Pediatrics DAN S. SANDERS, JR., M.D., Assistant Clinical Professor of Pediatrics CHARLES GORDON RENNICK SELL, M.B., B. Chiv., Assistant Clinical H fessor of Pediatrics WILLIAM BROWN WADLINGTON, M.D., Assistant Clinical Professor of Pedian ETHEL WALKER, M.D., Assistant Clinical Professor of Pediatrics ERLE E. WILKINSON, M.D., Assistant Clinical Professor of Pediatrics JAMES CARTER, M.D., Instructor in Pediatrics DOROTHY JEAN TURNER, M.D., Instructor in Pediatrics LINDSAY K. BISHOP, M.D., Clinical Instructor in Pediatrics E. THOMAS CARNEY, D.D.S., Clinical Instru tor in Pediatrics SAM W. CARNEY, JR., M.D., Clinical Instructor in Pediatrics NORMAN M. CASSELL, M.D., Clinical Instructor in Pediatrics ERIC MARTIN CHAZEN, M.D., Clinical Instructor in Pediatrics ISABELLA COLLINS, M.D., Clinical Instructor in Pediatrics WILLIAM M. DOAK, M.D., Clinical Instructor in Pediatrics RAY L. DUBUISSON, M.D., Clinical Instructor in Pediatrics PHILIP C. ELLIOTT, M.D., Clinical Instructor in Pediatrics JOHN P. FIELDS, M.D., Clinical Instructor in Pediatrics CHARLES HIRSHBERG, M.D., Clinical Instructor in Pediatrics ROBERT H. HUTCHESON, JR., M.D., Clinical Instructor in Pediatrics WILLIAM C. KING, D.M.D., Clinical Instructor in Pediatrics LEONARD J. KOENIG, M.D., Clinical Instructor in Pediatrics SOL L. LOWENSTEIN, M.D., Clinical Instructor in Pediatrics DEWEY G. NEMEC, M.D., Clinical Instructor in Pediatrics HARVEY SPARK, M.D., Clinical Instructor in Pediatrics JOSEPH STERANKA, M.D., Clinical Instructor in Pediatrics JACK TURNER SWAN, M.D., Clinical Instructor in Pediatrics RICHARD P. TABER, M.D., Clinical Instructor in Pediatrics ARVILLE WHEELER, M.D., Clinical Instructor in Pediatrics THOMAS B. ZERFOSS, JR., M.D., Clinical Instructor in Pediatrics

76 * VANDERBILT UNIVERSITY

501. METHODS IN CLINICAL SCIENCE: INTRODUCTION TO PEDIATRICS. As an integral part of the course Methods in Clinical Science, a series of lectures will be given in the second year. These lectures will prepare the students for their clinical experiences in the third year. Additionally, students are rotated through the department in small tutorial groups. SPRING. Dr. Christie and Staff.

502. CLINICAL CLERKSHIP. One-sixth of the third year class is assigned to the Pediatric wards for six weeks. Bedside instruction is given and patients are studied, emphasis being placed on the structure and function of the normal child. Physical diagnosis and variations from the normal and their prevention are considered. Drs. Christie, Little, and Staff.

503. PEDIATRIC OUTPATIENT SERVICE. During the Senior year, the class spends six weeks in a planned program in the Pediatric Outpatient Clinics. Patients, including well babies in a special clinic, are assigned to students who record histories, make physical examinations, and carry out diagnostic and immunization procedures. Diagnosis and treatment are considered. Students rotate through special Pediatric clinics. Dr. Christie.

504. CLINICAL LECTURES AND DEMONSTRATIONS. A series of eighteen Amphitheater Clinics held biweekly throughout the year. Cases and discussions on diseases of importance in pediatrics are presented. Dr. Christie and Staff.

521. SIGNPOSTS OF HUMAN GROWTH AND DEVELOPMENT. First year. A series of demonstrations on growth of children using ward and clinic material. Deviations from the normal growth pattern and congenital abnormalities will be shown. One hour per week; six week units. Dr. Christie and Staff.

522. LECTURE SERIES IN PEDIATRICS. Fourth year. Lectures will cover the spectrum of diseases in the pediatric age group including a discussion of prenatal period, the newborn child, growth and development, and nutrition of infants and children. The preventive aspects of pediatrics are discussed. Focus is primarily on the normal child as a basis for the study of the diseases of children. One hour per week. FALL & SPRING. Dr. Christie and Staff.

524. PEDIATRIC PATHOPHYSIOLOGY. Second and Fourth years. Lecture course concerning the special problems of the newborn child, alterations in normal physiology produced by various disease states, cardiac diseases, endocrine, renal, and metabolic disorders. One hour per week. FALL & SPRING. Drs. Puyau and Stablman.

525. PEDIATRIC SURGICAL PROBLEMS. Fourth year. A combined course offered by the departments of Surgery and Pediatrics utilizing patient demonstrations and didactic lectures. Diagnosis, preoperative preparation, surgery, and postoperative care will be stressed. Course may be elected for units of six weeks to all year. (Surgery 525.) One hour per week. FALL & SPRING. Drs. Little and Scott.

527. PEDIATRIC WARD WALK. Fourth year. The most interesting a instructive cases currently on the Pediatrics Wards will be shown a week. Diagnostic and therapeutic problems will be discussed. In elect one or more periods. One hour per week; six week units. I Little and Staff.

528. RECENT ADVANCES IN PEDIATRIC INFECTIOUS DISEASES. Second, The and Fourth year. A lecture course in clinical infectious diseases of child emphasizing the recent advances in common diseases, unusual disea and special problems. Patients and special laboratory demonstration will be shown when applicable. One hour per week. SPRING. J Sell, Turner, and Fleet.

543. PEDIATRIC SPECIALITY CLINICS. Fourth year. Experience in t following speciality clinics is available to the student: Pediatric Ca ology, Mental Retardation, Practical Pediatrics, Allergy, Endocrine a Metabolic, and Seizure. Three hours per week; six week units.

561. CLERKSHIP IN PEDIATRICS. Fourth year. The student shall serve Extern on the wards at Vanderbilt University Hospital or Nashville Geral Hospital. He shall have all associated responsibilities, include attendance at conferences. Full time; six week units. Drs. Christian Donald.

562. CLERKSHIP IN NEWBORN CARE. Fourth year. Students will k structed three afternoons a week in the special care involved in the sp vision of newborns. Prerequisite (or concomitant): Pediatric Pathon ology (Pediatrics 524). Six hours per week; six week units. Stahlman.

581. RESEARCH FELLOWSHIP IN NEWBORN PHYSIOLOGY. Fourth p Fellowship offering a concentrated experience in the newborn nursey, the laboratory. For students with special interest in the field of new physiology. Full time for twelve or eighteen weeks. Dr. Stablman.

582. RESEARCH FELLOWSHIP IN PEDIATRIC INFECTIOUS DISEASE. For year. Fellowship on special problems in infectious disease in pedian Special techniques, including immunofluorescent techniques, in clim microbiology included. Full time for six to twelve weeks. FALL & SPEC Dr. Sell.

Pharmacology

ALLAN D. BASS, M.S., M.D., Professor of Pharmacology and Chairman of the Department

MILTON T. BUSH, Ph.D., Professor of Pharmacology MURRAY HEIMBERG, Ph.D., M.D., Professor of Pharmacology LEON HURWITZ, Ph.D., Professor of Pharmacology FRIDOLIN SULSER, M.D., Professor of Pharmacology JOHN E. CHAPMAN, M.D., Associate Profesor of Pharmacology ERWIN J. LANDON, M.D., Ph.D., Associate Professor of Pharmacology JOHN A. OATES, M.D., Associate Professor of Pharmacology CHARLES B. PITTINGER, M.D., Associate Professor of Pharmacology B. V. RAMA SASTRY, D.Sc., Ph.D., Associate Professor of Pharmacology DANIEL M. BUXBAUM, Ph.D., Assistant Professor of Pharmacology FLORIS DE BALBIAN VERSTER, M.S., Ph.D., Assistant Professor of Pharmacology JAMES V. DINGELL, M.S., Ph.D., Assistant Professor of Pharmacology G. ALAN ROBISON, M.S., Ph.D., Assistant Professor of Pharmacology IRA WEINSTEIN, Ph.D., Assistant Professor of Pharmacology JOHN CAVANAUGH, M.D., Ph.D., Instructor in Pharmacology JOHN W. CHAMBERS, Ph.D., Instructor in Pharmacology WILLIAM E. FANN, M.D., Instructor in Pharmacology JORGEN MALMQUIST, M.D., Instructor in Pharmacology HENRY G. WILCOX, Ph.D., Instructor in Pharmacology KIM DAYANI, M.D., Research Associate in Pharmacology TOM FEAGIN, M.D., Research Associate in Pharmacology PAUL JOINER, Ph.D., Research Associate in Pharmacology HOWARD KLAUSNER, Ph.D., Research Associate in Pharmacology M. Kohout, C.Sc., Research Associate in Pharmacology ELAINE SANDERS, Ph.D., Research Associate in Pharmacology W. BOLTON SMITH, M.S., Research Associate in Pharmacology

The Department of Pharmacology offers courses leading to the Master's and Ph.D. degrees. Courses described below which are numbered in the 300 series are offered primarily for that program but are open to medical students by special arrangement.

JOI. PHARMACOLOGY (321). Lectures in which the reaction of the human organism to chemical substances is taken up in a systematic manner, and typical reactions demonstrated by animal experiments. Laboratory exercises in which the student has an opportunity to become familiar with pharmacological techniques. Five lectures a week and nine hours of laboratory work a week. SPRING. [8] Dr. Bass and Staff. 522. CLINICAL PHARMACOLOGY. Fourth year. Lectures and clinical inars on the pharmacological basis of therapeutics and on the clinical and evaluation of drugs. (Medicine 526.) One hour per week. Dr. Oates.

523. THE RELATIONSHIP OF CHEMICAL STRUCTURE TO PHARMACOLOGI ACTION (323-1). Fourth year. Discussion and demonstration of relations between pharmacological action and molecular structure organic substances, with special reference to the physical-chemical perties of these substances. Two hours per week. SPRING. Dr. Buth. (Not offered 1967/68.)

524. AUTONOMIC PHARMACOLOGY (323-4). Fourth year. The mechan of storage and release of catecholamines and acetylcholine will be discus Lectures on drugs modifying autonomic function through an action of mone synthesis, storage, release, or direct combination with tissue em or receptors will be given. FALL. [2] Drs. Bass and Sastry. (Not of 1967/68).

525. METABOLISM OF ANTIBACTERIAL AND ANTIFUNGAL AGENTS (3) Fourth year. Lectures and conferences on the penicillins, broad spear antibiotics, fungicidal, or fungistatic agents. Emphasis will be placed mode of action, distribution, excretion, and toxicity of the agent. I hours per week. Spring. Dr. Weinstein. (Not offered 1967/68.)

526. MECHANISM OF DRUG ACTION (322). Second and Fourth years. I tures and seminars will be held for students interested in acquiring a kinedge of the biochemical and physicochemical mechanisms involved in a action. This will include: (1) drug-receptor interactions, (2) the biochemical basis of drug therapy. FALL. [2] Dr. Hurwitz.

527. PSYCHOPHARMACOLOGY: PHARMACOLOGY OF PSYCHOTROPIC DRUGS (5). Second and Fourth years. Three separate but related courses a emphasize the neuropharmacological, neurophysiological, neurochemia and psychological aspects of psychotropic drugs. Besides presenting rent theories on the mode of action of psychotherapeutic drugs, the us these agents as tools to investigate brain function will also be consider. The significance of available biochemical, pharmacological, and behavin dara, with regard to possible psychopathological processes in man, w be critically reviewed. Prerequisite: (Anatomy 335.) Two hours p week. SPRING. [2] Drs. Sulser and Dingell.

528. ENDOCRINE PHARMACOLOGY (323-3). Second and Fourth year. E phasis placed on the mechanism of action of hormones and chemical age used as substitutes for physiologically occurring hormones. Drugs used modify action, synthesis, and release of natural hormones will be discuss Two hours per week. FALL. [2] Dr. Heimberg and Staff.

529. ANTIMETABOLITES AS PHARMACOLOGICAL AGENTS IN CANCER CEEL THERAPY (323-2). Fourth year. Pharmacology of antinucleic acid compou

80 / VANDERBILT UNIVERSITY

employed in cancer chemotherapy. First half of the course provides a comprehensive review of current knowledge of the chemistry and biology of nucleic acids. Two hours per week. SPRING. [2] Dr. Landon.

530. PHARMACOLOGY OF ANESTHESIA (325). Fourth year. A course related to pharmacologic principles involved in the action of anesthetic agents. This will include discussions of: the chemistry of anesthetic agents; physico-chemical principles of absorption, distribution, and elimination; theories of anesthesia; factors modifying drug responses; biotransformation toxicity and modifications of anesthesia under hyperbaric conditions. (Anesthesiology 521). One hour per week. FALL. [1] Dr. Pittinger.

531. TECHNIQUES IN NEUROPHARMACOLOGY OF THE CENTRAL NERVOUS SYS-TEM. An instrumental analysis course which will demonstrate the use of equipment and techniques employed in the evaluation of drugs which modify function of the central nervous system. The course will cover primarily fundamental biochemical and physiological techniques as applied to neuropharmacology. Prerequisite: Biochemistry 501-502 or Biochemistry 326. FALL. [2] Dr. F. de Balbian Verster. (Not offered 1967/68.)

581. RESEARCH FELLOWSHIP IN PHARMACOLOGY. Fourth year. The various areas of Pharmacology including Clinical Pharmacology. Full time for twelve or eighteen weeks. FALL & SPRING. Dr. Bass.

398. SEMINAR IN PSYCHOPHARMACOLOGY (331a-331b). An interdepartmental seminar involving the Departments of Pharmacology, Psychology, Psychiatry, and Anatomy. The topics covered relate to etiology of mental illness, behavioral psychology, and mechanism of action of drugs which are employed both as psychomimetic agents and psychotherapeutic agents. One hour per week. FALL & SPRING. [I-I] Staff.

399. SEMINAR IN PHARMACOLOGY (330a-330b). Fourth year. Admission to course by arrangement. One hour per week. FALL & SPRING. [1-1] Staff.

399. RESEARCH. Experimental and theoretical aspects of the mechanism of action of chemical substances on cell, tissue, and organ function, especially in the following areas: cardiac pharmacology, cancer chemotherapy, antimetabolites as chemotherapeutic agents, metabolic fate of narcotic and tranquilizing drugs, design and synthesis of new molecules as possible chemotherapeutic substances. FALL & SPRING. Hours and credit by arrangement. Staff.

Physiology

CHARLES RAWLINSON PARK, M.D., Professor of Physiology and Chairman of Department H. C. MENG, M.D., Ph.D., Professor of Physiology ROBERT L. POST, M.D., Professor of Physiology EARL W. SUTHERLAND, JR., M.D., Professor of Physiology JANE H. PARK, Ph.D., Associate Professor of Physiology EDWARD J. BATTERSBY, M.D., Assistant Professor of Physiology REGINALD W. BUTCHER, Ph.D., Assistant Professor of Physiology; Investigant Howard Hughes Medical Institute OSCAR CROFFORD, M.D., Assistant Professor of Physiology; Investigator, Hour Hughes Medical Institute JOHN H. EXTON, M.D., Ph.D., Assistant Professor of Physiology REN JYE HO, Ph.D., Assistant Professor of Physiology JOEL G. HARDMAN, Ph.D., Assistant Professor of Physiology VICENTE HONRUBIA, Ph.D., Assistant Professor of Physiology TETSURO KONO, Ph.D., Assistant Professor of Physiology DAVID M. REGEN, Ph.D., Assistant Professor of Physiology; Investigator, Hu ard Hughes Medical Institute GUY H. BOND, Ph.D., Instructor in Physiology PHILIP W. FELTS, M.D., Instructor in Physiology JOHN G. T. SNEYD, Ph.D., Instructor in Physiology A. H. UNDERWOOD, Ph.D., Instructor in Physiology JUDITH S. BOND, Ph.D., Research Associate in Physiology M. S. CABUT, Ph.D., Research Associate in Physiology NAOMI FRIEDMANN, Ph.D., Research Associate in Physiology M. GHOSAL, Ph.D., Research Associate in Physiology EIJI ISHIKAWA, M.D., Research Associate in Physiology HIKARU KOIDE, M.D., Research Associate in Physiology T. FRANKLIN WILLIAMS, M.D., Research Associate in Physiology

degree. Courses described below which are numbered in the 300 series are offered primarily for that program but are open to medical studen by special arrangement.

501. PHYSIOLOGY (321). This course consists of lectures, conference and laboratory work, designed to cover the essentials in physiology first year medical students. It or its equivalent is also required of a graduate students majoring in physiology. SPRING. [8] Dr. Park a Staff.

521. TOPICS IN GENERAL PHYSIOLOGY. First year. The course will sta with the basic cellular processes of accumulation, membrane transport

82 7 VANDERBILT UNIVERSITY

bioelectric potentials, contraction, and secretion from the point of view of elementary applied physical chemistry. The discussion will extend to the operation of these processes in the function of erythrocytes, nerves, sensory receptors, muscles, glands, and excretory organs. When applicable the mechanism of the hormonal control of these cells will be included. One hour per week. SPRING. Dr. Past.

522. LECTURES ON RESEARCH PROGRESS IN MOLECULAR BIOLOGY (350a-350b). Second and Fourth years. A course co-sponsored by the Departments of Microbiology, Physiology, and Molecular Biology, in which members of these and other departments present their own research activities in relation to current problems in their field. First semester: biophysical aspects will be stressed, including the application of modern physicochemical techniques to studies of macromolecules and enzyme action. Second semester: physiological aspects will be stressed, including the molecular basis of the function of specialized tissues, and the mechanisms for metabolic control of gene action and multi-enzyme systems. (Microbiology 522.) First and second semesters may be taken independently. Two hours per week. FALL & SPRING. [2-2]

581. RESEARCH FELLOWSHIP IN PHYSIOLOGY. Fourth year. Opportunities will be available in the fields of membrane transport and intermediary metabolism and in the hormonal control of these processes. Full time for twelve or eighteen weeks. Dr. Park.

581. ADVANCED PHYSIOLOGY (323). Second and Fourth years. This course deals with special topics in physiology and consists of laboratory work and conferences. Prerequisite: 501 or equivalent. Hours and credit by arrangement. Dr. Park and Staff.

322. PHYSIOLOGICAL TECHNIQUES AND PREPARATIONS. A course designed for advanced students. Hours and credit by arrangement. Dr. Park and Staff.

399. RESEARCH. Staff.

Preventive Medicine & Public Health

ROBERT W. QUINN, M.D., C.M., Professor of Preventive and Social Medicine and Chairman of the Department

RICHARD O. CANNON, M.D., Professor of Hospital Administration

ALVIN E. KELLER, M.D., Clinical Professor of Preventive Medicine and Public Health, Emeritus

LEWIS B. LEFKOWITZ, JR., M.D., Assistant Professor of Preventive Medicine

ANNE SWEENEY, M.A., Assistant Professor of Medical Social Service

W. CARTER WILLIAMS, M.D., M.P.H., Assistant Professor of Preventive Medicine and Public Health

SCHOOL OF MEDICINE + 83

- JOSEPH M. BISTOWISH, M.D., Assistant Clinical Professor of Preventive Multicine and Public Health
- A. H. TRITHART, D.D.S., M.P.H., Assistant Clinical Professor of Denia Health
- C. B. TUCKER, M.D., M.P.H., Assistant Clinical Professor of Preventive Multicine and Public Health
- THERESA SCOTT CARTER, M.S.S.W., Instructor in Medical Social Service
- RUTH M. HAGSTROM, M.D., Instructor in Preventive Medicine
- DOROTHY J. TURNER, M.D., Instructor in Preventive Medicine
- RAYMOND R. CROWE, M.D., Clinical Instructor in Preventive Medicine and Public Health
- FRED M. DOWNEY, M.D., Clinical Instructor in Preventive Medicine and Pull Health
- THOMAS W. HUNTER, M.A., Clinical Instructor in Preventive Medicine a Public Health
- JAMES E. GOLDSBERRY, M.D., Clinical Instructor in Preventive Medicine an Public Health
- JOHN HEINTZELMAN, M.D., Clinical Instructor in Preventive Medicine al Public Health
- WILDER WALTON HUBBARD, M.D., Clinical Instructor in Preventive Media and Public Health
- CURTIS P. MCCAMMON, M.D., M.P.H., Clinical Instructor in Preventive Mi icine and Public Health
- CON O. T. BALL, Research Associate in Preventive Medicine
- PANUEL NYE LOWRY, M.A., Research Associate in Preventive Medicine

BIOSTATISTICS

CHARLES F. FEDERSPIEL, Ph.D., Assistant Professor of Biostatistics FRANK C. CLARK, Ph.D., Assistant Professor of Biostatistics HOMER A. SpRAGUE, M.P.H., Instructor in Biostatistics ANN DILLON, M.S.P.H., Clinical Instructor in Biostatistics YAW CHIN HO, M.A., Research Associate in Biostatistics

501. EPIDEMIOLOGY: GENERAL PRINCIPLES. Basic principles are present in a series of lectures during the first semester of the second year. Media statistics is taught during the second semester and these two courses or plement each other. The approach in epidemiology is to acquain the students with the general principles of epidemiology dealing with agent, host, and environmental factors, their interrelationships, and fluence on health and disease. The aim is to get the student to think broad epidemiological terms of his patients and their problems, be the physical, emotional, or socioeconomic. One hour per week; first tweeks. FALL. Drs. Quinn, Lefkowitz, and Hagstrom.

502. MEDICAL STATISTICS. Designed to acquaint the second year stude with the elements of statistical reasoning as applied to medical problet Topics include: Formulation of hypotheses; design of clinical and labor

84 * VANDERBILT UNIVERSITY

tory experiments; methods of collection and tabulation of data; analysisof-variance techniques and nonparametric methods; methodology of shortand long-term medical studies; evaluation and use of vital statistics data. The course is organized around the presentation of examples from the literature. Twenty-one hours. FALL & SPRING. Dr. Federspiel and Mr. Sprague.

503. PRINCIPLES OF PUBLIC HEALTH AND PREVENTIVE MEDICINE. A COURSE of lectures intended to provide the second year student with the preventive point of view in the practice of medicine, to make him aware of the major health problems and of the changing nature of major health problems, and to acquaint him with the organized forces working for the advancement of public health. The following subjects are among those considered: epidemiology, etiology, modes of transmission and methods of prevention and control of communicable diseases; vital statistics; maternal and infant hygiene; the venereal disease problem; the more common occupational diseases; civilian defense and disaster control; school hygiene; principles of housing; water supplies and sewage disposal, and population problems. Clinical preventive medicine is emphasized in relation to cardiovascular diseases, diabetes, cancer, and the problems of geriatrics are presented. Stress is plated on principles in public health administration at international, national, state, and local levels and their relation to the practitioner of medi-Twenty-one hours. FALL & SPRING. Dr. Quinn and Staff.

521. MEDICINE IN FAMILIES AND THE COMMUNITY. First year. Three afternoons are spent in discussion-seminars on the relevance of the practice of preventive medicine to continuing and comprehensive care. Medical care is emphasized from the point of view of individualized consideration of patients for the maintenance of good health and rehabilitation from ill health, taking account of family factors and general community environment. Comprehensive care means health promotion; prevention of disease through immunization and health education; maternal and infant health guidance, and periodic health evaluation; early diagnosis and treatment; disability limitation; and rehabilitation. Case presentations and discussion of families with medical problems illustrating the points above will be made in another three afternoons. Field visits are made to the Bill Wilkerson Hearing and Speech Center, Metropolitan Health Department, Senior Citizens' Center (seminar on aging), and Central State Hospital (Geriatrics Pavillion). Medical economics, current and passed medical legislation, are presented in appropriate detail. Three hours per week, last twelve weeks. FALL. Dr. Quinn and Staff and Division of Human Behavior.

322. APPLIED EPIDEMIOLOGY. Second year. The principles of epidemiology are applied to the study of infectious, non-infectious, and chronic diseases and conditions such as accidents. Factors influencing the occurrence and distribution of various diseases and conditions are studied with the ultimate objective of developing programs for their prevention and control. Application of epidemiologic methods are demonstrated by means of exercises and problems. Tuberculosis, rheumatic fever, and syphillis are taken as examples of chronic diseases which have a profound physical, emotional, economic, and social effect on the patient, his family, and the commune The epidemiology and natural history of these illnesses are considered detail, with case presentations, and discussion of prevention and common One hour per week. SPRING. Drs. Quinn, Federspiel, Lefkowitz, and H strom.

523.1. BIOMETRY I. Third and Fourth years. Discussion of the and of data arising from laboratory experimentation in the biological medical sciences. Emphasis is placed on general biological models and ference based on analysis of variance techniques. Particular attention given to methods of multiple comparisons, the single degree of freed and the assumptions underlying analysis of variance. Three hous week. FALL. Dr. Federspiel.

523.2. BIOMETRY II. Third and Fourth years. Advanced topics in a lytical methods for data resulting from biological research. Various perimental designs and their corresponding models and analyses are cussed. Other topics include random, fixed, and mixed models; vaim components; multiple regression techniques; and covariance. Three has per week. SPRING. Prerequisite: Preventive Medicine 523.1. Dr. Ga

525. POPULATION PROBLEMS AND FAMILY PLANNING. First, Second, a Fourth years. This course is an introduction to population proba and family planning. It includes the causes of overpopulation and us population; the problems created by overpopulation, in relation to in supply and nutrition, environmental sanitation and education. The biolo of human reproduction, adaptation, and selection, sex practices, and py lation change are considered in as much detail as possible. The ouends with consideration of the infertile family wanting a child and fin methods for limiting family size. One hour per week, last twelve we FALL & SPRING. Drs. Quinn, Cappannari, and Rhamy.

526. VITAL STATISTICS AND MEDICAL RECORDS. First, Second, Third, a Fourth years. Health data sources including censuses, vital statist morbidity reporting, the National Health Survey, special studies, p lems in handling health data, classification, standardization of rates, tables and the person-period concept. Two hours per week. FALL & Dillon.

527. CLINICAL TRIALS AND MEDICAL SURVEYS. Third and Fourth je Design, execution, and analysis of clinical trials; interpretation of res Observational surveys and experimental trials. Examination and critic of relevant literature. Two hours per week. SPRING. Dr. Federspil.

528. THEORY OF SAMPLING. Third and Fourth years. Developmen sampling methods with emphasis on sample selection from human plations, construction of frames, choice of sampling unit, stratified sampli subsampling and double-sampling designs, ratio, and regression estime Three hours per week. SPRING. Mr. Sprague.

86 + VANDERBILT UNIVERSITY

529. SAMPLING PROJECT. Third and Fourth years. To be elected concurrently with Theory of Sampling. May be carried out in conjunction with other departments, medical school faculty, or local agencies such as the Metropolitan Planning Commission. One hour per week. SPRING. Staff.

530. BIOASSAY. Fourth year. Statistical techniques employed in assessing the potency of biologic compounds through the use of living organisms. Two hours per week. Prerequisite: Preventive Medicine 523.2 or equivalent. SPRING. Dr. Federspiel.

541. INTRODUCTION TO COMPREHENSIVE MEDICAL CARE. First year. There will be two introductory sessions dealing with student-family relations and the kind of interviewing appropriate for home visits. Each student will be assigned one family from the roster of the Vanderbilt Family Clinic (see Preventive Medicine 544.) He will visit this family at their home three times during the semester. He will discuss his first visit with a clinical adviser and later visits with a panel of advisers including public health nurses and social workers and classmates. The advisers will be selected from faculty members of the Department. At the end of the semester several sessions will be devoted to presentations and discussions of families of particular teaching value. Students completing this course will be offered the opportunity to continue family visits for the remainder of their years at Vanderbilt. Two additional assignments will be given as an introduction to community health. Each student will accompany a visiting nurse from the Metropolitan Health Department on a regular visit to a home-bound patient. He will also receive an orientation to the Family Planning Service of Metropolitan Nashville and observe a Family Planning Clinic in operation. Two hours per week. spring. Drs. Quinn, Lefkowitz, Hagstrom, and Turner.

544. CLINICAL CLERKSHIP IN FAMILY AND COMMUNITY MEDICINE. Fourth year. This clerkship will be a combined experience in the Family Clinic. the Medical L Clinic (Venereal Disease Clinic), and the Metropolitan Health Department. It will consist of six or twelve afternoon sessions once a week, to be spent in the Vanderbilt Family Clinic, the Venereal Disease Clinics of Vanderbilt Hospital and the Metropolitan Health Department, and the Visiting Nurse Service of the Metropolitan Health Department. The proportion of time to be spent in each of these units may be selected by the student electing this course, and should be prearranged with the Department of Preventive Medicine.

In the Family Clinic, students will have the opportunity of participating in the long-term, comprehensive care of selected families. They will have the opportunity to serve, in a clinical capacity, families they may have studied in the elective course Introduction to Comprehensive Medical Care, P.M. 541. The experience in venereal diseases will include seeing patients with diagnostic problems at Vanderbilt Hospital, patients with acute syphilis and gonococcal infections at the Health Department and experience in the modern epidemiologic and case finding measures in current use. Students will make home visits with public health nurses from the Metropolitan Health Department who are furnishing home nursing services prescribed by the patient's physician. The students will receive orientation to the Family Planning Program of the Metropolitan Health Department and will participate in one of the Family Planning Clinics. Certain he pitalized and clinic patients who have problems within the scope of teaching program will be the subjects of group discussions. Three he per week for six-week units. Drs. Quinn, Lefkowitz, Hagstrom, Im Johnson, Cappannari, and Chapman.

561. REHABILITATION CLERKSHIP. Fourth year. This clerkship is an interpart of the rehabilitation teaching program directed by Dr. Kampure Participation in programs providing long-term multidisciplinary medicate for inpatients and outpatients. Includes attendance at Birth De Clinic, Amputee Clinic, Cerebral Palsy Clinic, Arthritis Clinic, Field m to the Bill Wilkerson Hearing and Speech Center and the State Vocam Rehabilitation. The medical conditions which require team-type care demonstrated. In addition, the effective functioning of medical and participants will be in evidence. (Orthopedic Surgery for Twelve hours per week; six-week units. Drs. Hillman, Quinn, Bra Kampmeier, Saunders, and Alper.

Psychiatry

WILLIAM F. ORR, M.D., Professor of Psychiatry and Chairman of the Depart RUE L. CROMWELL, Ph.D., Professor of Psychology in Psychiatry CHARLES E. GOSHEN, M.D., Associate Professor of Psychiatry FRANK H. LUTON, M.D., Professor of Psychiatry, Emeritus JAMES W. WARD, Ph.D., M.D., Associate Professor of Anatomy in Psychiatry WARREN W. WEBB, Ph.D., Associate Professor of Clinical Psychology JOSEPH WEINREB, M.D., Associate Professor of Psychiatry OTTO BILLIG, M.D., Associate Clinical Professor of Psychiatry VIRGINIA KIRK, Ph.D., Associate Clinical Professor of Clinical Psychiatry

ROBERT W. ADAMS, JR., M.D., Assistant Professor of Psychiatry BASIL T. BENNETT, M.D., Assistant Professor of Psychiatry JOHN D. GRIFFITH, M.D., Assistant Professor of Psychiatry RICHARD F. MARTIN, Ph.D., Assistant Professor of Clinical Psychology MIRIAM MCHANEY, Assistant Professor of Psychiatric Social Work SARAH H. SELL, M.D., Assistant Professor of Pediatrics in Psychiatry MILDRED C. TATE, M.S.S., Assistant Professor of Social Service LAVERGNE WILLIAMS, M.S.S.W., Assistant Professor of Psychiatric Social JOHN A. WILSON, M.D., Assistant Professor of Psychiatry HENRY B. BRACKIN, JR., M.D., Assistant Clinical Professor of Psychiatry H. JAMES CRECRAFT, M.D., Assistant Clinical Professor of Psychiatry LLOYD C. ELAM, M.D., Assistant Clinical Professor of Psychiatry ALEXANDER E. HARVEY, M.D., Assistant Clinical Professor of Psychiatry

88 7 VANDERBILT UNIVERSITY

ALBERT R. LAWSON, M.D., Assistant Clinical Professor of Psychiatry ROBERT REED, M.D., Assistant Clinical Professor of Psychiatry CHARLES B. SMITH, M.D., Assistant Clinical Professor of Psychiatry FRANK W. STEVENS, M.D., Assistant Clinical Professor of Psychiatry NAT T. WINSTON, M.D., Assistant Clinical Professor of Psychiatry HELEN MARGARET BROWNING, M.S.S.W., Instructor in Psychiatric Social Work WILLIAM E. FANN, M.D., Instructor in Psychiatry DOROTHY HUNTER, M.S.S.W., Instructor in Psychiatric Social Work ABNER R. OVERDEER, Ph.D., Instructor in Clinical Psychology VIRGINIA RACKER, Instructor in Nursing in Psychiatry LANICE ELAINE RICKETSON, M.S.S.W., Instructor in Psychiatric Social Work GEORGE E. SPAIN, M.S.S.W., Instructor in Psychiatric Social Work ERIC BELL, JR., M.D., Clinical Instructor in Psychiatry MAURICE HYMAN, M.D., Clinical Instructor in Psychiatry LOUIS SAMPSON, M.D., Clinical Instructor in Psychiatry WILLIAM R. C. STEWART, M.D., Clinical Instructor in Psychiatry WILLIAM TRAGLE, M.D., Clinical Instructor in Psychiatry MARGARET G. EVANS, Ph.D., Lecturer in Psychoanalysis JOAN M. HELD, M.A., Research Associate in Psychiatry FRANCES M. THRONE, M.A., Research Associate in Psychiatry

HUMAN BEHAVIOR

STEPHEN C. CAPPANNARI, Ph.D., Associate Professor of Human Behavior and Head of the Division

JOHN PATE, Ed.D., Associate Professor of Human Behavior EUGENE A. WEINSTEIN, Ph.D., Assistant Professor of Human Behavior (On leave 1967/68)

SOI. PSYCHIATRY. This course acquaints the second year student with the inner forces at the disposal of each person in his adjustment to past as well as present experience. With this as a basis, the various clinical psychiatric syndromes are presented, their treatment and prevention outlined. FALL & SPRING. Dr. Orr and Staff.

502. PSYCHIATRY AND MEDICINE. A component part of the third year Medical Clerkship. Small group meetings are held in which the personality problems of patients with demonstrable disease are discussed. (See Medicine 502.) Drs. Orr and Brittingham.

503. PSYCHIATRY CLERKSHIP. A six-week block of time in which adults and children with various psychiatric problems are studied in an inpatient and outpatient setting by fourth year students. Patient care, ward rounds, conferences, and seminars in psychiatry, psychology, social work, and rehabilitation. Dr. Orr and Staff. 521. ROLE THEORY AND THE DOCTOR-PATIENT RELATIONSHIP. First of Second years. In this an examination of doctor-patient relationship terms of role theory and set theory, special emphasis is placed upon sonal intervention in crisis situations. One hour per week. FALL. Orr and Cappannari.

522. HUMAN DEVELOPMENT, EMBRYOLOGY OF PERSONALITY. First per The course, taught in seminar, explores means by which the newborn fant may be molded by sociocultural devices into a communicative hum being. Demonstrations of newborn and infantile behavior will serve bases for discussions. Two hours per week. SPRING. Drs. Orr, Cappan Sell, Weinreb, and Staff.

523. PERSONALITY EVALUATION AND MEASUREMENT. Second and For years. Introduction to historical background and theoretical rational personality measurement. Methods used in the construction and m dardization of widely used test procedures (intelligence, personality, 0 functioning). Intensive experience in the administration, scoring, a interpretation of selected test procedures. Two hours per week. SPIN Drs. Webb and Cromwell.

525. UNSOLVED PROBLEMS OF MEDICINE AND SOCIETY. Fourth year. (cerns the relationship of the physician to the legal and social regular processes. Also an inquiry into the extent of physicians' present and sible involvement in treatment and prevention of narcotics addiction, linquency, criminality, alcoholism. Lectures from School of Law, partments of Sociology, Preventive Medicine, Psychiatry. Two ho per week. SPRING. Drs. Orr and Cappannari, and Mr. Warden.

527. MAN AND HIS WORKS. Fourth year. This course is open to sela fourth year students interested in the effects of culture, past and pres upon man, and the forces and stresses that have produced the cult Two hours per week. SPRING. Drs. Orr and Cappannari.

529. PRINCIPLES OF ANTHROPOLOGY. First and Second year. This of in aspects of general anthropology is especially designed for medical dents who have had no previous formal training in anthropology. Is jects to be covered include biological evolution of man and the develop of races, emergence of language and culture, problems and significant crosscultural comparisons in human behavior, man considered as an and human. One hour per week. SPRING. Dr. Cappannari.

530. PRINCIPLES OF COMMUNITY PSYCHIATRY. Fourth year. This conis designed to give the student a working knowledge of important socultural aspects of mental health and illness. The course includes as of mental health needs of the community; a survey of community organ tion and planning; a review of salient epidemiological research in me illness; principles of crisis theory and prevention intervention; and a of methods in mental health consultation. Two hours per week; mi week units. FALL & SPRING. Dr. Reed.

90 7 VANDERBILT UNIVERSITY

531. SEX COUNSELING. Fourth year. This indepartmental course aims to give students a better understanding of psycho-sexual problems so that they may gain competence in counseling patients. It will include such topics as pre-martial counseling; impotence and frigidity: "perversions" (including homosexuality); child sexuality; standards of sexual behavior. (Surgery 527.) One hour per week. FALL. Drs. Rhamy, Cappannari, and Gass.

532. POPULATION PROBLEMS AND FAMILY PLANNING. First, Second and Fourth years. This course is an introduction to population problems and family planning. It includes the causes of overpopulation and underpopulation; the problems created by overpopulation in relation to food supply and nutrition, environmental sanitation and education. The biology of human reproduction adaptation, and selection, sex practices, and population change are considered in as much detail as possible. The course ends with consideration of community and individual methods for limiting family size. (Preventive Medicine 525.) One hour per week, last 12 weeks. FALL & SPRING. Drs. Quinn, Cappannari, and Rhamy.

541. PRINCIPLES OF PSYCHOTHERAPY. Fourth year. A limited number of ambulatory patients are followed by the student for psychotherapy. Each student is assigned a supervisor. Each patient interview is taken up in discussion session with the supervisor. Emphasis is placed on basic principles and techniques of psychotherapeutic management of patient in general medical practice. Six hours per week. FALL & SPRING. Drs. Orr and Adams.

561. CLERKSHIP IN ADULT PSYCHIATRY. Fourth year. This clerkship complements the experiences the student has had at Central State Hospital and in the Outpatient Clinic. Here students have an opportunity to study carefully a few patients to gain understanding of the dynamics of the patient's illness. Full time; six week units. Dr. Reed and Staff.

562. CLERKSHIP IN PSYCHOLOGICAL CORRELATES OF BEHAVIOR. Fourth year. Parallel observations of behavior of a hospitalized patient in interview, group therapy, occupational and recreational therapy, and intensive batteries of psychological tests designed to explain observed phenomena. Six hours per week; six week units. Dr. Martin.

563. CLERKSHIP IN CHILD PSYCHIATRY. Fourth year. Observation and participation in all aspects of the psychiatric evaluation of a child, survey of diagnostic groups and special social problems (e.g., the foster child, the delinquent child), methods of treatment, including work with parents, consultation with schools and social agencies, observation of the therapeutic milieu in an inpatient setting. Nine hours per week; six week units. Drs. Weinreb, Crecraft, and Corbin.

582. METHODS IN PSYCHIATRIC RESEARCH. Fourth year. Introductory experience in the use of controlled research methodology and statistical analysis as applied to psychiatric and behavioral research. Prerequisite: Foundations of Behavioral Research 581. Four hours per week. SPRING. Drs. Cromwell and Webb.

Radiology

EUGENE C. KLATTE, M.D., Professor of Radiology and Chairman of the partment

JOSEPH H. ALLEN, M.D., Associate Professor of Radiology A. BERTRAND BRILL, M.D., Associate Professor of Radiology HENRY BURKO, M.D., Associate Professor of Radiology WILLIAM L. CALDWELL, M.D., Associate Professor of Radiology VERNON A. VIX, M.D., Associate Professor of Radiology GRANVILLE W. HUDSON, M.D., Associate Clinical Professor of Radiology WILLIAM R. BAKER, Ph.D., Assistant Professor of Radiology THOMAS R. DUNCAN, M.D., Assistant Professor of Radiology JAMES ELTRINGHAM, M.D., Assistant Professor of Radiology HEUN Y. YUNE, M.D., Assistant Professor of Radiology JOHN BEVERIDGE, M.D., Assistant Clinical Professor of Radiology MINYARD D. INGRAM, M.D., Assistant Clinical Professor of Radiology JOSEPH M. IVIE, M.D., Assistant Clinical Professor of Radiology BEN R. MAYES, M.D., Assistant Clinical Professor of Radiology JOEL S. BEDFORD, Ph.D., Instructor in Radiology JANET K. HUTCHESON, M.D., Clinical Instructor in Radiology EUGENE JOHNSTON, Ph.D., Instructor in Radiology ROBERT J. KING, B.S., Instructor in Radiology JAMES L. WAYLAND, M.D., Instructor in Radiology WILLIAM T. FARRAR, M.D., Clinical Instructor in Radiology CLIFTON E. GREER, M.D., Clinical Instructor in Radiology WILLIAM M. HAMILTON, M.D., Clinical Instructor in Radiology ROBERT J. LINN, M.D., Clinical Instructor in Radiology JOHN R. OLSON, M.D., Clinical Instructor in Radiology RICHARD P. OWNBEY, M.D., Clinical Instructor in Radiology W. FAXON PAYNE, M.D., Clinical Instructor in Radiology BURTON SILBERT, M.D., Clinical Instructor in Radiology JOHN M. TANNER, M.D., Clinical Instructor in Radiology

sented at the time of dissection of various systems.

501. METHODS IN CLINICAL SCIENCE: INTRODUCTION TO RADIOLOGY. series of lectures and demonstrations are given to introduce the stude to the use of radiographic methods in the study of various organ system Methodology in radiology is stressed. The course will also include introduction to the utilization of radiant energy in the treatment of can One hour per week. SPRING. Dr. Klatte and Staff.

92 7 VANDERBILT UNIVERSITY

SOL RADIOLOGY. For third-year students. Lectures and demonstrations with discussions of radiation hazards, radiographic diagnosis, and some therapy clinics. One hour per week for twelve weeks. FALL. Staff.

521. INTRODUCTION TO RADIOBIOLOGY. First and Second years. Topics will be radiation physics, chemistry, and biochemistry; radiopathology; radiosensitization; radioprotection; and other radiobiologic principles. Information on the cancerigenic and mutagenic effects of radiation will be presented, and the application of these radiobiologic data to clinical radiotherapy will be discussed. Elaboration of potential areas of worthwhile investigation in this field is planned in conclusion. One hour per week. SPRING. Drs. Caldwell and Bedford.

561. CLERKSHIP IN RADIOLOGY. Fourth year. The student will rotate through the various divisions of the department. He will be considered as a Junior Resident, will assist in procedures, and will attend all radiology conferences. Time will be made available for the study of cases in the teaching file library. Full time; six week units. Dr. Klatte and Staff.

599. SEMINAR IN RADIOTHERAPY AND RADIOBIOLOGY. Fourth year. This discussion course will be restricted in size to no more than eight or ten mature students. Considerable assigned reading, primarily pertinent literature references, will be required of the participants. Results of cancer treatment by various methods will be evaluated. Particular attention will be paid to the significance of data reported in the selected references; selection of cases, methods of reporting results, side effects and complications of treatment, and other pertinent facets are to be discussed. Such discussion should allow a better understanding of treatment problems in oncology. Critical review of fundamental radiobiologic principles will be confined to several of the final discussions. One hour per week. FALL. Drs. Caldwell, Eltringham, and Bedford.

Surgery

H. WILLIAM SCOTT, JR., M.D., Professor of Surgery and Chairman of the Department

JOHN H. FOSTER, M.D., Professor of Surgery

BARTON McSwain, M.D., Professor of Surgery

Rollin A. DANIEL, JR., M.D., Clinical Professor of Surgery

BEVERLY DOUGLAS, M.D., D.Sc., Clinical Professor of Surgery, Emeritus

LEONARD W. EDWARDS, M.D., Clinical Professor of Surgery, Emeritus

STANLEY K. BROCKMAN, M.D., Associate Professor of Surgery

HAROLD A. COLLINS, M.D., Associate Professor of Surgery

WALTER G. GOBBEL, JR., M.D., Associate Professor of Surgery

JOHN L. SAWYERS, M.D., Associate Professor of Surgery

SCHOOL OF MEDICINE 7 93

CHARLES F. ZUKOSKI III, M.D., Associate Professor of Surgery BENJAMIN F. BYRD, JR., M.D., Associate Clinical Professor of Surgery W. ANDREW DALE, M.D., Associate Clinical Professor of Surgery WALTER L. DIVELEY, M.D., Associate Clinical Professor of Surgery JAMES A. KIRTLEY, JR., M.D., Associate Clinical Professor of Surgery DOUGLAS H. RIDDELL, M.D., Associate Clinical Professor of Surgery LOUIS ROSENFELD, M.D., Associate Clinical Professor of Surgery DAUGH W. SMITH, M.D., Associate Clinical Professor of Surgery, Emeritus BERNARD M. WEINSTEIN, M.D., Associate Clinical Professor of Surgery R. BENTON ADKINS, M.D., Assistant Professor of Surgery DUNCAN A. KILLEN, M.D., Assistant Professor of Surgery VERNON H. REYNOLDS, M.D., Assistant Professor of Surgery WILLIAM C. ALFORD, M.D., Assistant Clinical Professor of Surgery EDMUND W. BENZ, M.D., Assistant Clinical Professor of Surgery CLOYCE F. BRADLEY, M.D., Assistant Clinical Professor of Surgery GEORGE R. BURRUS, M.D., Assistant Clinical Professor of Surgery GEORGE E. DUNCAN, M.D., Assistant Clinical Professor of Surgery WILLIAM H. EDWARDS, M.D., Assistant Clinical Professor of Surgery PARKER D. ELROD, M.D., Assistant Clinical Professor of Surgery JOHN L. FARRINGER, JR., M.D., Assistant Clinical Professor of Surgery JAMES C. GARDNER, M.D., Assistant Clinical Professor of Surgery, Emeritus SAM YOUNG GARRETT, M.D., Assistant Clinical Professor of Surgery CARL N. GESSLER, M.D., Assistant Clinical Professor of Surgery HERSCHEL A. GRAVES, JR., M.D., Assistant Clinical Professor of Surgery JACKSON HARRIS, M.D., Assistant Clinical Professor of Surgery J. LYNWOOD HERRINGTON, JR., M.D., Assistant Clinical Professor of Surger GEORGE W. HOLCOMB, M.D., Assistant Clinical Professor of Surgery J. KENNETH JACOBS, M.D., Assistant Clinical Professor of Surgery MALCOLM R. LEWIS, M.D., Assistant Clinical Professor of Surgery ROBERT L. MCCRACKEN, M.D., Assistant Clinical Professor of Surgery OSCAR NOEL, M.D., Assistant Clinical Professor of Surgery DAVID R. PICKENS, JR., M.D., Assistant Clinical Professor of Surgery GREER RICKETSON, M.D., Assistant Clinical Professor of Surgery ROBERT N. SADLER, M.D., Assistant Clinical Professor of Surgery NATHANIEL S. SHOFNER, M.D., Assistant Clinical Professor of Surgery, Emun HARRISON H. SHOULDERS, JR., M.D., Assistant Clinical Professor of Surgery WILLIAM S. STONEY, M.D., Assistant Clinical Professor of Surgery KIRKLAND W. TODD, JR., M.D., Assistant Clinical Professor of Surgery CHARLES C. TRABUE, M.D., Assistant Clinical Professor of Surgery RACHEL K. YOUNGER, B.A., Instructor in Surgical Research STANLEY BERNARD, M.D., Clinical Instructor in Surgery ROBERT L. BOMAR, JR., M.D., Clinical Instructor in Surgery

94 7 VANDERBILT UNIVERSITY

KENNETH L. CLASSEN, M.D., Clinical Instructor in Surgery HAROLD C. DENNISON, JR., M.D., Clinical Instructor in Surgery ROY G. HAMMONDS, M.D., Clinical Instructor in Surgery ROBERT HARDIN, M.D., Clinical Instructor in Surgery JAMES P. LESTER, M.D., Clinical Instructor in Surgery CHARLES W. MACMILLAN, M.D., Clinical Instructor in Surgery M. CHARLES MCMURRAY, M.D., Clinical Instructor in Surgery JOE M. MILLER, M.D., Clinical Instructor in Surgery I. ARMISTEAD NELSON, M.D., Clinical Instructor in Surgery JEFFERSON C. PENNINGTON, M.D., Clinical Instructor in Surgery ROY J. RENFRO, M.D., Clinical Instructor in Surgery JOHN K. WRIGHT, M.D., Clinical Instructor in Surgery

DENTAL SURGERY

ROBERT B. BOGLE, JR., D.D.S., Clinical Professor of Dental Surgery E. THOMAS CARNEY, D.D.S., Associate Clinical Professor of Dental Surgery WILLIAM S. GRAY, D.D.S., Assistant Clinical Professor of Dental Surgery FRED H. HALL, D.D.S., Assistant Clinical Professor of Dental Surgery, Emeritus ELMORE HILL, D.M.D., Assistant Clinical Professor of Dental Surgery CHARLES J. LADD, D.D.S., Assistant Clinical Professor of Dental Surgery EDWARD H. MARTIN, D.M.D., Assistant Clinical Professor of Dental Surgery FRED M. MEDWEDEFF, D.D.S., Assistant Clinical Professor of Dental Surgery ROBERT POTTER, D.D.S., Assistant Clinical Professor of Dental Surgery JAMES B. BAYLOR, D.D.S., Clinical Instructor in Dental Surgery FRANK H. DEPIERRI, JR., D.M.D., Clinical Instructor in Dental Surgery WILLIAM C. KING, D.M.D., Clinical Instructor in Dental Surgery WILLIAM C. KING, D.M.D., Clinical Instructor in Dental Surgery L. WILLARD PARKER, D.D.S., Clinical Instructor in Dental Surgery

NEUROLOGICAL SURGERY

WILLIAM F. MEACHAM, M.D., Clinical Professor of Neurological Surgery and Had of the Division
CULLY A. COBB, JR., M.D., Associate Clinical Professor of Neurological Surgery
JOE M. CAPPS, M.D., Assistant Clinical Professor of Neurological Surgery
ARNOLD MEIROWSKY, M.D., Assistant Clinical Professor of Neurological Surgery
C. DAVID SCHEIBERT, M.D., Assistant Clinical Professor of Neurological Surgery
ARTHUR G. BOND, M.D., Clinical Instructor in Neurological Surgery

JAMES W. HAYS, M.D., Clinical Instructor in Neurological Surgery

OPHTHALMOLOGY

JAMES H. ELLIOTT, M.D., Associate Professor of Ophthalmology and Head of the Division

HENRY CARROLL SMITH, M.D., Clinical Professor of Ophthalmology, Emeritus GEORGE W. BOUNDS, M.D., Associate Clinical Professor of Ophthalmology FOWLER HOLLABAUGH, M.D., Associate Clinical Professor of Ophthalmology KATE SAVAGE ZERFOSS, M.D., Associate Clinical Professor of Ophthalmolog, Emeritus

JOHN STEVENS ANDREWS, JR., Ph.D., Assistant Professor of Ophthalmology ABRAHAM P. CHEIJ, M.D., Assistant Clinical Professor of Ophthalmology L. ROWE DRIVER, M.D., Assistant Clinical Professor of Ophthalmology WALLACE H. FAULK, JR., M.D., Assistant Clinical Professor of Ophthalmology G. ALLEN LAWRENCE, M.D., Assistant Clinical Professor of Ophthalmology PHILIP L. LYLE, M.D., Assistant Clinical Professor of Ophthalmology FRED A. ROWE, M.D., Assistant Clinical Professor of Ophthalmology JOHN B. BOND III, M.D., Clinical Instructor in Ophthalmology LEE ROY MINTON, M.D., Clinical Instructor in Ophthalmology J. RALPH RICE, M.D., Clinical Instructor in Ophthalmology

OTOLARYNGOLOGY

PAUL H. WARD, M.D., Associate Professor of Otolaryngology and Head of the Division

GUY M. MANESS, M.D., Clinical Professor of Otolaryngology, Emeritus PERRY F. HARRIS, M.D., Assistant Professor of Otolaryngology VICENTE HONRUBIA, M.D., Assistant Professor of Otolaryngology CLYDE ALLEY, JR., M.D., Assistant Clinical Professor of Otolaryngology J. THOMAS BRYAN, M.D., Assistant Clinical Professor of Otolaryngology HERBERT DUNCAN, M.D., Assistant Clinical Professor of Otolaryngology W. G. KENNON, JR., M.D., Assistant Clinical Professor of Otolaryngology WILLIAM E. GREER, M.D., Instructor in Otolaryngology LARSON DALE BECK, M.D., Clinical Instructor in Otolaryngology GHRIS B. FOSTER, M.D., Clinical Instructor in Otolaryngology ROBERT C. OWEN, M.D., Clinical Instructor in Otolaryngology

UROLOGY

ROBERT K. RHAMY, M.D., Professor of Urology and Head of the Division HARRY S. SHELLEY, M.D., Associate Professor of Urology, Emeritus JOHN L. SIMMONS, M.D., Associate Professor of Urology EDWARD HAMILTON BARKSDALE, M.D., Associate Clinical Professor of Urology

Emeritus

96 + VANDERBILT UNIVERSITY

CHARLES E. HAINES, JR., M.D., Associate Clinical Professor of Urology H. EARL GINN, M.D., Assistant Professor of Urology OSCAR CARTER, M.D., Assistant Clinical Professor of Urology ALBERT P. ISENHOUR, M.D., Assistant Clinical Professor of Urology TOM E. NESBITT, M.D., Assistant Clinical Professor of Urology PHILLIP P. PORCH, JR., M.D., Assistant Clinical Professor of Urology JOHN M. TUDOR, M.D., Assistant Clinical Professor of Urology ROBERT E. MCCLELLAN, M.D., Clinical Instructor in Urology

SOI. METHODS IN CLINICAL SCIENCE. An interdepartmental course designed to acquaint the student with the techniques, methods, and basic principles necessary to take careful histories, perform thorough physical examinations, and to understand and utilize basic laboratory procedures employed in clinical medicine. Students are divided into small tutorial groups for intensive work with patients on the wards at Vanderbilt University Hospital. the Veterans Administration Hospital, and Nashville General Hospital. Similar tutorial groups are utilized in the laboratory where students learn methods for examining urine, blood, sputum, gastric contents, feces, and body fluids. An introduction to neurologic diagnostic methods is included in the course. Additional training is given in special problems which relate to examination of pediatric, surgical, and obstetrical patients. Radiological techniques are correlated with instructional sessions. Correlative sessions are interspersed with the above. In these sessions, methods by which the history, physical examination and laboratory aids can be used to arrive at diagnosis and decisions regarding further study and treatment are conducted by interdepartmental groups. Drs. Rogers, Pennington, Hartmann, Minot, and the faculty of the Department of Medicine; Dr. Christie and members of the Department of Pediatrics; Dr. Foster and members of the Department of Surgery; Dr. Goss and members of the Department of Obstetrics-Gynecology; Dr. Klatte and members of the Department of Radiology; Dr. Shapiro and members of the Department of Pathology; members of the Departments of Anatomy, Pharmacology, and Biochemistry.

joz. CLINICAL CLERKSHIP. For twelve weeks each student in the third year class is assigned to the surgical divisions of the Vanderbilt University Hospital. Under the direction and supervision of the staff, the student takes histories, does physical examinations and assists the staff in the diagnostic evaluation and clinical management of assigned patients. Half of each student's period of clinical work is in general surgery, including thoracic, cardiovascular and pediatric services. The other six weeks of the clinical assignment provide brief but concentrated rotations to services in orthopedics, neurosurgery, urology, ophthalmology, and otolaryngology. These rotations provide exposure to a variety of patients with problems in general surgery and in the special fields of surgery. Teaching tounds are held daily by members of the staff. Students go with their patients to the operating rooms where they are observers and assistants to the staff in surgery, the surgical specialties, and anesthesiology. Instruction in anesthesiology is given during operating room assignments by the members of that department. An integral part of this clerkship is the weekly three hour assignment in operative surgery and anesthesiology conducted in the S. R. Light Laboratory for Surgical Research by the D partment of Surgery in collaboration with the Department of Anesthe ology. Dr. Scott.

503. SURVEY OF SURGERY. A series of clinical presentations and lecture are given which are designed to present a broad view of the clinical field of surgery. Illustrative case presentations are made by third year surger clerks. These discussions stress the correlation between basic biolog structure and function, pathologic alterations and clinical manifestation One hour per week for twenty-four weeks. FALL & SPRING. Dr. Scott.

504. SURGICAL OUTPATIENT SERVICE. Each fourth year student is assign in rotation for six weeks to the surgical outpatient department of d Vanderbilt University Hospital. Here they serve as assistants in the ou patient clinics of general surgery, orthopedic surgery, and the tumor clinic Various members of the surgical staff are in attendance to instruct d students in their work and discuss with them the diagnosis and treatment the patients. Drs. McSwain, Reynolds, and Hillman.

521. SURGICAL PATHOLOGY. Third year. Each session is initiated by lecture to be followed by presentation of pertinent microscopic lesin and roentgenograms. In the laboratory, fresh gross specimens and la collections of slides are studied under supervision of resident and sen staff. The course correlates the clinical manifestations and the gross a microscopic changes of the common surgical diseases. (Pathology 32) Three hours per week for year. Dr. McSwain and Staff.

522. PRINCIPLES OF PLASTIC SURGERY. Fourth year. Instruction in the principles underlying the practice of plastic surgery and their application to the correction of deformities, and problems of reconstruction. Patient before and after operation will be used for study of methods and result Includes a brief review of important research in this specialty. One has per week. FALL. Dr. Ricketson.

523. CANCER. Fourth year. This is an inter-departmental course wi few didactic presentations. Patients showing success or failure in t treatment of cancer are presented. Taught by members of the faculty of clinical and 2 pre-clinical departments. May be taken both semestor One hour per week. FALL & SPRING. Dr. McSwain.

524. ORAL PATHOLOGY IN CLINICAL MEDICINE. Fourth year. A cour of lectures and assigned readings emphasizing the relationship betwee oral disorders and general systemic diseases. The student will correla clinical medicine, radiologic, and laboratory procedures in a study of the relationship of oral and systemic diseases. One hour per week. FAIL SPRING. Dr. Carney.

525. PEDIATRIC SURGICAL PROBLEMS. Fourth year. A combined cou from the Departments of Surgery and Pediatrics utilizing patient demi strations and didactic lectures. The diagnosis, preoperative preparation

98 7 VANDERBILT UNIVERSITY

surgery, and postoperative care will be stressed. Course may be elected for units of six weeks to all year. (Pediatrics 525.) One hour per week. FAIL & SPRING. Drs. Scott and Little.

526. BASIC COURSE IN OPHTHALMOLOGY. Second and Third years. Consists of lectures on diseases of the eye, plus experience in the outpatient department. The physiology and anatomy of the eye are reviewed briefly. One hour per week. SPRING. Dr. Elliott and Staff.

517. SEX COUNSELING. Fourth year. This interdepartmental course aims to give students a better understanding of psycho-sexual problems so that they may gain competence in counseling patients. It will include such topics as pre-marital counseling; impotence and frigidity; "perversions" (including homosexuality); child sexuality; standards of sexual behavior. (Psychiatry 531.) One hour per week. FALL. Drs. Rhamy, Campannari, and Goss.

543. SURGICAL SPECIALTY CLINICS. Fourth year. Clinical experience in the following specialities is available to the student:

Neurosurgery, General Surgery, Otolaryngology, Tumor, Tumor Chemotherapy, Vascular, Postoperative care, Plastic Surgery, Minor Surgery, Urology, and Ophthalmology. Three hours per week; six week units. Dr. Scott and Staff.

361. CLERKSHIPS IN SURGERY. Fourth year. Students work under supervision of the surgical staff and resident in the diagnosis and treatment of patients with general and thoracic surgical problems. Will not involve patients studied by members of the third year class. Ward rounds daily. At Veterans Administration Hospital or Nashville General Hospital. Full time; six week units. Drs. Gobbel and Sawyers.

562. CLERKSHIP IN NEUROLOGICAL SURGERY. Fourth year. The student works with the resident staff on the neurosurgical service at Vanderbilt University Hospital participating in the diagnosis and management of patients with neurosurgical problems. Daily ward rounds. Full time; six week units. Dr. Meacham.

563. CLERKSHIP IN CARDIOVASCULAR SURGERY. Fourth year. Provides experience in the diagnosis of cardiovascular disease, preoperative assessment, operative treatment and postoperative management. Includes participation in research activities as applied to cardiovascular surgery. Full time; six week units. Dr. Collins.

564. CLERKSHIP IN UROLOGY. Fourth year. The student works with the resident staff on the urologic service at Veterans Administration Hospital participating in the diagnosis and management of patients with urologic problems. Daily ward rounds. Full time; six week units. Dr. Shelley.

565. CLERKSHIP IN OTOLARYNGOLOGY. Fourth year. The student work with the surgical staff and resident on the ENT service at Vanderbilt University Hospital participating in the diagnosis and management of patients with otolaryngolic problems. Ward rounds daily. Full time; six were units. Dr. Ward.

566. CLERKSHIP IN PEDIATRIC SURGERY. Fourth year. An opportunity for students to work on the Pediatric-Surgical floor, caring for children in pre-operative, operative, and post-operative periods and attending both pediatric and surgical conferences. Full time; six week units. Dr. Sont.

567. CLERKSHIP IN CANCER CHEMOTHERAPY. Fourth year. Inpatient, ou patient, and laboratory experience with chemotherapy methods and agen at Vanderbilt University Hospital and Nashville General Hospital. Fu time; six week units. Dr. Reynolds.

568. SURGICAL PATHOLOGY AND NEOPLASTIC DISEASE. Fourth year. Work with the Director of the Surgical-Pathology Laboratory and the fellor in Oncology in the Surgical-Pathology Laboratory and the Tumor Clinic Fifteen hours per week; six week units. Dr. McSwain.

569. CLERKSHIP IN OPHTHALMOLOGY. Fourth year. This course consists of ward work as well as experience in the operating room for student who may choose to specialize in Ophthalmology. Six hours per weak six week units. Dr. Elliott and Staff.

581. LABORATORY RESEARCH IN SURGERY. Fourth year. Principles a surgical research and care are presented with the performance of procedum and conduct of investigative studies in collaboration with the full-in staff of the Department of Surgery. A detailed written report will sur marize the investigative studies. At Veterans Administration Hospin or Vanderbilt University Hospital. Full time for six weeks. May b taken in afternoons for twelve weeks. Drs. Foster and Gobbel.

REGISTER OF STUDENTS 1966-67

FIRST-YEAR CLASS

C (Aller (A P Isteran)	
William Confer Alder (A. B., Lafayette)	
Paul Seabrook Ambrose (B.S., Davidson)	Knoxville, Tenn.
Howard Joseph Aylward, Jr., (A. B., Boston)	
William Brennan Baine (A. B., Princeton)	Washington D C
Thomas Word Bennett (B. A., David Lipscomb)	Nashville Terr
Charles Roger Bentz (A. B., Franklin).	Pares I 1
Deledencer Berror (A. B. Kaptucku)	
Thomas Poindexter Bersot (A. B., Kentucky)	Louisville, Ky.
Judy Faye Burroughs (B. A., Berea).	
Sam Frank Carter III (B. A., Vanderbilt)	Birmingham, Ala.
Clean Ray Carwell (B.A. Centre).	Bowling Green Vy
Gerald Dykes Cordell (B.A., Vanderbilt). Gerald Dykes Cordell (B.A., David Lipscomb). John Howey Crothers (B.A., Pepperdine).	Nashville Tenn
Godd Dyles Cordell (B.A. David Lipscomb)	College Deals Ca
La Hamer Crothers (B.A. Pennerdine)	Not The T
ion nowey crothers (D.A., repetune)	
Mark Alan Cunningham (B.A., Tennessee).	Knoxville, Tenn.
Freterick B. Emerson, Jr., (B.A., Alfred; Ph.D., Cornell)	East Alton, Ill.
Robert Branch Faber (B.A., Vanderbilt)	
John O. Firts (A.B. Kentucky)	Pineville Ky
David Elliot Fleischer (B.S., Washington & Lee)	Louisville Ky
Prehard Lewis Hose (RS Davidson)	Lindala Ca
 Renaul Levis 1055 (J. B.A., Vanderbilt) Harold Amos Hatcher, Jr. (Sr. in Absentia, Tennessee Polytechnical Institute) Robert Loyd Hendley (B.S., Georgia Institute of Technology) 	The standard, Ga.
Steven Anan Goldstein (D.A., Vanderbirt).	Louisville, Ky.
Harold Amos Hatcher, Jr. (Sr. in Adsentia, Tennessee	
Polytechnical Institute)	Nashville, Tenn.
Robert Loyd Hendley (B.S., Georgia Institute of Technology)	Decatur, Ga.
Marvin Ward Flinds (D.A., Vanderpille),	Stamtord levas
Aubrey Johnston Hough, Jr. (B.A., Hendrix)	Little Rock Ark
Herman Arthur Jenkins (B.S., Marshall).	Glagwood W V.
Douglas Larkin Jones (B.A., Vanderbilt)	Glenwood, w. va
Dugias Laikin Jones (D.A., y ander Dift)	Clarksville, Ienn.
Hilliard Earl Jordan, Jr. (B.A., Mississippi)	Kosciusko, Miss.
Raymond Phillip Kloepper II (Sr. in Absentia, Memphis State)	
Raymond Phillip Kloepper II (Sr. in Absentia, Memphis State) Immne Craddock Lilly (B.A., Murray State)	
¹ Robert Lee Losey (B.A., Centre)	Somerser Ky
Ralph James Mabry, Jr. (B.A., Vanderbilt).	Chattanooga Tenn
Conn Michael McConnell (B.S., Tennessee)	Nashwills Tean
Thomas Aaron McKenzie III (B.S., Davidson).	ivasnymic, ichn.
Parlines Maron Mickenzie III (D.S., Davidson)	winston-Salem, N. C.
Rosefrances Newsom (B.S., Wake Forest)	Nashville, Tenn.
James Travis Rhea (B.S., Yale). Braze Wanner Romick (Sr. in Absentia, Vanderbilt)	Paris, Tenn.
Brute Wanner Romick (Sr. in Absentia, Vanderbilt)	Signal Mountain, Tenn.
Signica Edwin Kostan (B.S., Davidson)	Valdese N C
Foster Jerome Sanders (B.A., Virginia). William James Schneider (B.S., Stetson).	Louisville Ky
William James Schneider (B.S. Station)	Miami Ela
John Joseph Second: (A P Deineren)	Ivitanii, Fia.
John Joseph Secondi (A.B., Princeton).	Spartenburg, S. C.
Indran Selveratnam (A.B., Merrimack)	Kelaniya, Ceylon
Durham Stegall (A.B., Emory)	Lindale, Ga.
Stephen Ray Sweitzer (B.S., Washington & Lee).	Louisville, Ky.
John Leeman Tarpley (B.A., Vanderbilt)	Tackson, Miss.
Frank Durham Stegall (A.B., Emory). Stephen Ray Sweitzer (B.S., Washington & Lee). John Leeman Tarpley (B.A., Vanderbilt). Rowland Pleasant Vernon, Jr. (B.A., Louisiana Polytechnic Institu Robert Harser Weller Le (B.A., Course)	te) Tioga La
Robert Harvey Walkup, Jr. (B.A., Centre).	McAllen Tevas
	IMCAHER, Texas

¹ Withdrew Voluntarily January 26, 1967 ² Withdrew Voluntarily March 2, 1967

David Hager Waller (B.A., Vanderbilt)
Kenneth Richard Wasson (Sr. in Absentia, Vanderbilt).
Levi Watkins (B.S., Tennessee A & I State)
Thomas Clayton Whitworth (B.A., David Lipscomb)
Melborne A. Williams, Jr. (Sr. in Absentia, Western Kentucky State) Bowling Green, Kr
Daniel Keith Winstead (B.A., Cincinnati)Cincinnati, Oin
Robert Summers Young, Jr. (B.S., Kentucky)Lexington, Kr.

SECOND-YEAR CLASS

Egbert Vernon Anderson, Jr. (B.S., Davidson) Pensacola, Fig
William Joseph Anderson (B.A., Vanderbilt).
Robert Jay Andrew (B.A., Washington), University City Ma
Robert Burton Barnett (B.A., Vanderbilt)
John Burr Bassel, Jr. (B.A., Vanderbilt)
James Arthur Bentley, Jr. (B.A., Vanderbilt)
Sidney Anderson Berry III (B.A. Vanderbilt)
Sidney Anderson Berry III (B.A., Vanderbilt)
Greer Albert Busbee III (B.A., Vanderbilt).
Cully Alton Cobb (B.A., Vanderbilt).
Curly Atton Coop (D.A., Vanderbitt)
Richard Erwin Dixon (A.B., Princeton). Douglas Alan Finnegan (B.A., Kentucky). Louisville, Ky
Douglas Alan Pinnegan (B.A., Kentucky)
Harvey Sid Fishbein (B.S., Queens)
James Moore Foster (B.A., Vanderbilt)
Robert Stanley Francis (B.A., Vanderbilt)Tulsa, Okla
John Wolcott Garrott (B.S., Purdue)
George William Glazebrook, Jr. (B.A., Kentucky) Lebanon, Kr.
Alan Douglas Glick (B.A., Vanderbilt)
James Philip Goolsby (B.A., Centre)Louisville, Kr.
James Harold Growdon (B.A., Vanderbilt)Little Rock Art
Keith William Hagan (B.S., Kentucky)Louisville, Kr.
John Herbert Harris, Jr. (B.A., Vanderbilt)Jasper, Ten
Norman Donald Hasty (B.A., Rice)
Bruce Emerson Herron (B.A., Southwestern at Memphis)Jackson, Tem
Robert Wright Higginbotham (B.S., Arizona)
Everette Irl Howell (B.S. Mississippi State) State College Mis
Ellen Elizabeth Hrabovsky (B.S., George Peabody)
John Clifford Johnson, Jr. (B.A., Vanderbilt)Elizabethton, Ten
Clifford Allen Lakin (B.A. Duke) Miami Beach El
Clifford Allen Lakin (B.A., Duke). Miami Beach, Fa Thomas Joseph Lustberg (B.S., University of Cincinnati)
Stephen Barry Lyons (B.E.E., Polytechnic Inst. of Brooklyn;
Ed M Tuffs) Roslyn Long Island N
Ed. M., Tufts)
Robert Karl Mercier (B.S., Mt. Union)
Kenny Wayne Messman (B.A., Milligan)
Douglas Park Mitchell (A.B., Yale)
James Ernest Mitchell, Jr. (B.A., Vanderbilt)Bolivar, Ten
Mark Kent Moore (B.A., Bethany Nazarene)
Lawrence Raymond Penner, Jr. (B.A., Kansas; A.M., Ph.D., Illinois). Storrs, Con Charles Joseph Phifer (B.E., Vanderbilt). McMinnville, Ten James Hargrave Powell (B.S., Virginia Polytechnic Institute). Petersburg, Vi John Marion Rainey (B.A., Vanderbilt). Pensacola, Fi
Charles Joseph Phiter (B.E., Vanderbilt).
James Hargrave Powell (B.S., Virginia Polytechnic Institute)
John Marion Rainey (B.A., Vanderbilt)
Philip Marks Rosenbloom (B.A., Vanderbilt)Detroit, Mid
Philip Marks Rosenbloom (B.A., Vanderbilt). Detroit, Mid Wyatt Easterling Rousseau (B.A., Vanderbilt). Jackson, Ma
Larry Dee Scott (B.S., Davidson)
Larry Dee Scott (B.S., Davidson). Robert Thomas Snowden (B.S., Stetson). William Ledford Stone (B.A., Vanderbilt). Mayfield I
William Ledford Stone (B.A., Vanderbilt)
Roger Thomas Swanson (B.A., Vanderbilt)
Amos Darrell Tackett (B.S., Kentucky)
David Carroll Waggoner (B.A., Vanderbilt)

*Special Student

102 / VANDERBILT UNIVERSITY

David Hughes Walker (B.A., Davidson).	Nashville, Tenn
Lekson B. White IV (B.A., Vanderbilt)	Nashville, Tenn
avio Oliver Williamson II (B.A., Vanderbilt).	Princeton Ky
Ronald Bruce Workman (B.S., Alabama).	Decatur Ala
Vernon Thomas Worrall III (B.S., Davidson)	Nashville Tenn

THIRD-YEAR CLASS

H	oward Marion Alig (B.S., St. Joseph's College)	Cedar Grove, Ind.
D,	hadd Lee Alt (A.B., Centre College)	Louisville, Ky
100	Corres Askinson (A B Emory)	Marrie C
R	mson Stewart Bauknight (B.S., Wofford)	Easley, S. C.
	seph Sprott Atkinson (A.B., Entory) mson Stewart Bauknight (B.S., Wofford). Serge Carter Bell (B.A., Virginia). avid Edgar Blanton, Jr. (B.A., Vanderbilt). mes Dickson Bomboy, Jr. (B.S., Mississippi).	Portsmouth, Va
n	vid Edgar Blanton, Ir. (B.A., Vanderbilt).	Sikeston Mo
L	nes Dickson Bomboy, Jr. (B.S., Mississippi)	Hattiesburg Miss
ĉ	enn Harwell Booth (B.A., Williams).	Memphis Tenn
U	Illiam Henry Brewer (B.A., Vanderbilt).	Oak Ridge, Tenn
D	oce DeLeon Bullard, Jr. (B.S., Presbyterian).	Paw Creek N C
D	mond Franklin Burk Ir (B.A. Mississippi)	Kascinska Miss
T	m Way Campbell (B.A., Vanderbilt). omas McColl Chesney (B.A., Pennsylvania).	Dandridge Tenn
Ť	omas McColl Chesney (B.A., Pennsylvania)	
D	tricia Wall D'Encarnacao (B.A., Vanderbilt)	Oakland Calif
T.	poidas W. Dowlen, Ir. (B.A., Vanderbilt).	Coral Gables, Fla
R	aberr Currin Dunkerley, Ir. (B.A., Vanderbilt).	Nashville, Tenn
1	mes Ray Dzur (B.A. Oklahoma City)	Crescent Okla
J.	nes Ray Dzur (B.A., Oklahoma City) rhur Benedict Gallun (B.S., Stanford; M.S., Wisconsin)	Hartland Wis
N	Ichael Arthur Gilchrist (B.A., MacMurray)	Griffith Ind
	chibald Clinton Hewes, Ir (BA, Vanderbilt)	Gulfport Miss
	erge Baker Hubbard, Jr. (B.A., Vanderbilt). wid Rex Hunter (B.A., Westminster).	Jackson Tenn
F	wid Rey Hunter (BA Westminster)	Barrlesville Okla
L.	ames Granbery Killebrew, Jr. (B.S., Davidson)	Nashville Tenn
1	ferson Davis Kyle (B.A., Washington).	Spokane Wash
C	harles Burke Maino (A.B., Stanford).	Modesto Calif
C	Parles Farl Marrin (B.A. Vanderhilt)	Slaughters Ky
I	harles Earl Martin (B.A., Vanderbilt). ohn Robert Mather (B.S., Western Kentucky) nolyn Leach McIntyre (B.A., Vanderbilt).	Louisville Ky
ć	rolyn Leach McIntyre (BA Vanderbilt)	Memphis Tenn
T	ohn Parker Mickle (B.S., Wofford).	Rock Hill S C
ŝ	uphen Philip Mowry (B.A., Vanderbilt)	Louisville Ky
R	ceckah Ann Naylor (B.A., Baylor).	Fort Worth Texas
F	lise Moss Neeld (B.A., Vanderbilt)	Clearwater Fla
ī	on William Nucholls (B.A., Vanderbilt)	Jackson Tenn
4	homas William Orcutt (B.A., DePauw).	Chicago III
ŝ	ale Park (B.S. Whitworth)	Bismarck N D
Ĩ	ola Park (B.S., Whitworth). anes Benajah Philips III (B.A., Vanderbilt).	Chartanooga Tenn.
ĩ	anes Sterling Price (B.A., University of the South)	Knoxville Tenn.
ť	Judela Reisig (B.A., Vanderbilt).	Huntsville, Ala.
	Allen Lee Schlamp (B.A., Kentucky).	Henderson, Ky.
1	lobert Leonard Schweitzer (B.A., Bellarmine).	Louisville, Ky.
	ames Alfred Settle, Jr. (B.A., Vanderbilt)	Arlanta Ga.
	Robert Alvin Sewell (B.S. Duke)	Franklin, Tenn,
R	Robert Alvin Sewell (B.S., Duke). George Edward Smith (B.S., Western Kentucky)	Cocoa Beach, Fla.
	Hugh Nelson Smith (B.S., U. S. Air Force Academy).	Chartanooga, Tenn.
	Stewart Phillip Smith, Jr. (B.A., Vanderbilt).	Chattanooga, Tenn
	Peter John Townes (B.A. Vanderhilt)	Nashville, Tenn
	Peter John Townes (B.A., Vanderbilt) Marvin Haber Vickers, Jr. (B.A., Vanderbilt)	Birmingham, Ala
	Nicholas Andre Viner (A.B., Holy Cross).	Stanford Conn
	Larry Gale Willis (B.A., Vanderbilt).	Old Hickory Tenn
	William Clenney Yankowsky (B.S., Alabama).	Huntsville, Ala
	Sara Elizabeth Zieverink (B.S., Purdue).	Cincinnati, Ohio
		i, i, i, i childrandi, child

*Special Student

FOURTH-YEAR CLASS

Oren Wyatt Babb (B.S., Alabama)	Birmingham Al.
Oren Wyatt Babb (B.S., Alabama). Frank Dugger Black (B.A., David Lipscomb).	Columbia Ter
John Edward Bossert (B.A. Vanderbilt)	(Incinnati Oli
Thomas Campbell Butler (A.B., Johns Hopkins)	Charel Hill Vin
Robert Hanen Caminhan (A.B. Kamer, D.D. TUtter)	Chaper mill, N.C.
Robert Hanen Carnighan (A.B., Kenyon; Ph.D., Illinois)	Louisville, Kr.
Henry Austin Carr (B.A., Vanderbilt)	Iullahoma, Tenn
Henry Austin Carr (B.A., Vanderbilt). William Jennings Chesnut III (B.S., Georgetown).	London K.
John Lars Unristensen (A B Harvard)	Columbus OF
Lee Coulter Chumbley (B.A., Harvard). Murrell Oliver Clark (B.A., Vanderbilt).	Nashville T
Murrell Oliver Clark (B.A. Vanderbilr)	Chattanoone, Ten
Brauston Joseph Creach (D.A. Wasseringer)	Chattanooga, Tem
Brevator Joseph Creech (B.A., Westminster). Samuel Henry Dillard, Jr. (B.A., Vanderbilt).	Iroy, Mo
Samuel Henry Dillard, Jr. (B.A., Vanderbilt)	Nashville, Ten
John Herman Dixon, Ir (B.S. Georgia Institute of Technology)	Murfreeshoro Ta
John Wesley Dorman (B.A., Texas). Arthur Merrimon Freeman III (A.B., Harvard).	Ennis Tar
Arthur Merrimon Freeman III (A B Harvard)	Birmingham II
Alan Hartman Fruin (B.A., Vanderbilt).	Alt No.
Thomas Edward Eulaham In (D.A., ValiderDift)	Normal, II
Thomas Edward Fulghum, Jr. (B.A., Vanderbilt)	Atlanta, Ga
David Wilson Gregory (B.A., Vanderbilt).	Parsons, Tenn
Henry Lytle Harrell, Ir. (B.A., Vanderbilt)	Ocala El
Samuel Pinckney Hawes III (B.S., Davidson)	
Innow Hong (BA University of Southern California)	Ball Cille
Aprojectice Foore Hood (B.A. Scanford)	E-i-(
Charles Edward Head (D.A., Stanford)	rairiax, Vi
Antoinette Foote Hood (B.A., Stanford). Charles Edward Hood (B.A., Vanderbilt). David Lee Hudson (A.B., Asbury).	Scottsboro, Ala
David Lee Hudson (A.B., Asbury)	
William David Johnston (B.A., Vanderbilt)	ackson, Tenal
William Sailor Jordan (B.A., Vanderbilt).	
Allen Bernard Kaiser (B.A., Vanderbilt)	Memohia Ter
John Arthur Kiely (B.A., Washington & Lee).	Vislahom M
Pohart Hanny Kramer (D.C. M. L.)	Wicksburg, Mis
Robert Henry Kremers (B.S., Michigan).	····· Pasadena, Cali
John Martin Leonard (B.A., Florida State)	····· Sarasota, Far
Henry Roby Lesesne (B.A., Vanderbilt)	Atlanta, Gu
Selden Longley III (B.A., Vanderbilt)	Nashville Tem
Michael Searle Matteson (B.A., Washington).	Sedro Woolley Wet
Fayette M. McElhannon, Jr. (B.S., Georgia).	Asher C
Diana Andrawa MeMaine (D.A. D.	Athens, GL
Diane Andrews McMains (B.A., Berry).	
*Jerry Ray Mitchell (B.A., Kentucky).	Providence, Ky
Harry Charles Nottebart, Ir. (B.A., Vanderbilt: LL.B., Harvard).	Nashville Tent
Tommy Jack Poirier (B.A., New Hampshire). William Bennett Ralph, Jr. (B.A., Vanderbilt).	Dover N.H.
William Bennett Ralph, Ir. (B.A. Vanderhilt)	. Goodlerreville Ten
Ted Alan Ramsey (B.A., Kentucky).	Somerice V.
John Michael Reichart (A.B. S. Jose L. C.B.	Somerset, M.
John Michael Reinhart (A.B., St. Joseph's College)	Louisville, M
Robert Eugene Scott (B.A., Vanderbilt). Michael Brent Seagle (B.A., Vanderbilt). *Jere Palmer Segrest (B.A., Vanderbilt). Charles Sidney Settle (B.A., Murray State).	lerre Haute, Int.
Michael Brent Seagle (B.A., Vanderbilt).	Lynchburg, Vu
*Jere Palmer Segrest (B.A., Vanderbilt)	Jackson, Miss
Charles Sidney Settle (B.A. Murray State)	Princeton Kt
David Ralph Shollenbarger (B.S., Kenyon).	Hamileon Ohe
Herman David Serences (B.F. Verdenbil)	····· Trainfiton, One
Herman David Sorensen (B.E., Vanderbilt).	Newport, M.
William Ralph Welborn, Jr. (B.A., Vanderbilt)	Sheffield, Ala
Thomas Allen Woodward (A.B., Transylvania)	Aberdeen, Ohn
	The second se

*Special Student

INTERNSHIPS

Class of June 1967

N	Name	Type of Internship
0	Oren Wyatt Babb. Ochsner Foundation, New Orleans, Louisiana	Medicine-Surgery
Fr	Fank Dugger Black. Butterworth Hospital, Grand Rapids, Michigan	Rotating
Jo	John Edward Bossert. Cincinnati General Hospital, Cincinnati, Ohio	Surgery
	Thomas Campbell Butler. John Hopkins Hospital, Baltimore, Maryland	
	Robert Hanen Carnighan. Barnes Hospital, St. Louis, Missouri	
	Henry Austin Carr. Butterworth Hospital, Grand Rapids, Michigan	
	William Jennings Chesnut. Vanderbilt University Hospital, Nashville, Tennessee	
Jo	John Lars Christensen San Diego County University, San Diego, California	Surgery
	Lee Coulter Chumbley	
M	Murrell Oliver Clark. Methodist Hospital, Dallas, Texas	Rotating
B	Brevator Joseph Creech. Vanderbilt University Hospital, Nashville, Tennessee	Surgery
5	Samuel Henry Dillard, Jr. Vanderbilt University Hospital, Nashville, Tennessee	Pathology
J	John Herman Dixon, Jr. Vanderbilt University Hospital, Nashville, Tennessee	Pediatrics
	Jehn Wesley Dorman. Methodist Hospital, Dallas, Texas	
	Arthur Merrimon Freeman III. William A. Shands Teaching Hospital, Gainesville, Florida	
	Alan Hartman Fruin. Vanderbilt University Hospital, Nashville, Tennessee	
1	Thomas Edward Fulghum, Jr. University of California, San Francisco, California	Pediatrics
	David Wilson Gregory. Vanderbilt University Hospital, Nashville, Tennessee	
	Henry Lytle Harrell, Jr University of Kentucky Hospital, Lexington, Kentucky	
\$	Samuel Pinckney Hawes III. University of Virginia Charlottesville Virginia	Surgery
1	Inpow Hong. U. S. Public Health Service, Boston, Massachusetts	Rotating
	Antoinette Foote Hood Vanderbilt University Hospital, Nashville, Tennessee	
	Charles Edward Hood. Vanderbilt University Hospital, Nashville, Tennessee	

SCHOOL OF MEDICINE + 105

David Lee Hudson
William David Johnston
William Sailor Jordan
Allen Bernard KaiserOsler Medica Johns Hopkins Hospital, Baltimore, Maryland
John Arthur Kiely
Robert Henry Kremers. Vanderbilt University Hospital, Nashville, Tennessee
John Martin Leonard. Yale New Haven Medical Center, New Haven, Connecticut
Henry Roby Lesesne
Selden Longley III
Michael Searle Matteson
Fayette Monroe McElhannon, Jr
Diane Andrews McMains. Vanderbilt University Hospital, Nashville, Tennessee
Harry Charles Nottebart, Jr
Tommy Jack Poirier. University of Virginia, Charlottesville, Virginia
William Bennett Ralph, Jr
Ted Alan Ramsey
John Michael Reinhart. Vanderbilt University Hospital, Nashville, Tennessee
Robert Eugene Scott
Michael Brent Seagle
University Hospital, Jackson, Mississippi
David Ralph Shollenbarger
Herman David Sorensen. Medicier Vanderbilt University Hospital, Nashville, Tennessee
William Ralph Welborn, Jr
Thomas Allen Woodward

106 / VANDERBILT UNIVERSITY

MEDALS, PRIZES, AND SCHOLARSHIPS

For the Year 1966-1867

 OUNDER'S MEDAL FOR SCHOLARSHIP. Endowed by Commodore Cornelius Vanderbilt and given ever since to the graduate standing first in his class.
John Martin Leonard
BEAUCHAMP SCHOLARSHIP. Endowed, and awarded in the School of Medicine to the Department of Psychiatry.
THOMAS EDWARD FULGHUM
BORDEN UNDERGRAUDATE RESEARCH AWARD IN MEDICINE. Awarded for the most meritorious undergraduate research in the medical field.
THOMAS CAMPBELL BUTLER
THE MERRELL AWARD IN PATHOLOGY. Awarded annually for outstanding research papers by Vanderbilt University medical students in the field of Pathology.
JOHN WILLIAM NUCKOLLS
THE ALBERT WEINSTEIN PRIZE IN MEDICINE. Established in memory of Albert Wein- stein, M.D., and awarded to the senior student who has demonstrated high scholastic attain- ment and qualities which characterize the fine physician.
THOMAS CAMPBELL BUTLER
Jere Palmer SegrestJackson, Miss.
DEAN'S AWARD FOR STUDENT RESEARCH PRESENTATION. Awarded for most out- tanding research paper presented by a medical student.

ALPHA OMEGA ALPHA

FOURTH-YEAR CLASS

Thomas Campbell Butler	Chapel Hill, N.C.
obert Hanen Carnighan	Louisville, Ky.
Lee Coulter Chumbley*	Nashville, Tenn.
Samuel Henry Dillard, Jr.*	Nashville, Tenn.
Allen Bernard Kaiser.	Memphis, Tenn.
ohn Martin Leonard*	Sarasota, Fla.
Michael Searle Matteson Sedro	o Woolley, Wash.
Ted Alan Ramsey	Somerset, Ky.
William Ralph Welborn, Jr.	Sheffield, Ala.

*Elected in Third Year

THIRD-YEAR CLASS

Joseph	Sprott Atkinson.		 	 	Ga.
Arthur	Eastwood Broa	idus		 Knoxville, Ter	nn.
ames	Benajah Phillips	III.	 	 Chattanooga, Ter	nn.

SCHOOL OF MEDICINE * 107

VANDERBILT UNIVERSITY HOSPITAL

16th

JOE S. GREATHOUSE, Jr., M.S.H.A., Director D. GENE CLARK, M.H.A., Associate Director D. ANDREW GRIMES, M.S., Assistant Director JOHN K. MILES, M.S.H.A., Assistant Director HEWITT ROGERS, Assistant Director J. JACK HORN, M.B.A., Administrative Assistant FRANK R. BLOOD, Ph.D., Director, Clinical Laboratories LAURENCE E. SOUZA, M.S., Assistant Director for Nursing Service WARREN H. KENNEDY, B.B.A., Director of Finance, Medical Units WILLIAM R. COOK, B.S., Director of Personnel, Medical Units RICHARD G. BRUEHL, Ph.D., Chaplain

DIRECTORS OF HOSPITAL SERVICES

MILDRED FOUTCH, Volunteer Services DOROTHY FREDRICKSON, M.S., Physical and Occupational Therapy AILEEN GRAVES, B.S., Dietetic Service THOMAS M. HUTCHISON, Housekeeping Service RUTH G. LAND, B.S., Medical Records GROVER C. LYLES, Laundry and Linen Service MARY PRICE, R.N., Central Supply Service WINTON BATSON, M.S., Social Service RALPH STONE, B.S., Pharmacy



HOSPITAL MEDICAL BOARD COMMITTEE

JOE S. GREATHOUSE, JR., Chairman

Randolph Batson Eugene L. Bishop Cloyce Bradley Richard O. Cannon Amos Christie James H. Elliott Donald A. Goss LAURENCE A. GROSSMAN J. WILLIAM HILLMAN EUGENE C. KLATTE WILLIAM F. MEACHAM WILLIAM F. ORR GORDON PEERMAN CHARLES B. PITTINGER Robert M. Reed Eugene Regen, Sr. Robert K. Rhamy David E. Rogers H. William Scott, Je. John L. Shapiro Paul H. Ward

108 Y VANDERBILT UNIVERSITY

STANDING COMMITTEES

(The Director is ex officio a member of all standing and special committees.)

CREDENTIALS* J. WILLIAM HILLMAN, Chairman WALTER L. DIVELEY

THOMAS E. BRITTINGHAM WILLIAM F. ORR EDWIN LEA WILLIAMS

ROBERT C. HARTMANN GRANT W. LIDDLE

CLINICAL RADIOISOTOPE

A. B. BRILL, Chairman STANLEY R. GLASSER

FRANK R. BLOOD JOHN G. CONIGLIO

DISASTER PLANNING

VERNON H. REYNOLDS, Chairman

STANLEY K. BROCKMAN WILLIAM F. FLEET ARTHUR L. BROOKS NEWTON B. GRIFFIN ROBERT DEXTER YILMAZ ERYASA

ARTHUR BROOKS

IANE DAVIS EDITH FLY

WILLIAM J. CHEATHAM

HAROLD A. COLLINS

JACK HORN SUE NALDER

JAMES D. SNELL ELSIE WHITE ALYCE YOUNG HEUN YUNE

INFECTIONS

SARAH H. SELL, Chairman NEWTON GRIFFIN THOMAS M. HUTCHISON ROBERT K. RHAMY M. Glenn Koenig Mildred Stahlman GROVER LYLES JOHN K. MILES

MARY PRICE PAUL R. STUMB Alyce E. Young

INTENSIVE CARE UNIT

STANLEY BROCKMAN, Chairman

ARTHUR L. BROOKS OE M. CAPPS D. GENE CLARK

OHN M. FLEXNER ELIZABETH HOLMES M. GLENN KOENIG VIRGINIA FLOERSH EDITH FLY

OSCAR CROFFORD DONALD A. GOSS Yilmaz Eryasa H. William Scott, Jr. Virginia Floersh Laurence Souza

LABORATORY SERVICE

FRANK R. BLOOD, Chairman DAVID H. LAW GRANT W. LIDDLE

SARAH H. SELL BRUCE SINCLAIR-SMITH JAMES W. WARD

SCHOOL OF MEDICINE 7 109

MEDICAL RECORDS

JOSEPH A. LITTLE, Chairman

Jean Caum D. Gene Clark Charles Federspiel John Griscom Ruth Land BARTON MCSWAIN MARJORIE MATHIAS WALTER F. NANCE

OUTPATIENT SERVICE

DAVID H. LAW, Chairman

Winton Batson Frank R. Blood Maudie L. Booker Newton Griffin Robert Hartmann Jack Horn Joseph A. Little Barton McSwain Lee Minton Eugene Regen, Jr. Robert Rhamy Louise T. Smith Paul Ward Joseph Weinreb Elsie White

PATIENT CARE

ELLIOT V. NEWMAN, Chairman

THOMAS E. BRITTINGHAM SHIRLEY BURD RICHARD O. CANNON LUTHER CHRISTMAN D. GENE CLARK MARGARET DOYLE JAMES H. ELLIOTT DONALD A. GOSS J. WILLIAM HILLMAN Geraldine Labecki Joe Little William Orr Laurence Souza Ouida Tucker

PHARMACY AND THERAPEUTICS

JOHN H. GRISCOM, Chairman

Allen D. Bass Nancy Elkins Yilmaz Eryasa John H. Foster Robert C. Franks Newton Griffin Marjorie Mathias John K. Miles John A. Oates Ralph Stone

REHABILITATION SERVICE

J. WILLIAM HILLMAN, Chairman

WINTON BATSON D. GENE CLARK EDITH FLY DOROTHY FREDRICKSON DONALD A. GOSS FREEMAN MCCONNELL ROBERT M. REED JAMES D. SNELL

SURGICAL OPERATING AND DELIVERY SUITE

H. WILLIAM SCOTT, JR., Chairman

Arthur L. Brooks Roger B. Burrus James Elliott Yilmaz Eryasa Bonnie Harding William F. Meacham John K. Miles Charles B. Pittinger Robert Rhamy Paul Ward Alyce E. Young

TISSUE

JOHN L. SHAPIRO, Chairman

DONALD A. GOSS

J. William Hillman Barton McSwain H. WILLIAM SCOTT, JR.

TUMOR

BARTON McSWAIN, Chairman

Arthur L. Brooks Walter L. Diveley Charles E. Haines Robert C. Hartmann Eugene Klatte G. Sydney McClellan William F. Meacham

EMERGENCY SERVICES

VERNON REYNOLDS, Chairman

R_{obert} M. Heyssel J. William Hillman Jack Horn Joe Little Helen Mayberry Phyllis Murphy Elsie White John Wilson

INTERNSHIPS AND RESIDENCIES*

JOHN L. SHAPIRO, Chairman

Robert W. Adams, Jr. Arthur L. Brooks Henry Burko Richard O. Cannon John Chapman Robert M. Dez Prez William F. Fleet John H. Foster Robert C. Franks Robert C. Hartmann G. Sydney McClellan Vernon Reynolds Paul H. Ward

Indicates Joint Committee with School of Medicine

Hospital Staff

ANESTHESIOLOGY

CHARLES B. PITTINGER, Anesthesiologist-in-Chief YILMAZ ERYASA, Director of Clinical Anesthesia

Visiting Staff

ILDEFONSO ALCANTARA ALEJANDRO BERBA

JOANNE L. LINN BASAL M. MIXON, JR. PAULA CONAWAY SANDIDGE

MEDICINE

DAVID E. ROGERS, Physician-in-Chief

PHYSICIANS TO THE HOSPITAL

Emeritus Staff

WILLIAM R. CATE HOLLIS E. JOHNSON RUDOLPH H. KAMPMEIER JACK WITHERSPOON THOMAS B. ZERFOSS

Visiting Staff

CRAWFORD W. ADAMS BEN ALPER LUIS ISMAEL ARIAS WILLIAM L. ALSOBROOK PAUL HAROLD BARNETT EDWARD J. BATTERSBY F. T. BILLINGS A. BERTRAND BRILL THOMAS E. BRITTINGHAM RICHARD BRYAN JAMES J. CALLAWAY WILLIAM J. CARD WILLIAM S. COPPAGE O. A. COUCH, JR. FREDERICK E. COWDEN OSCAR B. CROFFORD William J. Darby Roger M. Dez Prez ERIC ENGLE PHILLIP FELTS ROBERTS M. FINKS JOHN M. FLEXNER RICHARD FRANCE THOMAS FRIST

EARL GINN FRED GOLDNER, JR. ROBERT A. GOODWIN JOHN H. GRISCOM LAURENCE A. GROSSMANLLOYD H. RAMSEY THOMAS B. HALTOM ROBERT C. HARTMANN AUBREY HARWELL ROBERT M. HEYSSEL DAVID E. JENKINS, JR. HERMAN J. KAPLAN ALVIN E. KELLER J. ALLEN KENNEDY M. GLENN KOENIG WILLIAM W. LACY DAVID H. LAW LEWIS B. LEFKOWITZ, JR. ROBERT TODD TERRY GRANT W. LIDDLE GEORGE VERNON MANN JAMES N. THOMASSON BILLY MATTER WALTER E. NANCE Elliott V. Newman JOHN A. OATS FRED D. OWNBY

THOMAS F. PAINE, JR. THOMAS G. PENNINGTON WILLIAM PETTINGER ROBERT W. QUINN SAMUEL S. RIVEN DAVID E. ROBERTS WILLIAM D. SALMON, R. STEPHEN SCHILLIG ADDISON B. SCOVILLE, R. HARRISON J. SKULL JAMES D. SNELL, JR. BRUCE SINCLAIR-SMITH W. ANDERSON SPICKARD, JR. W. DAVID STRAYHORN CLARENCE S. THOMAS CHARLES B. THORNE RUSSELL D. WARD CLARENCE C. WOODCOCK JOHN ROBERT WOODS I. LANIER WYATT

II2 / VANDERBILT UNIVERSITY

Associate Staff

ARTHUR R. ANDERSON EDWIN B. ANDERSON H. R. ANDERSON AMES E. ANDERSON, JR. WILLIAM C. ANDERSON ACK MILLER BATSON ROBERT T. COCHRAN OHN R. COLLINS FRED MCEWEN DOWNEY RWIN BERNARD ESKIND E. WILLIAM EWERS HOWARD R. FOREMAN MILTON GROSSMAN

JOSIAH B. HIBBITTS, JR. ROBERT M. HOLLISTER JOSEPH E. HURT IRA T. JOHNSON ROBERT GARY KIGER JOHN P. KINNARD O. MORSE KOCHTITSKY L. CLIFFORD MCKEE ALEXANDER MCLEOD CARL E. MITCHELL DAVID ORTH HARRY L. PAGE MARVIN J. ROSENBLUM LAWRENCE K. WOLF SOL A. ROSENBLUM

ROBERT M. ROY HAROLD H. SANSTEAD HERBERT J. SCHULMAN WILLIAM F. SHERIDAN, IR. ABRAM C. SHMERLING W. DAVID STRAYHORN, PAUL R. STUMB Edward L. Tarpley W. Carter Williams, IR.

DERMATOLOGY

ROBERT N. BUCHANAN, Dermatologist-in-Chief

Visiting Staff FRANK G. WITHERSPOON

Associate Staff

AMES R. HAMILTON

BERNARD J. PASS

NEUROLOGY

WILLIAM M. CLARK, Acting Neurologist-in-Chief

Visiting Staff

ERIC BELL, JR.

BERTRAM E. SPROFKIN

Associate Staff JOHN S. WARNER

OBSTETRICS AND GYNECOLOGY

DONALD A. Goss, Obstetrician and Gynecologist-in-Chief

Emeritus Staff

W. BUSH ANDERSON JOHN C. BURCH OHN SMITH CAYCE

WILLIAM C. DIXON RALPHAEL S. DUKE MILTON S. LEWIS HARLIN TUCKER FRANK E. WHITAKER

SCHOOL OF MEDICINE + 113

Visiting Staff

D. SCOTT BAYER RUSSELL T. BIRMINGHAM JAMES M. BRAKEFIELD **JOHN C. BURCH** ROBERT L. CHALFANT EVERETT M. CLAYTON, JR. G. SYDNEY MCCLELLAN WILLARD O. TIRRILL, JR. GEORGE B. CRAFTON JAMES W. ELLIS HAMILTON V. GAYDEN

PAUL A. GREEN NEWTON B. GRIFFIN B. K. HIBBETT, III RONALD D. LAMB HORACE T. LAVELY, JR. HOMER M. PACE, JR. ROY W. PARKER ROBERT C. PATTERSON C. GORDON PEERMAN

Associate Staff

LARRY ARNOLD HARRY BAER ROGER B. BURRUS BENJAMIN H. CALDWELL CHARLES M. GILL

ROBERT GRIFFON CHARLES J. HOBDY CHARLES H. HUDDLESTON JAMES W. JOHNSON ORRIN L. JONES, JR. SIDNEY C. REICHMAN HOUSTON SARRATT WILLIAM D. SUMPTER. JR. ARTHUR SUTHERLAND

ROBERT H. TOSH THOMAS F. WARDER EDWIN LEA WILLIAMS

RALPH KLING CHARLES MCGRUDER JAMES B. MILLIS PHILLIP NICHOLAS NORMAN E. WITTHAUER

ORTHOPEDIC SURGERY

J. WILLIAM HILLMAN, Orthopedic Surgeon-in-Chief

Emeritus Staff

GEORGE K. CARPENTER. SR.

Visiting Staff

ARTHUR L. BROOKS DON L. EYLER JOE G. BURD S. BENJAMIN FOWLER GEORGE K. CARPENTER, JR, JOHN R. GLOVER GEORGE WILLIAM DAVIS ARNOLD HABER, JR.

CHARLES M. HAMILTON JOHN R. JONES THOMAS F. PARRISH EUGENE M. REGEN, SR.

Associate Staff

STANLEY M. ELMORE JERRY C. HUNT FRANK JONES

J. JEFFERSON ASHBY

LAWRENCE LAUGHLIN A. BRANT LIPSCOMB JACK M. MILLER

EUGENE M. REGEN, R. E. DEWEY THOMAS JOHN M. WAMPLER

PATHOLOGY

JOHN L. SHAPIRO, Pathologist-in-Chief

Emeritus Staff WILLIAM A. DEMONBREUN

Visiting Staff

DAVID L. BEAVER William J. Cheatham Robert D. Collins Norman Ende Robert G. Horn Fred Ryden John B. Thomison Frank C. Womack, Jr.

Associate Staff

RICHARD D. BUCHANAN

JAMES M. PHYTHYON

PEDIATRICS

AMOS CHRISTIE, Pediatrician-in-Chief

HEARN G. BRADLEY

Emeritus Staff T. FORT BRIDGES

Visiting Staff

RANDOLPH BATSON LUTHER A. BEAZLEY, JR. EUGENE L. BISHOP, JR. LINDSAY K. BISHOP SAM W. CARNEY, JR. NORMAN M. CASSELL ERIC M. CHAZEN WILLIAM A. DOAK WILLIAM A. DOAK WILLIAM D. DONALD RAY L. DUBISSON PHILLIP C. ELLIOTT HARRY M. ESTES

John P. Fields William Fleet Robert C. Franks Charles S. Hirshberg Leonard Koenig Joseph A. Little Sol L. Lowenstein Dewey G. Nemec James C. Overall Francis A. Puyau Dan S. Sanders, Jr. Gordon Sell

Associate Staff

RALPH GREENBAUM DAVID L. SILBER ROBERT H. HUTCHESON, JR. HARVEY SPARK RICHARD BOLES JOHNSTON JOHN M. LEE

Sarah H. Sell Mildred Stahlman Joseph Steranka Joe M. Strayhorn Jack T. Swan Richard P. Taber William Vaughn William B. Wadlington Ethel Walker Thomas S. Weaver Erle W. Wilkinson

ARVILLE V. WHEELER WILLIAM C. YOUNG THOMAS B. ZERFOSS, JR.

PSYCHIATRY

WILLIAM F. ORR, Psychiatrist-in-Chief

Emeritus Staff

O. S. HAUK

Visiting Staff

Robert W. Adams, Jr. Otto Billig Henry B. Brackin, Jr. Charles Corbin, Jr. H. James Crecraft Lloyd C. Elam

James C. Gammil John D. Griffith Alex E. Harvey Maurice Hyman Albert R. Lawson Robert M. Reed Louis Sampson Charles B. Smith Frank W. Stevens Joseph Weinreb John A. Wilson

FRANK H. LUTON

SCHOOL OF MEDICINE + 115

Associate Staff

ERIC BELL, JR.

W. R. C. STEWART HERBERT H. BOCKIAN WILLIAM E. FANN

VIRGINIA KIRK, Emeritus Psychologist

Visiting Psychologists

ABNER R. OVERDEER

WARREN W. WEBB

RADIOLOGY

EUGENE C. KLATTE, Radiologist-in-Chief

Visiting Staff

JOSEPH HUNTER ALLEN, JR. CLIFTON E. GREER		JOHN R. OLSON
JOHN BEVERIDGE	WILLIAM M. HAMILTON	RICHARD B. OWENRY
HENRY BURKO	WILLIAM H. HILL	
WILLIAM LYMAN	GRANVILLE W. HUDSON	
CALDWELL	MINYARD DEE INGRAM,	BURTON SILBERT
THOMAS RAY DUNCAN		LEONARD STOANE
WILLIAM TAYLOR FARRAR		JOHN M. TANNER
BURTON P. GRANT	BEN R. MAYES	VERNON A. VIX

Associate Staff JANET K. HUTCHESON

SURGERY

H. WILLIAM SCOTT, JR., Surgeon-in-Chief

SURGEONS TO THE HOSPITAL Emeritus Staff

LEONARD W. EDWARDS

JAMES C. GARDNER DAUGH W. SMITH NATHANIEL S. SCHOFNER

Visiting Staff

WILLIAM C. ALFORD EDMUND W. BENZ STANLEY BERNARD CLOYCE F. BRADLEY STANLEY K. BROCKMAN GEORGE R. BURRUS BENJAMIN F. BYRD, JR. KENNETH L. CLASSEN HAROLD A. COLLINS W. ANDREW DALE ROLLIN A. DANIEL, JR.

HAROLD C. DENNISON HERSHEL A. GRAVES, A WALTER DIVELEY ROY G. HAMMONDS GEORGE E. DUNCAN ROBERT A. HARDIN JACKSON HARRIS WILLIAM H. EDWARDS PARKER D. ELROD LYNWOOD HERRINGTON JOHN L. FARRINGER, JR. R. JAMES H. FLEMING GEORGE W. HOLCOMB, JOHN H. FOSTER R. J. KENNETH JACOBS SAM Y. GARRETT CARL N. GESSLER DUNCAN A. KILLEN WALTER G. GOBBEL, JR. JAMES A. KIRTLEY, JR.

AMES PEYTON LESTER MALCOLM R. LEWIS ROBERT L. MCCRACKEN M. CHARLES MCMURRAY ROY J. RENFRO BARTON MCSWAIN I ARMISTEAD NELSON OSCAR F. NOEL

EFFERSON C. PENNINGTON, JR. DAVID R. PICKENS, JR. VERNON H. REYNOLDS DOUGLAS H. RIDDELL LOUIS ROSENFELD

ROBERT M. SADLER JOHN L. SAWYERS H. H. SHOULDERS, JR. WILLIAM S. STONEY CHARLES C. TRABUE IV BERNARD WEINSTEIN CHARLES F. ZUKOSKI

Associate Staff

ROBERT L. BOMAR, JR. JOE M. MILLER

JOHN K. WRIGHT

R BENTON ADKINS

DENTAL SURGERY

Emeritus Staff

FRED H. HALL

WALTER M. MORGAN

Visiting Staff

AMES B. BAYLOR ROBERT B. BOGLE, JR. E. THOMAS CARNEY FRANK H. DEPIERRI, JR.

WILLIAM S. GRAY BARNETT J. HALL ELMORE HILL WILLIAM C. KING

CHARLES J. LADD EDWARD H. MARTIN FRED M. MEDWEDEFF ROBERT POTTER

Associate Staff LEO W. PARKER

NEUROLOGICAL SURGERY

WILLIAM F. MEACHAM, Neurosurgeon-in-Chief

ARTHUR G. BOND JOE M. CAPPS

Visiting Staff CULLY A. COBB JAMES W. HAYS

ARNOLD MEIROWSKY CHARLES D. SCHEIBERT

OPHTHALMOLOGY

JAMES H. ELLIOTT, Ophthalmologist-in-Chief

Emeritus Staff HENRY CARROLL SMITH KATE SAVAGE ZERFOSS

ROBERT E. SULLIVAN

GEORGE W. BOUNDS, JR. ABRAHAM P. CHEIJ L. ROWE DRIVER

Visiting Staff

WALLACE H. FAULK FOWLER HOLLABAUGH G. ALLEN LAWRENCE

PHILIP L. LYLE J. RALPH RICE FRED A. ROWE, JR.

SCHOOL OF MEDICINE + 117

Associate Staff John B. Bond III

OTOLARYNGOLOGY

PAUL H. WARD, Otolaryngologist-in-Chief GUY M. MANESS, Emeritus

Visiting Staff

Jerral P. Crook Herbert Duncan

WILLIAM G. KENNON, JR.

Associate Staff Chris Benton Foster Robert Owen

LAWSON BECK

CLYDE ALLEY, JR.

J. THOMAS BRYAN

PLASTIC SURGERY

GREER RICKETSON, Chief of Plastic Service BEVERLY DOUGLAS, Emeritus

> Visiting Staff Kirkland W. Todd, Jr.

> > Associate Staff

JAMES HOWARD FLEMING

CHARLES D. MACMILLA

HENRY L. DOUGLAS

UROLOGICAL SURGERY ROBERT K. RHAMY, Urologist-in-Chief

Emeritus Staff

E. H. BARKSDALE

Visiting Staff

Oscar Carter Charles E. Haines, Jr. Albert P. Isenhour, Jr. ROBERT E. MCCLELLAN HARRY S. SHELLEY TOM NESBITT JOHN M. TUDOR PHILLIP P. PORCH, JR.

Staff Officers of the Outpatient Service

MEDICINE

DAVID E. ROGERS, Physician-in-Chief DAVID H. LAW, Chief of Clinic F. TREMAINE BILLINGS, Associate Chief of Clinic

> ALLERGY CLARENCE S. THOMAS, Chief

> > ARTHRITIS B. J. Alper, Chief

CARDIOVASCULAR DISEASES BRUCE SINCLAIR-SMITH, Chief

DIABETES Addison B. Scoville, Jr., Chief

ENDOCRINOLOGY WILLIAM S. COPPAGE, JR., Chief

GASTROENTEROLOGY HARRISON J. SHULL, Chief

HEMATOLOGY Robert C. Hartmann, *Chief*

PULMONARY DISEASES LLOYD H. RAMSEY, Chief

DERMATOLOGY ROBERT N. BUCHANAN, Chief of Clinic

NEUROLOGY BERTRAM E. SPROFKIN, Chief of Clinic OBSTETRICS AND GYNECOLOGY DONALD A. Goss, Obstetrician and Gynecologist-in-Chief

> OBSTETRICS B. K. HIBBETT III, Chief of Clinic

GYNECOLOGY ROGER B. BURRUS, Chief of Clinic

GYNECOLOGY TUMOR G. Sydney McClellan, Chief of Clinic

ORTHOPEDIC SURGERY J. WILLIAM HILLMAN, Orthopedic Surgeon-in-Chief and Chief of Clinic

PEDIATRICS Amos Christie, Pediatrician-in-Chief and Chief of Clinic

> WELL BABY Amos Christie, Chief

PEDIATRIC ALLERGY JAMES C. OVERALL, Chief

PEDIATRIC CARDIOLOGY FRANCIS A. PUYAU, Chief

PEDIATRIC SEIZURE Dan S. Sanders, Chief

PEDIATRIC ENDOCRINOLOGY Robert Franks, Chief

PSYCHIATRY WILLIAM F. ORR, *Psychiatrist-in-Chief* ROBERT W. ADAMS, JR., *Chief of Clinic*

S U R G E R Y H. WILLIAM SCOTT, JR., Surgeon-in-Chief

BARTON McSwain, Chief of Surgical Outpatient and Emergency Service"

DENTAL SURGERY ROBERT B. BOGLE, Chief of Clinic

EMERGENCY SERVICE VERNON H. REYNOLDS, Assistant Chief

GENERAL SURGERY VERNON H. REYNOLDS, Chief of Clinic

NEUROLOGICAL SURGERY CULLY A. COBB, JR., Chief of Clinic

OPHTHALMOLOGY JAMES H. ELLIOTT, Chief of Clinic

OTOLARYNGOLOGY PAUL H. WARD, Chief of Clinic

PLASTIC SURGERY GREER RICKETSON, Chief of Clinic

THORACIC SURGERY ROLLIN A. DANIEL, JR., Chief of Clinic

TUMOR BARTON McSwain, Chief of Clinic

UROLOGICAL SURGERY ROBERT K. RHAMY, Chief of Clinic

VASCULAR SURGERY W. ANDREW DALE, Chief of Clinic

INTERN AND RESIDENT STAFF

(Listed in alphabetical order)

ALEXANDER, ALEXANDER JOHN JR., Intern; Medicine ALLEN, ELMO LEACH, Assistant Resident; Medicine ASHER, HARVEY, Assistant Resident; Psychiatry ATKINSON, SCHALES LUKI, Chief Resident; Ob-Gyn AVANT, GEORGE RAY, Intern; Medicine BAGWELL, JOHN CLAUDE, Assistant Resident; Medicine BAKER, ANGUS SELLERS, Intern; Medicine BODNER, STANLEY J., Intern; Medicine BOLASNY, BRUCE LYNN, Assistant Resident; Surgery BONCHECK, LAWRENCE I., Assistant Resident; Surgery BONE, ROBERT, Intern; Pediatrics BRECKINRIDGE, JOHN CABELL, Assistant Resident; Medicine BREINIG, JOHN BOYERS, Assistant Resident; Medicine BRIAN, BRUCE ALLEN, Assistant Resident; Medicine BROADBENT, DAVID H., Intern; Pediatrics BROTHERS, JOHN C., Assistant Resident; Orthopedic Surgery BROWN, COLLINS DALE, Assistant Resident; Radiology BRYANT, JOHN ARTHUR, JR., Assistant Resident; Pathology BUDTHIMEDHEE, VIROTE, Assistant Resident; Ob-Gyn BUTLER, STEPHEN ALLEN, Intern; Surgery BUXTON, ERNEST PERRY, Intern; Medicine CABRERA, RAFAEL, Assistant Resident; Ob-Gyn CALLAWAY, RICHARD L., Intern; Pathology CARTER, JAMES WALTER, Assistant Resident; Surgery CASTLE, WARREN G., Assistant Resident; Orthopedic Surgery CHANG, PONG MOON, Assistant Resident; Anesthesiology CHESTNUT, WILLIAM J., Intern; Surgery CHUMBLEY, LEE, Intern; Medicine CHURCH, JACKIE LEE, Assistant Resident; Radiology CLEAVELAND, CLIFTON RANCE, Chief Resident; Medicine CONKLE, DAVID MILTON, Intern; Surgery COOPWOOD, WILLIAM EUGENE, Assistant Resident; Psychiatry CRAIG, JAMES THOMAS, JR., Assistant Resident; Orthopedic Surgery CRANE, JOSEPH MICHAEL, Intern; Surgery CREECH, BREVATOR J., Intern; Surgery CREWS, HARRY DENNISON, Assistant Resident; Medicine CROSS, MARVIN RICHARD, Intern; Medicine CROWDER, WADE ALLEN, Chief Resident; Psychiatry D'ALONZO, RICHARD TITUS, Intern; Surgery DAVIES, ROBERT LYNN, Assistant Resident; Radiology DAVIS, CHARLES KING, JR., Assistant Resident; Surgery DAVIS, WILKES HENRY, JR., Assistant Resident; Ophthalmology DAVIS, WILLIAM GRAY, Assistant Resident; Otolaryngology DICKINS, ROBERT DUBOSE, JR., Assistant Resident; Neurosurgery DILLARD, SAMUEL H., Intern; Pathology DIXON, JOHN HERMAN, JR., Intern; Pediatrics DONAHOO, JAMES SAUNDERS, Assistant Resident; Surgery DOWNEY, WILLIAM LEE, Chief Resident; Otolaryngology

DOZIER, J. EMMETT, JR., Assistant Resident; Psychiatry DUNCAN, GARY WILLIAM, Assistant Resident; Medicine FARNEST, JAMES BRYAN, Assistant Resident; Medicine DWARDS, ROBERT HARVEY, Chief Resident; Urological Surgery EMCH, A. WILLARD, Assistant Resident; Neurosurgery EMORY, WARDEN HAMLIN, Intern; Surgery FARRIS, RICHARD KENT, Assistant Resident; Medicine INCH, ROBERT DELMAR, Resident; Radiology FINLEY, JIMMY GARRETT, Assistant Resident; Medicine LAKE, GORDON PERRY, Assistant Resident; Pathology FRANK, EDWARD THOMAS, JR., Chief Resident; Psychiatry RANKLIN, JOHN D., Intern; Surgery RANKLIN, ROBERT HAROLD, Assistant Resident; Surgery FREANT, LAWRENCE J., Intern; Surgery ROST, JOHN WILSON, JR., Assistant Resident; Surgery RUIN, ALAN HARTMAN, Intern; Surgery GAINES, DONALD LEE, Resident; Orthopedic Surgery GASKINS, FAY MARY, Resident; Child Psychiatry GEDDIE, DANIEL CLARK, Assistant Resident; Radiology GIBBS, JERRY L., Assistant Resident; Pathology GIBSON, THOMAS ASHFORD, Resident; Radiology GRAHAM, CHARLES PATTISON, JR., Assistant Resident; Surgery GRAYBILL, JOHN RICHARD, Assistant Resident; Medicine GREEN, JAMES WINSLOW, Assistant Resident; Surgery GREGORY, DAVID W., Intern; Medicine GROOS, ERICH BRYAN, Assistant Resident; Ob-Gyn GROVES, HASSELL EUGENE, Assistant Resident; Anesthesiology GROVES, ROBERT BLAINE, Assistant Resident; Radiology HAMMAD, SALAH EL-DIN, Assistant Resident; Pediatrics HANNAH, RICHARD J., Assistant Resident; Medicine HARGADON, CHARLES MATTHEW, Resident; Orthopedic Surgery HARRIS, JOHN JOEL, Assistant Resident; Anesthesiology HARRIS, JOHN JUSTUS, Assistant Resident; Surgery HARRIS, NORMAN S., Assistant Resident; Medicine HARRIS, PERRY FELTON, Chief Resident; Otolaryngology HEADLEY, ELWOOD JEAN, Assistant Resident; Medicine HEADLEY, SYLVIA SEAMANS, Assistant Resident; Medicine ELLINGER, KARL H. R., Assistant Resident; Pathology HERNANDEZ, GUSTAVO ENRIQUE, Assistant Resident; Radilology HESTER, RAY WILLIS, Assistant Resident; Neurosurgery HIGHTOWER, DANIEL R., Assistant Resident; Otolaryngology Hollifield, JOHN WARD, Intern; Medicine HOMESLEY, HOWARD DAVID, Intern; Surgery Hood, ANTOINETTE FOOTE, Intern; Medicine HOOD, CHARLES EDWARD, Intern; Medicine HONEYCUTT, L. FULLER, Intern; Medicine HONRUBIA, FRANCISCO MANUEL, Assistant Resident; Ophthalmology HUBER, FRANCIS C., JR., Assistant Resident; Anesthesiology

Begins approximately 8-8-67

HUGHES, FELIX AUSTIN, III, Assistant Resident; Radiology JACK, WILLIAM DAVID, II, Intern; Medicine JOHNSON, DAVID HOLLOWAY, Intern; Pediatrics KAPLAN, MICHAEL PHILIP, Assistant Resident; Surgery KATES, RICHARD BERNARD, Assistant Resident; Ob-Gyn KENDALL, ROBERT LEON, Intern, Pathology KERNS, ALBERT LOUIS, Assistant Resident; Medicine KIELY, JOHN ARTHUR, Intern; Medicine KIMBRELL, FRED T., JR., Intern; Medicine KREMERS, ROBERT HENRY, Intern; Pediatrics LAMPERT, RALPH JACQUES, Assistant Resident; Pathology LANIER, VERNE CLIFTON, JR., Assistant Resident; Surgery LAWLER, MARION RUSSELL, JR., Assistant Resident; Surgery LAWLER, ROBERT EUGENE, Resident; Radiology LAWRENCE, ROBERT LIVINGSTON, Assistant Resident; Otolaryngology LEIGH, JAMES HOMER, Intern; Surgery LENTZ, JOSEPH F., Chief Resident; Pediatrics LEV, DANIEL MATHEW, Resident; Ophthalmology LEVINSON, JOEL DAVID, Assistant Resident; Medicine LIMBAUGH, JAMES WILSON, JR., Assistant Resident; Radiology LITTLEFORD, PHILIP OSBORNE, Assistant Resident; Medicine LONG, WARREN DAVID, JR., Assistant Resident; Neurosurgery LOWDER, STEPHEN CARLTON, Assistant Resident; Medicine LOWE, ROBERT WYLIE, Assistant Resident; Orthopedic Surgery LUTZ, ROY WINSTON, Intern; Pediatrics LYNN, MORTON DANIEL, Assistant Resident; Orthopedic Surgery MARTIN, LEWIS KERFORD, II, Intern; Surgery MAUNEY, WALTER FORD, Assistant Resident; Ob-Gyn MAXWELL, OLEN DALE, Assistant Resident; Psychiatry MCALLISTER, RUSSELL GREENWAY, Intern: Medicine McCoy, Roy MAXIE, Resident; Urological Surgery McLAMB, JOSEPH TIMOTHY, Intern: Surgery McMAHAN, JOHN WELLINGTON, Resident; Ophthalmology McMAINS, DIANE ANDREWS, Intern: Pediatrics MCNUTT, DAVID RICHARD, Assistant Resident; Medicine McPHERSON, WARREN FREDERICK, Assistant Resident; Surgery MEWBORNE, EDWARD BRUCE, JR., Assistant Resident; Radiology MIGLIORE, ANTHONY DAVID, Assistant Resident; Anesthesiology MILES, GORDON L., Assistant Resident; Pathology MODE, DONALD GENE, Resident; Urological Surgery MORGAN, CALVIN V., JR., Assistant Resident; Surgery MORGAN, HENRY BROOKS, Assistant Resident; Surgery MORGAN, JOHN RONALD, Assistant Resident; Pediatrics MORROW, JOHN ANDREW, Resident; Radiology Moss, JOE P., Intern; Pediatrics MYERS, ROBERT PERRY, Intern; Medicine NECHTMAN, CARL MANDEL, Assistant Resident; Surgery NELSON, HENRY SPERRY, Assistant Resident; Pathology NEUMASTER, TERRY DAVID, Intern; Surgery NEVINS, ROBERT CHARLES, JR., Assistant Resident; Ophthalmology NOAH, HUGH BRYAN, Assistant Resident; Surgery

NORTON, CHARLES GLENN, Assistant Resident; Orthopedic Surgery OMOHUNDRO, JOHN MOTEN, III, Assistant Resident; Ophthalmology PATIKAS, LOUISE GREEN, Senior Assistant Resident; Pediatrics PATIKAS, PANAGIOTIS TAKIS, Assistant Resident; Surgery PATTERSON, HOMER SCOTT, Assistant Resident; Psychiatry PERRAS, DAVID ARTHUR, Assistant Resident; Ob-Gyn PINKERTON, JOE ANDERSON, Assistant Resident; Surgery POPE, JAMES NORFORD, Assistant Resident; Surgery PORTMAN, EDWARD MALCOLM, Intern; Ob-Gyn RAMNATH, SURESH, Assistant Resident; Neurosurgery REINHART, JOHN MICHAEL, Intern; Pediatrics REYNOLDS, ROBERT NELSON, Assistant Resident; Psychiatry ROBBINS, LANSDON BRECKINRIDGE, Assistant Resident; Surgery RODRIGUEZ, ADALBERTO PEREZ, Resident; Urological Surgery RUSSELL, ALEXANDER PRESTON, Assistant Resident; Pathology RUSSELL, JAMES EDWARD, Assistant Resident; Orthopedic Surgery RUSSELL, ROBERT VANCE, Resident; Orthopedic Surgery RUTLEDGE, SAMUEL BENTON, Assistant Resident; Radiology RYU, CHI YOL, Assistant Resident; Radiology SAITER, JOSEPH T., JR., Assistant Resident; Orthopedic Surgery SANCHEZ, JUAN F., Assistant Resident; Otolaryngology SCHLICHTER, FRANK JOHN, JR., Resident; Urological Surgery SCHWARTEN, DONALD E., Assistant Resident; Radiology SCHWINK, THOMAS MICHAEL, Assistant Resident; Psychiatry SCOTT, ROBERT E., Intern; Pathology SETLIFF, REUBEN CARROLL, II, Assistant Resident; Otolaryngology SHAKER, ISSAM JOHN, Intern; Surgery SHASTEEN, WILLIAM JOHNSON, Assistant Resident; Pathology SHEPHARD, GLENN HARVEY, Assistant Resident; Surgery SILVERMAN, BARRY DAVID, Intern; Medicine SKOGLUND, RODNEY DAN, Assistant Resident; Medicine SMITH, MURRAY W., Assistant Resident; Medicine Sorensen, Herman David, Intern; Medicine SoyANGCO, ALFREDO LOPEZ, Chief Resident; Anesthesiology Spalding, Michael Jon, Assistant Resident; Surgery STEVENS, TIMOTHY WATSON, Chief Resident; Medicine STEWART, SCOTT, III, Assistant Resident; Surgery TAPPER, RICHARD IVAN, Intern; Surgery TEMPLE, CLARENCE ALLEN, Assistant Resident; Orthopedic Surgery THOMAS, CLARENCE SIMPSON, JR., Assistant Resident; Surgery THOMPSON, BARRY HAMMOND, Senior Assistant Resident; Pediatrics THRELKEL, JAMES BENTLEY, Assistant Resident; Surgery THRELKEL, ROBERT HAYS, Assistant Resident; Pediatrics TILLEY, KENNETH SHANNON, Resident; Ophthalmology TRAUGHBER, SAM HENDLEY, Assistant Resident; Medicine TRIPLETT, JOSEPH NIMROD, JR., Assistant Resident; Surgery Tyler, William L., Assistant Resident; Medicine VAN Eys, JAN, Assistant Resident; Pediatrics VAN WAY, CHARLES WARD, III, Assistant Resident; Surgery VINDING, JENS, Assistant Resident; Radiology WARSON, JAMES STICKNEY, Assistant Resident; Surgery

WELBORN, MELL BURRESS, JR., Assistant Resident; Surgery WELBORN, WILLIAM RALPH, Intern; Medicine WEYMULLER, ERNEST ALFRED, JR., Assistant Resident; Surgery WHITTAKER, DAVID STANTON, Assistant Resident; Surgery WILLINGHAM, WINBORN B., JR., Resident; Urological Surgery WILSON, JAMES PHILLIP, Assistant Resident; Medicine WILSON, RALPH VALENTINE, Assistant Resident; Orthopedic Surgery WIMBERLY, JOHN EVAN, Assistant Resident; Surgery WISE, HENRY ALEXANDER, II, Assistant Resident; Surgery WOOD, FRANK STEPHENS, Intern; Surgery WOOD, GEORGE WALLACE, Assistant Resident: Pediatrics WOOD, JOHN WATERBURY, Assistant Resident; Ophthalmology WOODRUFF, RALPH DUTTON, Chief Resident; Pathology WOODWARD, THOMAS ALLEN, Intern; Pediatrics YOUNG, ALFRED BYRON, Assistant Resident; Neurosurgery YOUNG, JAMES L., Intern; Medicine YOUNT, JAMES ALVIN, Assistant Resident; Medicine ZAENTZ, SAMUEL DONALD, Intern; Medicine