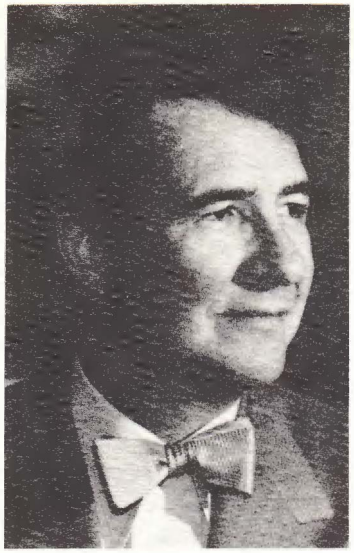
Texas Tech University School of Medicine

BULLETIN 1973-74



Grover E. Murray, Ph.D. President
Texas Tech University School
Of Medicine

The building which will house the Texas Tech University School of Medicine will be the largest building in West Texas. The architectural renderings indicate it will be a handsome landmark. Blueprints show it will be an eminently useful building.

It is to be hoped, however, that this magnificent building will never be confused with what is truly the Texas Tech University School of Medicine; for the school is not a building but a community of dedicated people.

The central group is the faculty. Texas Tech has reason to be proud of the faculty nucleus, the first persons chosen to begin the teaching, research and health services which are all directed toward providing the delivery of health care necessary to the well-being of the people who live in West Texas.

Students who began their studies in the first classes in the Texas Tech University School of Medicine already are setting their own fine record of dedication in their endeavors. Great care was taken in choosing these students, and we are hopeful that their future services will reflect our wisdom in undertaking an innovative program leading to the delivery of health care services of the first class.

In addition, of course, there are administrative, paramedical and staff persons who contribute to the effectiveness of the medical school program.

Supporting the faculty, the students, and other personnel related to the medical school at Lubbock, where central facilities are located on the campus of Texas Tech University, are the communities in which Regional Academic Health Centers will be located.

Already operative is the Amarillo Regional Academic Health Center, and intensive planning is started in El Paso. Other centers will be located in major urban areas in West Texas.

Undergirding the entire program with financial support are, of course, the people of Texas who have, through their Legislature, established and funded the program.

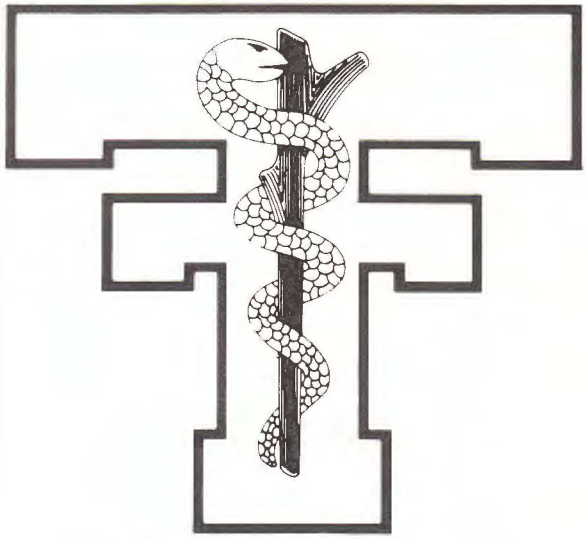
It is of particular interest to recognize one unusual feature of the Texas Tech University School of Medicine. It was located deliberately on the campus of a major university in order that there might be an interchange between the people primarily interested in medical education and those interested primarily in other academic areas. The interchange includes facilities also, and this is economically desirable. More important, however, is the communication between persons.

Neither students nor faculty are isolated within a single professional area. Consequently both the University and the Medical School communities are enriched by the dual presence.

The Texas Tech University School of Medicine by 1975 is to be housed in a large, handsome useful structure. We shall be proud of that building, but our deepest concern will be properly directed always to what goes on within the building rather than with the structure itself.

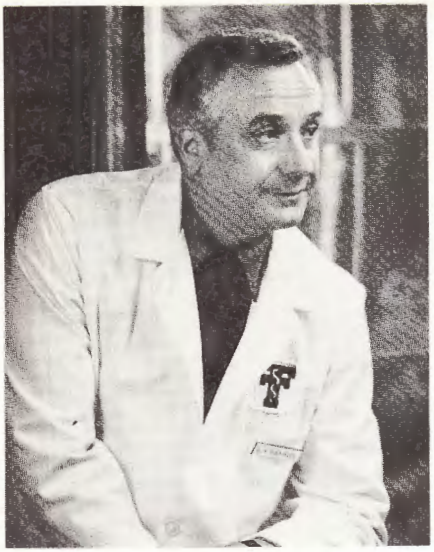
BULLETIN
OF
TEXAS TECH UNIVERSITY SCHOOL OF MEDICINE

Vol. I September 1973 No. I



"This institution is an integrated institution of higher learning at all levels." — Policy statements of the Board of Regents of Texas Tech University School of Medicine.

The Bulletin of Texas Tech University School of Medicine is published by Texas Tech University School of Medicine, P.O. Box 4569, Lubbock, Texas 79409.



John A. Buesseler, M.D.
Vice President for Health Sciences
and Health Affairs

Texas Tech University School of Medicine is, of course, new, having enrolled its first students in August, 1972. But its newness extends beyond chronological age.

In planning and developing Texas Tech University School of Medicine, we were given the opportunity to build a medical school that could be truly responsive to national and regional health needs, including the needs of the modern medical student. Opportunity became commitment, a commitment to provide the highest quality, most efficient medical education, and the best possible service to our constituency, the people of Texas and the nation. The result is a program with these significant innovations:

—In line with the above, avoidance of premature career specialization at the pre-doctoral level of training.

—Education of medical students in a broad-spectrum general program where there is as much emphasis on training in primary comprehensive health care as in other medical specialties.

—Inclusion of a Rural Preceptorship program, where senior medical students participate in delivering health care in private offices in rural communities. Working under physicians who are preceptors appointed by the School of Medicine, students get a feeling for organizing and managing comprehensive health care activities as members of smaller communities.

—In the interest of efficiency, compression of the program leading to the medical degree to 36 months.

—Incorporation of Tutorial teams, each a "family" of one faculty physician and some eight medical students to build the benefits of small-group dynamics and personal attention into the total medical education experience.

—Employment of a system of Health Education Regions covering the vast West Texas area, with a Regional Academic Health Center in each. The Centers offer education and training in primary health care and in the various medical specialties as appropriate, at all three points in the medical education process: pre-doctoral training for medical students, post-doctoral training for house staff, and continuing education for practicing physicians.

Our program is well under way. We are gratified with the legislative support and the cooperation received from the Texas Tech University Complex and the citizenry that has enabled us to put the School into operation in such a short time. And we look forward to the work ahead, because we think it matters very much.

TEXAS TECH UNIVERSITY SCHOOL OF MEDICINE

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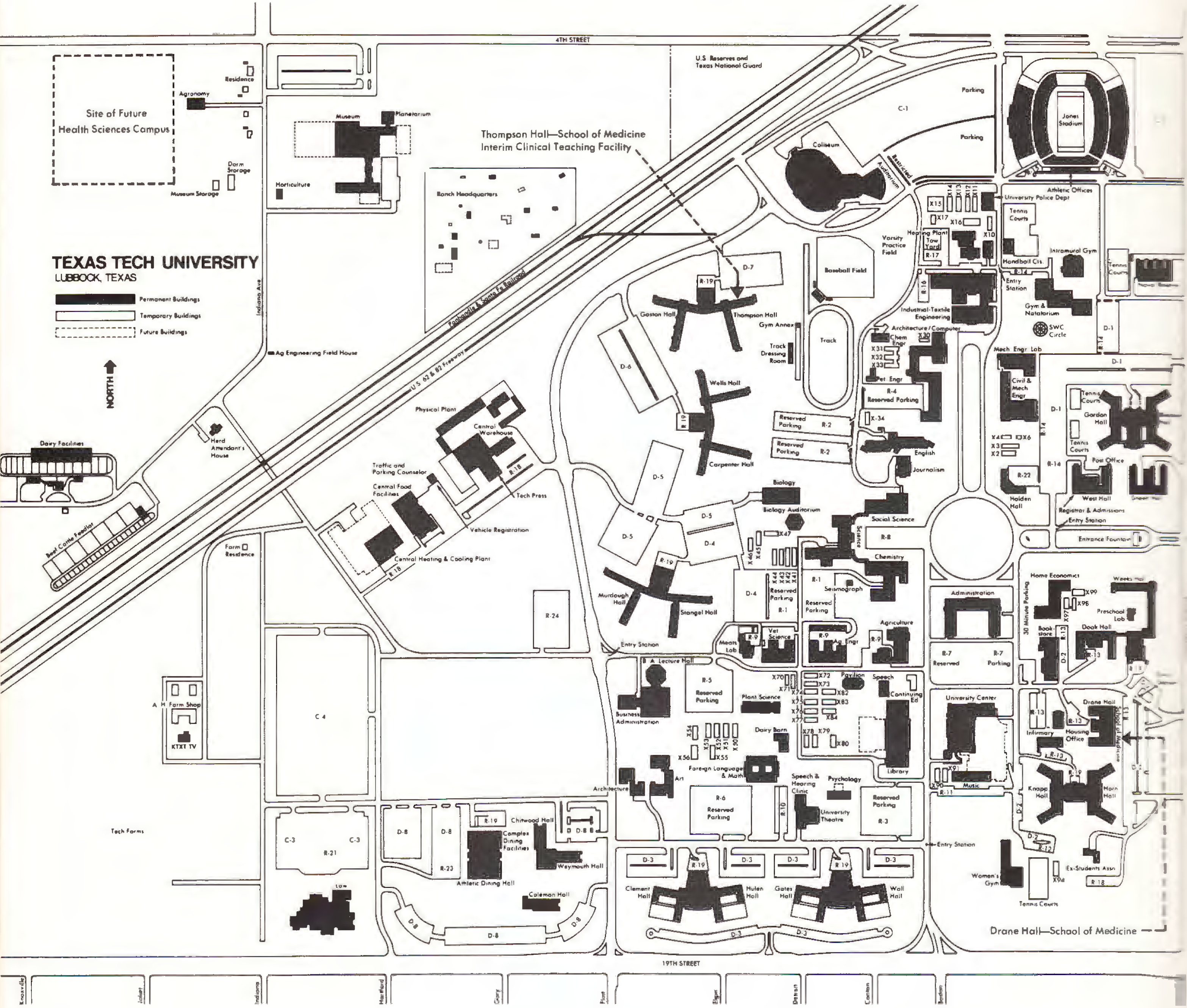

TEXAS TECH UNIVERSITY
LUBBOCK, TEXAS
Permanent Buildings
Temporary Buildings
Future Buildings
NORTH
4TH STREET
19TH STREET
Site of Future Health Sciences Campus
Thompson Hall—School of Medicine Interim Clinical Teaching Facility
Drane Hall—School of Medicine
U.S. Reserves and Texas National Guard
Agronomy
Residence
Dorm Storage
Museum Storage
Museum
Planetarium
Horticulture
Ranch Headquarters
Panhandle & Santa Fe Railroad
U.S. 62 & 82 Freeway
Indiana Ave
Ag Engineering Field House
Dairy Facilities
Herd Attendant's House
Beef Cattle Feedlot
Farm Residence
Physical Plant
Central Warehouse
Traffic and Parking Counselor
Central Food Facilities
Tech Press
Vehicle Registration
Central Heating & Cooling Plant
A H Farm Shop
KTXT TV
Tech Farms
Law
Coliseum
Auditorium
Restricted
Parking
Jones Stadium
Athletic Offices
University Police Dept
Tennis Courts
Intramural Gym
Handball Cts.
Heating Plant
Tow Yard
Varsity Practice Field
Baseball Field
Track
Track Dressing Room
Gym Annex
Gaston Hall
Thompson Hall
Wells Hall
Carpenter Hall
Murdough Hall
Stangel Hall
Entry Station
Industrial-Textile Engineering
Architecture/Computer
Chem Engr
Pet. Engr
Reserved Parking
English
Journalism
Biology
Biology Auditorium
Social Science
Chemistry
Seismograph
Science
Gym & Natatorium
SWC Circle
Mech Engr Lab
Civil & Mech Engr
Gordon Hall
Holden Hall
Post Office
West Hall
Registrar & Admissions
Entrance Fountain
Home Economics
Weeks Hall
Preschool Lab
Doak Hall
Administration
Book-store
30 Minute Parking
Agriculture
Ag Engr
Vet Science
Meats Lab
B. A. Lecture Hall
Business Administration
Plant Science
Pavilion
Speech
Continuing Ed
Library
Dairy Barn
Foreign Language & Math
Art
Architecture
Speech & Hearing Clinic
Psychology
University Theatre
University Center
Music
Drane Hall
Infirmary
Housing Office
School of Medicine
Knapp Hall
Horn Hall
Women's Gym
Ex-Students Assn
Tennis Courts
Chitwood Hall
Complex Dining Facilities
Weymouth Hall
Athletic Dining Hall
Coleman Hall
Clement Hall
Hulen Hall
Gates Hall
Wall Hall
Knoxville
Joliet
Indiana
Hartford
Gary
Flint
Elgin
Detroit
Canton
Boston

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COVER

The cover illustration is an architect's rendering of the Texas Tech University School of Medicine Building. The new building will be the largest in West Texas and, when completely finished, will contain more than 770,000 gross square feet. It is the first component in the development of a health sciences campus and the first finished phase is scheduled for occupancy in the fall of 1975.


SCHOOL OF MEDICINE

ACADEMIC CALENDAR

TTUSM Class of 1974

21 August 1972	Orientation
22 August 1972	First day of classes, Trimester V
23-26 November 1972	Thanksgiving Vacation
20 December 1972	End, Trimester V
21 Dec. - 1 Jan. 1973	Christmas Vacation
2 January 1973	First day of classes, Trimester VI
27 April 1973	End, Trimester VI
30 April 1973	First day of classes, Trimester VII
12 October 1973	End, Trimester VII
15 October 1973	First day of classes, Trimester VIII
22-25 November 1973	Thanksgiving Vacation
20 Dec. - 1 Jan. 1974	Christmas Vacation
29 March 1974	End, Trimester VIII

ACADEMIC CALENDAR
TTUSM Class of 1975*

21 August 1972	Orientation
22 August 1972	First day of classes, Trimester I
23-26 November 1972	Thanksgiving Vacation
20 December 1972	End, Trimester I
21 Dec. - 1 Jan. 1973	Christmas Vacation
2 January 1973	First day of classes, Trimester II
27 April 1973	End, Trimester II
30 April 1973	First day of classes, Trimester III
17 August 1973	End, Trimester III
27 August 1973	First day of classes, Trimester IV
22-25 November 1973	Thanksgiving Vacation
19 December 1973	End, Trimester IV
20 Dec. - 1 Jan. 1974	Christmas Vacation
2 January 1974	First day of classes, Trimester V
26 April 1974	End, Trimester V
29 April 1974	First day of classes, Trimester VI
16 August 1974	End, Trimester VI
26 August 1974	First day of classes, Trimester VII
21-24 November 1974	Thanksgiving Vacation
18 December 1974	End, Trimester VII
19 Dec. - 1 Jan. 1975	Christmas Vacation
2 January 1975	First day of classes, Trimester VIII
6 June 1975	End, Trimester VIII

* (Includes transfer juniors who arrive August 1973)

ACADEMIC CALENDAR
TTUSM Class of 1976

2 July 1973	Orientation
3 July 1973	First day of classes, Trimester I
2 November 1973	End, Trimester I
5 November 1973	First day of classes, Trimester II
22-25 November 1973	Thanksgiving Vacation
20 Dec. - 1 Jan. 1974	Christmas Vacation
1 March 1974	End, Trimester II
4 March 1974	First day of classes, Trimester III
25 May - 2 June 1974	Free Time
28 June 1974	End, Trimester III
1 July 1974	First day of classes, Trimester IV
17-25 August 1974	Free Time
1 November 1974	End, Trimester IV
4 November 1974	First day of classes, Trimester V
21-24 November 1974	Thanksgiving Vacation
19 Dec. - 1 Jan. 1975	Christmas Vacation
7 March 1975	End, Trimester V
10 March 1975	First day of classes, Trimester VI
27 June 1975	End, Trimester VI
1 July 1975	First day of classes, Trimester VII
31 October 1975	End, Trimester VII
3 November 1975	First day of classes, Trimester VIII
20-23 November 1975	Thanksgiving Vacation
18 Dec. - 1 Jan. 1976	Christmas Vacation
18 June 1976	End, Trimester VIII

General Information

Texas Tech University School of Medicine

Organization

Background

The 61st Legislature of the State of Texas authorized Texas Tech University School of Medicine by legislative action in May, 1969. It is a separate institution but shares the same President and Board of Regents as Texas Tech University.

It took only 39 months for the School to become operational — 23 months from the arrival of the Dean, who was the first full-time employee. Thirty-six freshman and 25 junior medical students began classes on August 21, 1972. According to the Association of American Medical Colleges, this was the fastest development time on record for a senior medical school authorized prior to the existence of any staff or facilities.

In October, 1971, Texas Tech University School of Medicine received provisional accreditation from the Liaison Committee on Medical Education of the American Medical Association and the Association of American Medical Colleges.

The School has been in its temporary quarters, Drane Hall, a renovated dormitory, since December, 1971. Another renovated dorm, Thompson Hall, began operation as the interim clinical teaching facility in April, 1973. Ground was broken for the School's permanent quarters, on a 250-acre plot of the Texas Tech campus, in February, 1973. It is the only school of medicine in Texas to be located on the campus of a major university.

The Lubbock County Hospital District will build a teaching hospital adjacent to the School's permanent quarters. As of July, 1973, there were medical training affiliation agreements with 23 West Texas hospitals and health care institutions, with additional affiliations currently under negotiation.

The Texas Tech University School of Medicine, in achieving as much as it has to date, has taken the opportunity to be innovative — in compressing the medical curriculum to 36 months by means of trimesters, in placing educational emphasis on a broad spectrum of general medicine utilizing the ambulatory patient for the major portion of the student's clinical experience, and in incorporating Tutorial Team and Family Practice Clinic features into the medical education program. Thus, innovation is an integral part of the School's effort to establish the highest quality medical education, research and service for its constituency, the people of Texas.

Directions

The curriculum and educational emphasis is on providing medical students with the skills to become competent family practitioners. There is a desperate need, in the nation as well as in Texas, for physicians who can provide comprehensive health care.

Students are discouraged from choosing careers in specialty areas until they have the knowledge and experience to make a wise choice. The thorough education in a full spectrum of medicine provided by Texas Tech University School of Medicine is the best possible preparation for post-doctoral specialty training in any field as well as for a family practice career.

Tutorial Teams

Tutorial teams are a basic part of the educational system of the School of Medicine. A tutorial team is one faculty physician-scholar as mentor, and eight medical students. With the teams, small-group dynamics become an important part of medical education. They facilitate development of the student's scientific and humanitarian system of values, his ability to make clinical judgments and develop his professional ethics with mentors providing continuous attention and guidance.

The tutorial team is literally a "family." Students get to know each other and their mentors, and relate to each other as they would within their own families. Mentors are teachers, counselors and friends, and they serve as role models for the blend of skills, values and professional attitudes that physicians must have. The tutorial team is intended to offset the trend toward depersonalization found in the mass education programs that have been created in response to the need for an increased production of physicians.

In short, the tutorial team ensures that medical students at Texas Tech University School of Medicine will continually receive personalized attention, training and guidance in a medical curriculum tailored to individual needs.

Trimester System

In response to national goals of health care delivery and the need for more physicians to fulfill them, TTUSM has developed a curriculum which condenses the normal four-year medical curriculum into 36 months, with no reduction in the quality of medical education. This has been accomplished by eliminating most of the vacation time and adopting a system of intensified training within a framework of eight trimesters, each of approximately 17 weeks duration.

Under this new system it is possible for a student to graduate from medical school six years after he completes high school.

Because of the intensiveness of the training, TTUSM recommends that its students not attempt to hold part-time jobs during their medical training since this would compromise their medical education.

Outreach Programs

Texas Tech University School of Medicine is a regional medical school and a vital part of its philosophy of education and service is its outreach program.

Unlike schools in large urban areas where the medical school-medical center complex may be located in a few square blocks of real estate, many of the Texas Tech University School of Medicine facilities and faculty are distributed throughout West Texas — an area encompassing approximately 126,000 square miles and 106 counties. The regional medical school concept complements the program in family practice training at TTUSM. In a large, urban medical center, primary and ambulant care may be only classroom concepts to medical students. At TTUSM students work and learn in actual primary health care delivery situations, in ambulatory clinical environments.

In addition to affiliation agreements with selected health care institutions throughout the West Texas region, the School of Medicine is developing Regional Health Education Centers in large cities of the outreach area. These Centers will be part of the region's health education system, along with affiliated hospitals. Activities of the Centers may include training for predoctoral and postdoctoral medical students and for other students in medical sciences. The School also will conduct continuing education programs for practicing physicians in the Health Education Regions served by the Centers.

The Centers will be staffed and operated by the faculty of the School of Medicine, with resident physicians as junior members of the medical staff with the rank of instructor. All medical students will acquire part of their training in the clinical environments of these Centers.

Faculty

As of July 1, 1973, the full-time faculty and professional staff of the School of Medicine numbers 93. In addition, 243 West Texas area health care professionals and scientists have been appointed to the part-time faculty of the School of Medicine. As the School's educational programs grow and as the Regional Health Education Centers develop, both the full-time faculty and the part-time faculty will grow with them.

Physical Facilities

Texas Tech University School of Medicine is on the campus of Texas Tech University. It is occupying temporary quarters until the permanent medical school building is completed in late 1975.

The three major facilities currently operated by the School are Drane Hall, Thompson Hall, and the former University Health Center building.

Drane Hall houses the School's administrative offices, te medical library, educational support activities and non-clinical academic departments. In addition, student tutorial team areas, student and faculty conference and seminar rooms, and anatomical laboratory facilities are in Drane Hall.

Thompson Hall houses clinical departments of the School and contains ambulatory patient care clinics, the Student Health Clinic, an emergency room for university students, laboratory medicine space, a pharmacy and facilites for radiology, physical therapy, and educational media services. Thompson Hall also contains additional tutorial team space, student conference areas, and a clinical reference library.

In addition, laboratory facilities for the basic science departments of the School of Medicine are also maintained in the Texas Tech University Chemistry and Biology buildings and in the former University Health Center building.

Health Sciences Information Center

At the core of the Health Sciences Information Center is the medical library, developed in the record time of eleven months. Current resources of the medical library total 20,000 items including books, serials, pamphlets, microfilms, microfiche, audio tapes, discs, slides, films and filmstrips. By 1975 it is expected that the number of books and serials will reach approximately 60,000. Medical students also have access to the Texas Tech University library, which contains approximately 1,360,000 items including 775,000 volumes and substantial holdings in the sciences.

Affiliated Institutions

The programs of Texas Tech University School of Medicine are conducted in many clinics and teaching and research facilities throughout West Texas through affiliation agreements. Institutions with which the School of Medicine has established educational affiliations include the following:

Lubbock

St. Mary of the Plains Hospital: A general hospital of 140 beds operated by the Sisters of St. Joseph's of Orange, California.

Methodist Hospital: A 405-bed general hospital opposite the campus of Texas Tech University.

University Hospital: A 110-bed general hospital owned by the Hospital Corporation of America of Nashville, Tennessee.

West Texas Hospital: A 110-bed community hospital.

Lubbock Medical Center Hospital: A 200-bed facility housing the only TTUSM departmental in-patient services, involving the Departments of Psychiatry, Physical Medicine and Rehabilitation, and Family Practice.

City-County Maternity Clinic: A free maternity clinic operated by the Lubbock City-County Health Unit.

The Presbyterian Center: A free clinic operated by the Presbyterian Church.

Posey Clinic: A neighborhood primary health care clinic directed by TTUSM under an affiliation agreement with the city of Lubbock.

Plainview

Central Plains General Hospital: A 151-bed community general hospital.

Central Plains Comprehensive Community Mental Health and Mental Retardation Center: An in-patient facility of 24 beds with an out-patient and day care capability.

Big Spring

Veterans Administration Hospital: A federal government general hospital of 235 beds.

El Paso

William Beaumont Army Medical Center: A 611-bed U. S. Army general hospital with an out-patient facility handling about one million patient-visits annually.

R. E. Thomason General Hospital: A 377-bed general hospital owned and operated by the El Paso County Hospital District.

Amarillo

Northwest Texas Hospital: A 250-bed general hospital operated by the Amarillo Hospital District.

Psychiatric Pavilion: A 120-bed facility located in the Amarillo Medical Center and operated by the Amarillo Hospital District.

Killgore Children's Psychiatric Center and Hospital: A 24-bed privately endowed facility located at the Amarillo Medical Center.

Veterans Administration Hospital: A federal government general hospital of 130 beds.

High Plains Baptist Hospital: A 241-bed community general hospital located in the Amarillo Medical Center.

St. Anthony's Hospital: A 250-bed voluntary, non-profit hospital owned and operated by the Sisters of Charity of the Incarnate Word.

Andrews

Permian General Hospital: A 74-bed community general hospital.

Midland

Midland Memorial Hospital: A 186-bed community general hospital.

Kermit

Memorial Hospital: An 85-bed community general hospital.

Perryton

Ochiltree General Hospital: A 65-bed community general hospital.

Additional affiliations will be established as the School of Medicine develops its training programs.

Admission

General Requirements

General admissions requirements include at least three years of senior college level study in an accredited institution, and a baccalaureate degree is strongly recommended. Because of the curriculum flexibility, there are no preferred undergraduate majors. Equal consideration is given to humanities majors provided they demonstrate motivation for a career in medicine and an aptitude for handling scientific material. Emphasis is placed on a baccalaureate or pre-baccalaureate program that constitutes a logical whole, regardless of the field.

Recommended undergraduate credits include evidence of satisfactory completion of the following:

Courses	Semesters
Chemistry (including Organic)	4
General Biology	2
Physics	2

In addition, a reasonable working knowledge of a foreign language is recommended. There is no language requirement for admission to Texas Tech University School of Medicine, but conversational Spanish is recommended as a highly useful course for the student if he intends to practice in Texas or the Southwest in general. Calculus also is highly recommended but not required.

The Medical College Admission Test (MCAT) also is required of all applicants for admission to the School of Medicine. The MCAT should be taken in the spring of the year in which the application to medical school is submitted. Application to take the MCAT should be made to The Psychological Corporation, 304 East 45th Street, New York, New York, 10017, or through the counseling and testing service at the student's college or university.

Students interested in Allied Health programs and graduate study in Basic Medical Sciences should contact the appropriate medical school department chairman.

The undergraduate student planning a career in medicine is advised to complete the minimum recommended courses prior to his senior year so that his college transcript record is available for evaluation by the Admissions Council.

Application Procedures

Texas Tech University School of Medicine is a participant in the centralized application service provided by the Association of American Medical Colleges (AAMC). Applicants need complete only one application when applying to any of the medical schools participating in the American Medical College Application Service (AMCAS), and supply only one set of transcripts to AMCAS. The application will be reproduced and the transcripts standardized prior to distribution to medical schools designated by the applicant. Texas Tech University School of Medicine will then notify the applicant of additional information that must be provided and of the admission decision.

An individual using AMCAS must be applying for the first year of study leading to the M.D. degree. Students applying for transfer or advanced standing must request application information and material directly from the Office of the Registrar at Texas Tech University School of Medicine.

AMCAS applications may be obtained from the Association of American Medical Colleges, One Dupont Circle, Washington, D.C., 20036, or from the Office of the Registrar at this school. The completed forms are returned directly to the AAMC. Early application is advisable. The deadline for receipt of applications at Texas Tech University School of Medicine is December 15.

If the information in the AMCAS application is favorable, the applicant will be sent additional application material from this school. This should be completed and returned to the Office of the Registrar, Texas Tech University School of Medicine, along with an application fee of $10. A personal interview may then be required after which the Admissions Council will make a final decision. Applicants are carefully evaluated with regard to their potential for pursuing a curriculum leading to the Doctor of Medicine degree. Academic achievement, MCAT scores and the interview constitute the major factors for applicant evaluation. The Admissions Council may request additional information when appropriate.

Timetable of Application and Acceptance

Filing of formal application by applicant:
Earliest date: June 1
Latest date: December 15

Notification of Acceptance by School:
Earliest date: October 1
Latest date: When class is filled

The School of Medicine may give an early decision to an applicant preferring this School.

Applicant response to acceptance offer:
Two weeks

Deposit fee to hold place in class (Applies on tuition): $100 due on acceptance (refundable upon cancellation)

Deadline for cancellation of acceptance: March 1

Financial Information

Applicants are requested to indicate their anticipated financial needs. Limited financial aid in the form of loans and scholarships will be available through the Registrar's Office.

Tuition and Fees

Approximate Cost for 12-Month School Year

	Resident	Non-resident
Tuition:	$400	$1200
Building Use:	150	150
University Center:	15	15
Student Activity Fee:	60	60
Laboratory and Course Fee:	49	49
General Property Deposit:	7	7
Total	$681	$1481

For further information about Admissions or Financial Aids, contact: Registrar, Texas Tech University School of Medicine, P.O. Box 4569, Lubbock, Texas, 79409.

Texas Tech University Medical School Foundation

The Texas Tech University Medical School Foundation was formed in August, 1970, exclusively for charitable, educational and scientific purposes and to assist in the establishment of the School of Medicine. It was chartered by the Secretary of State, State of Texas as a non-profit corporation with a perpetual duration, on February 18, 1970.

The Foundation is responsible for accepting donations, gifts and grants of money and property and administering these funds on a charitable, educational, or non-profit basis on behalf of the School of Medicine. In addition, the Foundation helps provide support for training facilities, research, and financial assistance for students.

Officers currently serving the Texas Tech University Medical School Foundation are:

Royce C. Lewis, Jr., M.D., Chairman
Edward R. Smith, Vice Chairman
S. C. Arnett, Jr., M.D., Secretary
Leo E. Ells, Treasurer and Chief Financial Officer
Clyde E. Kelsey, Jr., Vice President for Development, Texas Tech University Complex

Student Life

Organizations

The student body of Texas Tech University School of Medicine holds membership in the Student American Medical Association and the Texas Academy of Family Practice. The School of Medicine student government is currently working on plans to establish a chapter of a national medical fraternity at Texas Tech University School of Medicine.

Student Offices

Each room may have its own telephone and the rooms are located adjacent to the office of the tutorial team mentor. The student offices are home base for the tutorial teams and provide a place for individual study and use of self-instructional material as well as for tutorial team meetings and discussion groups.

Students are assigned office space in tutorial team rooms. Four students are assigned to a room and each student has a desk, storage cabinet, bookshelf and a locker for clothing.

Housing

Texas Tech University maintains 20 residence halls, which house approximately 8,000 students. Medical students are eligible for University housing if they desire it, and assignments will be made according to student preference if space is available. Students interested in University housing should contact the Texas Tech Housing Office, P. O. Box 4629, Texas Tech University, Lubbock, Texas, 79409, for further information.

In addition, there are numerous off-campus apartments and housing facilities available near the campus. Students are expected to make their own arrangements concerning off-campus housing.

Student Health Service

The Texas Tech University School of Medicine operates the Student Health Service and provides treatment for all students in the Texas Tech University complex including the School of Medicine.

The Student Health Service provides treatment through the ambulatory clinic. Physicians and health care personnel are available 24 hours a day. Treatment is confined to the clinic; student health service physicians do not make routine dormitory or house calls. Transportation for the transfer of ill students is available through the University Police Service.

Regular clinic hours are 8:00 a.m. to 5:00 p.m. Monday through Friday and 8:00 a.m. to 12:00 noon on Saturday. At other hours, services may be secured by telephoning or visiting the Student Health Clinic. A nurse is on duty and a physician on call at all times.

Between the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday the services of a laboratory are available for a variety of tests. Also between 8:00 and 5:00 Monday through Friday pharmacy service is available.

Students requiring in-patient care or who have serious injuries or chronic illnesses requiring hospitalization will be given necessary emergency care by the Student Health Clinic and then transferred to a local hospital for additional treatment.

The Health Service staff will notify the parents, guardians or nearest relative of a patient believed to be threatened with a serious illness or thought to be in need of an emergency surgical operation.

The Student Health Service cannot be responsible for continuing treatment of students suffering from chronic diseases. The student health primary care physicians will provide referrals to specialists to give special care to students who need it and who are unacquainted with Lubbock physicians.

Three components are represented in the Student Health Service program. They are:

Personal health services including preventive, diagnostic, therapeutic, and rehabilitative care for both physical and emotional problems.

Environmental surveillance and control, including occupational medicine.

Education for health that includes educational programs for individuals through which they may be motivated to healthful individual and community behavior.

Student Accident and Sickness Insurance

Medical students enrolled at Texas Tech University School of Medicine may subscribe to a supplemental Student Accident and Sickness Insurance Plan that provides 24-hour coverage on or off campus and while in the care of any qualified physician (according to the policy provisions). The 12-month plan covers all vacations and remains in force for a full year even if the student is graduated or drops out of school. A married student may include his spouse and children on the 12-month plan for an additional premium. This insurance plan is available to students at the time of registration for classes.

The Course of Study

The course of study leading to the Doctor of Medicine degree is composed of eight trimesters totaling 36 consecutive months.

A comprehensive education in the broad spectrum of general medicine is provided in order to give the student a solid foundation of medical training as appropriate preparation for further training in any branch or specialty of medicine.

Curriculum Revision

Since Texas Tech University School of Medicine is a new and developing school, the curriculum will undergo complete annual review for possible revision, to make it more responsive to the needs of students. Currently the senior year is under consideration for revision in the areas of elective and selective courses, family practice time and other clinical specialty time.

Curriculum

Texas Tech University School of Medicine utilizes an interdisciplinary approach to medical education that integrates clinical department material into the instructional programs of the basic sciences in order to describe the clinical significance of disease processes on the organ systems. (For example, ophthalmology and neurology teach the functions and common disorders of the extraocular muscles as part of the basic instruction in anatomy.) This interdisciplinary instruction begins at the earliest possible point in the educational experience.

In the clinical years basic science departments may participate in teaching rounds, clinical conferences, and at the bedside.

Among the clinical departments which function as part of the required medical curriculum are Dermatology, Family Practice, Neurology, Obstetrics and Gynecology, Medicine, Ophthalmology, Orthopaedic Surgery, Otorhinolaryngology, Physical Medicine and Rehabilitation, Psychiatry, Radiology, Thoracic Surgery, Urology and Veterinary and Zoological Medicine.

Required Interdisciplinary Curriculum

Trimester I

MCS 5261 - Clinical Sciences I: An orientation for all students in the philosophy of current medical education which is being developed and the background of scientific, environmental, social, and political and economic factors that have influenced the development of modern health and medical care services.

Trimester II

MCS 5312 - Clinical Sciences II: Continuation of Clinical Sciences I.

Trimester III

MCS 6433 - Clinical Sciences III: Fundamentals of Medical Practice. A consideration of the concepts and principles underlying the identification and evaluation of human disease processes in a clinical setting where medical students will function and relate to patients in the context of the total response of a patient to disease and his environment.

Trimester IV

MCS 6834 - Clinical Sciences IV: Fundamentals of Medical Practice. Continuation of Clinical Sciences III.

Freshman Curriculum

The freshman curriculum is designed to impart core knowledge in the basic medical sciences. Additional basic science material is woven into the sophomore, junior and senior curricula. In addition to the instruction in basic sciences, the student is exposed to patients and patient care relatively early in the freshman curriculum as part of the emphasis on clinical training integrated with basic science education.

Summary of Freshman Trimesters

Trimester I

Subject	Hours
Orientation	8
Biochemistry I	86
(Laboratory)	54
(Case of Week)	34
Anatomy	309
Microbiology	51
Clinical Sciences I	34
Convocation Presentation - Tutorial	17
Free Time	103
Final Examinations	24
Total	720

Trimester II

Subject	Hours
Clinical Anatomy	86
Microbiology	80
Physiology	116
(Medicine)	30
(Laboratory)	52
Psychiatry	43
Clinical Sciences II	75
Health Organization Management	15
Convocation Presentation - Tutorial	15
Free Time	56
Final Examinations	24
Total	592

Sophomore Curriculum

The sophomore trimesters provide training in relating to patients with respect to reactions to disease and the consequences of the reactions; instruction in the identification and evaluation of human disease processes; and an understanding of the management principles involved in comprehensive health care. Clinical sciences, pathology, pharmacology, health organization management, biostatistics, and public health, are all integrated into the sophomore curriculum.

Summary of Sophomore Trimesters

Trimester III

Subject	Hours
Pathology	182
Pharmacology	66
Clinical Pharmacology	48
Psychiatry	66
Clinical Biochemistry	32
Health Organization Management	16
Convocation Presentation - Tutorial	16
Clinical Sciences III	132
Free Time	98
Final Examinations	24
Total	680

Trimester IV

Subject	Hours
Pathology	175
Epidemiology and Public Health	53
Biochemical Disorders and Medical Genetics	51
Clinical Sciences IV	262
Oral Medicine	17
Convocation Presentation - Tutorial	17
Free Time	121
Final Examinations	24
Total	720

Junior Curriculum

The junior curriculum is designed to transmit those essential skills required for any type medical practice. Essential clinical skills are learned through clerkships in internal medicine, general surgery, pediatrics, obstetrics-gynecology and psychiatry.

Summary of Junior Trimesters
Trimester V-VI

Subject	Weeks
Internal Medicine	7
Pediatrics	7
Psychiatry	7
General Surgery	7
Obstetrics & Gynecology	7

Senior Curriculum

The senior curriculum includes an entire trimester of 24 weeks devoted to Family Practice and Continuing Comprehensive Health Care. The content of this trimester is a three-way interdisciplinary offering by the Department of Family Practice, Department of Physical Medicine and Rehabilitation and the Office of the Associate Dean for Affiliated Programs which will coordinate the Rural Preceptorship Program. A trimester of 24 weeks of the senior curriculum also is devoted to electives, selectives and clinical clerkships in various specialties. Electives are in a large group of courses a student may choose to fulfill his elective credit requirements. These choices can be independent of one another. Selectives are smaller groups of courses, grouped along specialty lines, from which students must choose interdependent sets of courses.

Graduate Program

The School of Medicine offers graduate courses in the basic medical sciences. At this time, there are no master's or doctor's degrees available in the School of Medicine, except the Doctor of Medicine degree. However, degree programs have been approved by the TTUSM Board of Regents in anatomy, pharmacology, and physiology. These programs have been submitted to the Coordinating Board, Texas College and University System, for further action. There are plans for the establishment of graduate degree programs in each of the other basic medical sciences and various fields in the allied health sciences.

Currently, the microbiology faculty of the School of Medicine participates in a joint program in microbiology offered through the Texas Tech University Department of Biology. Presently, the Texas Tech University Department of Chemistry offers a program leading to the Ph.D. in Chemistry; graduate students may select a biochemistry option as a part of that program in chemistry.

The graduate courses listed in each academic department are available to graduate students in the Texas Tech University Complex, with the consent of the instructor.

Further information about these courses and planning for graduate programs in the School of Medicine may be obtained by contacting the appropriate basic science department chairman or Dr. Francis J. Behal, who serves as Associate Dean of the Graduate School in addition to his duties at the School of Medicine.

Academic Regulations

All credits are expressed in trimester (semester) hours. Grades are on a 4.0 system (A = 4, B = 3, etc.). An overall cumulative weighted quality point average of 2.0 will be required for graduation.

Students who receive the grade I (Incomplete) will have a maximum of two trimesters in which to complete work for the course and remove this grade, or it will be changed to F (Failing) automatically at the end of the second trimester following the receipt of the I. Grades of I received as a result of illness will be dealt with on an individual basis.

Transfer of credits toward the Doctor of Medicine degree is never automatic but rather should be made at the discretion of the Dean upon recommendation of the appropriate advisory faculty bodies.

Academic advancement (promotion) of medical students from the freshman year to the sophomore year (from Trimester II to Trimester III), from the sophomore year to the junior year (from Trimester IV to Trimester V), from the junior year to the senior year (from Trimester VI to Trimester VII) will be governed by the Dean, upon recommendation of the faculty promotion council who will consider all facets of a student's endeavor (evidence of academic achievement, evidence of professional development, and evidence of ethical and responsible standards of conduct).

It is implicit in the requirements for the Doctor of Medicine and all other degrees conferred by Texas Tech University School of Medicine that the faculty recommend each candidate for graduation. This requirement is the final requirement for all degrees and is in addition to any and all specific degree requirements. In considering candidates for graduation, the faculty will consider not only academic achievement, but the ethical, professional and personal standards of conduct as a potential physician evidenced by each candidate.

Following is a listing of TTUSM academic departments, departmental educational goals, and required courses currently offered. Due to its status as a developing medical school, some TTUSM departments are not presently fully developed in terms of full-time faculty and course offerings.

Academic Departments

The School of Medicine is organized into 34 academic departments. These departments include the basic medical sciences and major specialty fields of medicine as well as some innovative medical fields designed to better prepare the student for the role of a physician. These latter fields include Biomathematics, Bio-medical Engineering, Environmental Health, Forensic Medicine, Health Communications and Health Organization Management.

In addition to the curriculum designed for medical students, several departments also offer courses for graduate credit which are listed as such under the department.

School of Medicine departments and course offerings are described in the following section.

(NOTE: The first digit of each course number indicates the year in which it is given: 5 - freshman; 6 - sophomore; 7 - junior; 8 - senior. The second digit of each course number indicates the credit hours for the course. A zero in the second digit indicates 10 hours credit. The third and fourth digits are course identification numbers.)

Allied Health

Francis J. Behal, Ph.D., Professor and Chairman

Instructor

Donna B. Gault, B.S.

In the growing concern for the quality and quantity of health care available to the average American, the concept of a "Health Care Delivery System" is becoming increasingly important. The efforts of the physician must have a greater outreach by utilizing the services of highly trained and skilled people with more specialized skills who operate under the physician's direction.

The Department of Allied Health, along with the proposed School of Allied Health* has a major role in supplying allied health personnel to this region. The Department currently functions to coordinate all Allied Health programs in the Texas Tech University complex. The most effective training of these people is through the combined efforts of certain physician-directed groups such as in pathology and radiology, with academic administration and coordination from the Department. It is important not only to train "paramedical" personnel in special areas, but also to train the physician to effectively and efficiently utilize these new specialists in the health care field.

* Approved by Coordinating Board, Texas College and University System — July 1973.

Anatomy

William G. Seliger, D.D.S., Ph.D., Professor and Chairman

Professor

George Bernard, Ph.D.

Associate Professor

J. Richard Hillman, Ph.D.

Assistant Professor

Patrick R. Sterrett, Ph.D.

Instructors

Barbara Apgar, M.S.
Phyllis Burk, M.S.

The core course of anatomy is designed specifically as the first anatomy teaching episode for the training of physicians, not for the training of professional anatomists. When unlimited time is available to teach anatomy, the traditional methods are excellent, but today new clinical materials and techniques have seriously curtailed the available time for anatomy. The obvious solution, then, is to find more efficient and effective methods of teaching anatomy and to screen out all material from the basic courses that is not needed by the general physician.

To accomplish this, the Department of Anatomy has restructured its courses and teaching methods to fit the needs of today's physician. The faculty uses a minimum number of hours for formal lectures and emphasizes the laboratory time. The course material is trimmed down to what directly applies to the training and practice of a physician. The students are taught to find material in source books rather than to commit large amounts of material to memory. New teaching methods using audio-visual aids, notes and microscopic demonstrations increase the efficiency of the microanatomy laboratory time. Most of the dissection by students is deleted from the core anatomy course and added to advanced classes in anatomy.

Thus, by careful incorporation of modern teaching methods, modern instruments, improved faculty contact, and careful screening of course material, today's medical student can be taught the necessary material in greater depth and in a more meaningful manner despite the reduced amount of time.

Required Courses

MAN 5811 - Anatomy I: A highly integrated introductory course of anatomy starting with the cell, passing through developmental and microscopic anatomy and concluding with a general anatomical study which embodies the gross, microscopic, developmental, and clinical aspects of the body's systems and regions.

MAN 5312 - Anatomy II: A clinical anatomy course that is designed to train the student in the clinical aspects of the musculo-skeletal system and the thorax and abdomen. (Taught jointly with Orthopaedic Surgery, Physical Medicine, Thoracic Surgery and General Surgery departments.)

Graduate Courses

ANM 5811 - Anatomy I: A highly integrated introductory course of anatomy starting with the cell, passing through developmental and microscopic anatomy, and concluding with cadaver dissection. The course embodies the gross, radiological, microscopical, developmental, and clinical aspects of the body's systems and regions.

ANM 5312 - **Anatomy II:** A clinical anatomy course that is designed to train the student in the clinical aspects of the musculoskeletal system and the thorax and abdomen. This course will be taught by the Anatomy, Orthopaedic Surgery, Physical Medicine, Thoracic Surgery, and General Surgery departments.

ANM 9301 - **Clinical Applications of Electron Microscopy:** Specimen preparation, theory and use of the electron microscope for clinical medicine, including specimen analysis and diagnosis of disease.

ANM 9502 - **Histochemistry:** Techniques and applications of histochemical techniques for light and electron microscopy.

ANM 9303 - **Advanced Anatomical Studies:** Advanced studies in general anatomy, gross anatomy, histology, embryology, neuroanatomy, or cell biology.

ANM 9304 - **Advanced Cytochemistry:** Discussions and applications of current cytochemical theory and techniques.

ANM 9306 - **Biodynamics of Bone:** Study of the morphology and cell biology of bone and bone changes.

ANM 9507 - **Surgical Anatomy:** A study of the anatomy of the landmarks, approaches and problems of the surgeon as related to the head and neck, musculoskeletal system, abdomino-pelvic cavity and thoracic cavity.

ANM 9309 - **Biology of Reproduction:** This course will analyze the various aspects of biological reproduction with an emphasis on human problems. The reproductive process will be taught from union of the gametes to the delivered fetus. Morphology, in relation to functional and pathological states, will be stressed. Social aspects will be considered as they relate to current reproductive problems, i.e., abortion and contraception. The course will draw upon experts in the field from anatomy, medicine and physiology.

ANM 9310 - **Microscopy and Miscroscopic Technique:** Prerequisite: BIOLOGY 431 - Biological techniques or its equivalent. The first half of the course will be concerned with the theory, design and use of the many various forms of light microscopes. The course will include lectures, demonstrations and use of these instruments as well as an Abbe diffraction demonstration microscope explaining his theory and principles of image formation. The second half of the course will be concerned with the theory, techniques, and practices of general histological and cytological preparations. The various microtomes, fixatives, embedding materials and stains will be discussed and a number of them will be used in the laboratory.

ANM 9311 - **Advanced Musculoskeletal System:** Detailed study of the skeleton and muscles with the aid of models and gross dissection. The purpose of this course is to present a detailed view of the skeleton and muscles and their interrelation to produce movement. A detailed study of the joints will be presented, as well as a study of the functions of muscles and their innervations.

ANM 9312 - **Anatomy of Movement:** A detailed study of movement of the body in terms of the muscles and joints involved. The purpose of this course is to study the body in terms of movement. Individual movements will be analyzed in terms of the muscles that produce movement, and the joints that participate in the movement. Coordinated functional movement will be analyzed, as well as pathological types of movement. The techniques used for this study will involve dissection, photographic recording of movement, and manual and electrical testing.

ANM 9213 - **Analysis and Preparation of Scientific Papers:** A course designed to improve the individual scientist's writing in regard to directness, comprehensibility, logical organization, and precision of expression. Each participant will prepare a short journal article or an equivalent piece of writing during the course.

ANM 9114 - **Anatomy Seminar.**

ANM 9115 - **Anatomical Research.**

Anesthesiology

Anesthesiology is presented as the discipline encompassing the rendition of a state of insensibility to pain during surgery, the support of life functions under the stress of anesthesia and operative manipulations, consultation and management of the airway of unconscious patients, and instruction in cardiopulmonary resuscitation. The physiological and pharmacologic basis of anethesiology is taught. Instruction methods include seminars, tutorial sessions and staff-supervised administration of anesthetic agents.

Biochemistry

Francis J. Behal, Ph.D., Professor and Chairman

Professor and Associate Chairman

Marvin R. Shetlar, Ph.D.

Assistant Professors

Gwynne H. Little, Ph.D.
John W. Pelley, Ph.D.
Willis L. Starnes, Ph.D.

Instructor

Charles W. Garner, Ph.D.

The primary mission of the Department of Biochemistry is to teach all students at this institution whose career objectives require differing competencies in the field of biochemistry. Accordingly, the Department is prepared to provide the educational programs in biochemistry for (1) professional students in medicine, veterinary medicine, dentistry, nursing, and allied health sciences, (2) graduate students majoring or minoring in biochemistry and (3) other students requiring instruction in biochemistry.

Principles of biochemistry are brought into sharp focus and it is expected that the medical students will then be prepared to use and apply these principles in many other biochemical situations later in their careers. The Department also considers the National Board of Examiners examination which many of the students will take for licensure and aims its curriculum at giving medical students adequate preparation for the test.

The undergraduate medical curriculum in biochemistry is so structured that the medical student will complete the course of instruction in biochemistry with a willingness and receptivity to explore and assimilate the continuing advances in biochemistry (relative to medicine) as they evolve and appear in the literature.

Required Courses

MBC 5721 - Biochemistry I: Biological Chemistry. A study of life processes at the molecular level with emphasis on the molecular biology of life processes of man in health and disease.

MBC 6223 - Clinical Biochemistry: Clinical Chemistry. A study of clinical chemistry with emphasis on the interpretation of clinical laboratory data and concepts of laboratory assisted diagnosis of human disease.

MBC 6324 - Biochemistry III: Biochemical Disorders and Medical Genetics. A study of the molecular basis of selected disease processes with emphasis on concepts of genetic disorders and their consequences.

Graduate Courses

BCH 5721 - Medical Biochemistry: Prerequisite: CHEM 335, 336 or equivalent. A study of human life processes at the molecular level with emphasis on biochemical homeostasis and control mechanisms. This course is the same as that taken by first year medical students and it consists of a series of closely related lectures, laboratories, and clinical correlation sessions. Major focal points will include neurological and endocrine control of metabolism, molecular genetics, function of specialized tissues, and molecular lesions in selected disease entities. Laboratory exercises and clinical correlation sessions will be major components of this course and are designed around selected case reports from the medical literature.

BCH 6223 - Clinical Chemistry: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. A study of clinical chemistry with emphasis on the interpretation of clinical laboratory data and concepts of laboratory assisted diagnosis of human disease.

BCH 6324 - Biochemical Basis for Inherited Disease: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. A study of the molecular basis of selected disease processes in man with emphasis on concepts of genetic disorders and their consequences.

BCH 6321 - Biophysical Characterization of Macromolecules: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. A study of the characterization of macromolecules with major emphasis on the analytical ultracentrifuge and related instrumentation. This course will consist of interwoven lectures and laboratory exercises where students will have an opportunity to become familiar with operation and use of the analytical ultracentrifuge and with the interpretation of data obtained from it. Typical macromolecules, associated with human disorders, to be studied will include immune globulins, fibrinogens, mucopolysaccharides, and myeloma proteins.

BCH 6521 - Human Intermediary Metabolism and its Regulation: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. A detailed consideration of normal and abnormal human intermediary metabolism with major emphasis on modulation and control. The use of patients and patient data will constitute a major portion of the course. Control and regulation mechanisms will be emphasized and will include such key examples as enzyme induction and destruction, the effect of neuro-transmitters, the role of the hypothalmus and pituitary, hormonal effects on the relation between subcellular organelles, and the overall homeostasis between tissues.

BCH 6322 - Biomedical Radioisotope Techniques: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. Basic radioisotope techniques as used in biomedical research with special emphasis on liquid scintillation counting techniques.

BCH 9111 - Biochemistry Seminar: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. Discussions of advanced and current topics of biological chemistry.

BCH 9313 - Biochemical Research: Prerequisite: BCH 5721, CHEM 433, CHEM 436, 437 or equivalent. An offering designed to meet the needs of those students who wish to obtain experience in biochemical research and biomedical instrumentation as they relate to laboratory medicine and human health.


9% casein
61% cornstarch
30% misc
vitamins
cellulose (roll
salts
oil)
vegetable protein
misc.
diets
wheat (+ kidney bean meal) +7, 11, 12 +0, 1, 6
oats (+ kidney bean meal) +7, 18, 16 (-) 2, 2, 4
soy (+ oat flour) 29, 33, 37 33, 35, 35
corn (+ lima bean meal) 3, 0, 0 3, 1, 3
cotton seed flour (casein) 23, 15 25, 30, 26

Biomedical Engineering

Blair A. Rowley, Ph.D.,
Associate Professor and Associate Chairman

This department is concerned with the education, research, and service development of technology in medicine and the allied health fields. It is planned to utilize interdisciplinary methods which will enable the department to draw on specialists covering a wide range of expertise. Educational efforts will be directed towards a better understanding by the health professional of technology; how it functions and how to use it effectively. In addition, courses will be developed for engineers and life scientists leading to a graduate academic program in Biomedical Engineering.

In research, the department is interested in developing concepts and applications of technology to the problems of health care delivery. Communication methods, computer development, terminal hardware, and transducer development fall in this area. In addition it is planned to develop programs in bioelectric phenomena, instrumentation, rehabilitation and computer diagnosis.

The service role is quite broad. It encompasses engineering support and development for all departments of the medical school. It furnishes expertise in intensive care areas, life support, implantables, monitoring, transduction, safety, and instrumentation. In addition, consultation is available to the medical community at large in these areas.

Colon and Rectal Surgery

This department is concerned with the study of disorders of the lower colon and rectum which are commonly seen in office practice, presenting to the students the peculiar aspect of these diseases. It is expected that all students will learn certain basic techniques including those of proctoscopic examinations, which are felt to be necessary for competence and general understanding of medicine. Special emphasis is placed on training the students in examination techniques which facilitate the early diagnosis of malignancies in this region. Most of the student contact is in the ambulatory patient clinic.

Computer Medicine and Biomathematics

Blair A. Rowley, Ph.D.,
Associate Professor and Associate Chairman

Biostatistician

Dwane Anderson, Ph.D.

The primary functions of the department are divided into three major categories: service, teaching and research. The faculty and staff of the department serve as consultants as well as developers of the computer software and records. Consultation is primarily in the areas of experimental design, analysis of experiments, and the use and availability of computer software. The department will also be involved in the creation and maintenance of both temporary and permanent records for the hospital and ambulatory patient clinic.

Research in the department is directed primarily in the area of computer usage and statistical theory in the biomedical field, such as the development of a program for computer diagnosis of disease.

Required Courses

MCH 6314 - Epidemiology and Biostatistics: This course introduces principles and methods of epidemiologic investigation, both of infectious and noninfectious diseases. In the laboratory, problems are considered in order to provide experience in methods of collecting and analyzing field observations. These begin with the investigation of an epidemic and proceed to interpretation of the results and discussion of control measures. This course will also provide a basic introduction to statistical methods with emphasis on those techniques frequently encountered in medical and epidemiological literature. Liberal use of these techniques will be made in the laboratory portion of the course.

Dermatology

Diseases of the skin comprise a high proportion of the cases seen by physicians. Because many skin lesions are expressions of an underlying systemic disease, it is important that all physicians, family practitioners and specialists alike, become familiar with the skin and learn to recognize the clues that may aid in diagnosis. Therefore, the student is given the opportunity to participate in the care of the most common diseases of skin, those most likely to be seen in practice, and those having systemic significance. Consideration is also given to the diagnosis and treatment of industrial dermatoses and to the preventive measures that are available. The roles of allergy in dermatology and the psychosomatic aspects of skin diseases are also considered. Venereal diseases from the point of view of morphologic diagnosis, serologic diagnosis, and therapy will be included in the instructional program.

Environmental Health

Robert H. Kokernot, D.V.M., M.D., Dr. P.H., Professor and Chairman

The objective of this department is to identify those aspects of man's relationship to his total environment that influence his health or state of well-being.

The principal goal of this department is directed toward prevention and health maintenance. A new national health strategy has emerged with emphasis on disease avoidance as the best way of assuring higher levels of health and a higher quality of living. It has also become abundantly clear that disease avoidance is by far the most economical approach in terms of money, manpower and effort.

Graduates from this school should have a clear understanding of the principles involved in epidemiology if they are to contribute to programs focused on disease prevention and health maintenance. They should also appreciate that they are but one of many participants involved in the successful implementation of such programs.

The approach to these objectives and goals is through a consideration of specific problems present in this region of Texas. A large segment of the student's time is actually spent in the field, evaluating in depth, some facet of a problem that has broad ecologic and demographic implications. Opportunities will also be made available for the student to become involved in planning and executing community health programs so that he will appreciate the relevancy of social, cultural, political and economic issues.

Within this broad frame of reference as well as the specific charge which this department has for directing the Student Health Program of the Texas Tech University Complex, opportunities will exist for postdoctoral training leading to certification by the American Board of Preventive Medicine.

Required Course

MCH 6314 - Epidemiology and Biostatistics: This course introduces principles and methods of epidemiologic investigation, both of infectious and noninfectious diseases. In the laboratory, problems are considered in order to provide experience in methods of collecting and analyzing field observations. These begin with the investigation of an epidemic and proceed to interpretation of the results and discussion of control measures. This course will also provide a basic introduction to statistical methods with emphasis on those techniques frequently encountered in medical and epidemiological literature. Liberal use of these techniques will be made in the laboratory portion of the course.

Family Practice

Lester E. Wolcott, M.D., Professor and Chairman

Associate Professor and Associate Chairman (Amarillo)

John F. Gillett, M.D.

Associate Professors

Sydney Garrett, M.D.
Orene W. Peddicord, M.D.
Anthony B. Way, M.D., Ph.D.
Philip T. Williams, M.D.

Instructors

Ernest Cabrera, M.D.
Mary K. Chauncey, M.S.
Ramon A. Garcia, M.D.
Ruth V. Klover, M.S.
Berta D. Carmen Lutherer, M.D.
Sandra L. Patterson, R.N.
Ronald W. Thomas, M.D.

The Family Practice Department has the responsibility for training medical students and their supportive personnel in the diagnosis and treatment of prevalent illnesses, recognition of rare diseases and in utilization of referral techniques for problem cases. The program demonstrates health main-

tenance methods through early recognition of change from the norm, through anticipation of such change, recognition of environmental problems and through the natural history of disease.

Family Practice is a clinical department that functions, not only to teach and train primary care physicians but also to serve as a model for organizing the medical health care team. The Department's research is in the search for more effective methods of delivery of medical care; its laboratories are clinical settings such as emergency rooms, ambulatory care centers, nursing homes, physicians' offices and community health care clinics of various types.

The Family Practice curriculum is a blend of classroom study and active participation in the rendering of patient care in clinics. Senior students spend 24 weeks in Family Practice Clinic including a four-week Rural Preceptorship program.

Required Courses

MFP 8018 - Family Practice: Family oriented health care, both in the office and hospital will be combined with seminars concerned with clinical skills, family dynamics and social and cultural relationships. The team approach to health care will be emphasized along with community and psychological medicine.

MFP 8528 - Family Practice Rural Preceptorship: Students will be assigned to a variety of practices within the Regional Health Education Areas for a supervised exposure to day to day practice problems. Emphasis is on the application of clinical skills within the demands and limits of actual practice in a rural area.

Forensic Medicine

William H. Gordon, Jr., J.D., M.D.,
Clinical Professor and Chairman

The objective of the Department of Forensic Medicine is to provide the medical student with basic information concerning his rights and responsibilities under the law as a medical practitioner. The courses survey the broad interface of medicine and law with emphasis on statutory regulation of licensure and practice, the physician's role as a witness in various legal proceedings, medical malpractice, rights of the patient, the problems of innovative and experimental therapy and the legal implications of particular areas of clinical medicine and surgery.

The legal aspects of practicing medicine often can be exacting and it is of the utmost importance that the medical student learn the legal limitations of medical practice and have the necessary background to understand new developments of forensic medicine as they occur.

Required Course

MFM 7167 - Forensic Medicine: Provides the medical student with basic information concerning his rights and responsibilities under the law as a medical practitioner.

General Surgery

Robert J. Salem, M.D., Clinical Professor and Chairman
Professor and Associate Chairman
Maurice I. Marks, M.D.

Instruction in the Department of General Surgery acquaints the student with surgery as a clinical discipline concerned with the diagnosis and treatment of injury and illness. The major functions in undergraduate teaching of surgery strongly emphasize diagnosis, preoperative and postoperative care and the role of general surgery in clinical medicine. Students are exposed to the basic operative techniques, but detailed and highly specialized operative skills and maneuvers are not emphasized at this point in their training. In his clinical years, the student takes the patient's history, performs examinations and scrubs with the surgical team. In the preoperative preparation and particularly in the postoperative care of the patient, the student utilizes the clinical application of anatomy, physiology, biochemistry and the other basic sciences.

The student is able to observe and participate in the care of patients in the emergency room, offices and surgical wards. Through conferences, demonstrations and ward rounds with the staff, the student is able to verify his own observations and to correlate them with observations of others. Emphasis is on the overall practical aspects of general surgery which gives the student a well-rounded foundation and basic knowledge for whatever phase of medicine he may ultimately choose to pursue as his life's endeavor.

Required Course

MGS 7827 - General Surgery: An introduction to the principles and techniques used in the surgical management of disease.

Health Communications

Donald J. Brenner, Ph.D., Professor and Associate Chairman

Professor

Charles W. Sargent, Ph.D.

Assistant Professors

Gary Bishop, M.S.
Lorraine Murphy, M.L.S.

Instructors

Rodolfo M. Arredondo, M.Ed.
Emily Gilmer, M.A.
Charles E. Henry, M.Ed.
Timothy C. Judkins, M.S.
Ricky H. McCarty, M.A.
Dona J. Roush, M.L.S.
Elizabeth Thomas, M.L.S.
Doris Vaughn, M.A.

This department, whose concern is all aspects of the problems of transmitting, receiving, understanding and retaining medical and health information, performs teaching, service and research functions, and is developing a graduate academic program. As an academic department its faculty consists of the School's medical librarians, medical illustration and educational media specialists, educational methodology specialists, and information and communication science specialists. It provides support, through continuous evaluation of teaching methodology and the outreach educational effort, and through research in support of development and all other communication activities of the School. Its concerns are with information transmission hardware (print publications; films, slides and tapes; computers; bioelectronics; microwave systems, etc.), teaching hardware (didacters, etc.) and with the human effects of information transmission—knowledge and skills imparted, attitudes formed and changed.

The department employs and teaches the use of the latest information transfer systems and equipment. It researches the School's various audiences to determine existing health-medical knowledge, facilities and personnel uses and needs, and existing attitudes, with a view toward tailoring communications to be maximally beneficial and effective, toward determining specific communication needs, and toward developing and adapting a body of theory concerning health communication. Concern is with both content and form of communications.

The department seeks to provide communication practices and principles input into the medical curriculum, both in the degree programs and in the continuing education programs.

A long-term goal is the development of a graduate program in health communication, for the training of medical writers and health communication researchers, medical information specialists, and media specialists.

Health Organization Management

John A. Buesseler, M.D., M.S. (Business Administration)
Professor and Chairman

Professor

Maurice I. Marks, M.D.

Assistant Professors

George J. Hlousek, M.B.A.
Jon A. Klover, M.S.

Instructors

Merron H. Teague, M.Ed.
Paul D. Godwin, M.B.A.
George A. McGowan, M.S.

The goal of the Department of Health Organization Management is to familiarize the medical student with current management, administrative and health organization theory and practice to such a degree that when he enters into residency, practice, education or administration, he will have the basic understanding of a broad spectrum of the management and administrative phenomena as they relate to health care organization.

The curriculum will be geared toward teaching the medical student a modern theory of administration and health organization management providing him with a general framework to which he may relate. In addition, the medical student will become acquainted with the managerial tools such as accounting, budgeting, economics, administrative principles and statistics so that he will be able to effectively lead the health care team in the future.

Required Courses

MHO 5162 - Health Organization Management I: Basic concepts, principles and practices of management in a health care organization setting including traditional and modern organization theory.

MHO 6163 - Health Organization Management II: Health Care Systems. Analysis of private and public health care systems and their interrelationships including managerial aspects of the team approach to health care delivery.

Microbiology

John M. McKenna, Ph.D., Professor and Chairman

Associate Professors

James E. Dyson, Ph.D.
Stanley Lefkowitz, Ph.D.

Assistant Professors

Randall T. Jones, Ph.D.
Russell C. Baskett, Ph.D.
Donald Lee Evans, Ph.D.

The initial goal of the Department of Microbiology is to teach medical students the place of the microbial world in infectious diseases. The interplay of parasite and host in the development and subsequent outcome of infectious diseases will be the central theme. This interplay will be shown by lectures, laboratory exercises, conferences, demonstrations, review of case histories and actual case presentations.

The microbiology curriculum is designed for professional students in medicine but simultaneous teaching of professional students in veterinary medicine, dentistry, nursing and allied health sciences also will be carried out as those programs are developed. The curriculum is heavily oriented toward the laboratory diagnostic aspects of microbiology. In addition, since microbiology has many subdisciplines of interest to the medical profession, carefully planned sequences in concert with the Departments of Biochemistry, Pathology and Medicine are essential.

Required Courses

MMB 5331 - Microbiology I: A study of the fundamental aspects of animal parasites, fungi and viruses together with the role of these agents in human disease. A study of the biochemical and biological aspects of immune mechanisms in disease processes.

MMB 5432 - Microbiology II: A study of the place and role of the bacterial world in infectious disease processes. The interplay of host and bacterial parasite will be the central theme.

Graduate Courses

MIB 5331 - Microbiology I: A study of the fundamental aspects of animal parasites, fungi, and viruses together with the role of these agents in human disease. A study of the biochemical and biological aspects of immune mechanisms in disease processes.

MIB 5432 - Microbiology II: A study of the place and role of the bacterial world in infectious disease processes. The interplay of host and bacterial parasite will be the central theme.

MIB 9437 - Microbial Ecology: Prerequisite: At least an introductory course in Microbiology or permission of the instructor. The aim of this course is to provide an understanding of the place of microorganisms in nature and in human society. Bacteria, Fungi, Protozoa and Algae will be considered with regard to their structure, function and role in a variety of ecosystems. The influence of physical, chemical and biological factors on microorganisms and microbial contributions to the environment will be described. Among the major themes of the course are the following: Interactions between Microbial Populations; Interactions of Microbial Populations with Plants and Animals; Microbial Ecology of Aquatic and Terrestrial Environments.

MIB 6321 - Tumor Immunology: Prerequisites: Introductory courses in microbiology, biochemistry, pathology, and immunology; or, permission of the instructor. The objectives of this course will be to collate the various immunological, biochemical, and pathological parameters of tumor growth, both in animal model systems and man. Emphasis will be placed on investigations of current concepts of tumor immunity, transplantation and autoimmunity; immunological tolerance, surveillance, and enhancement; as well as viral induced immunosuppression and inherited immunodeficiency states.

MIB 6322 - Viral Oncology: Prerequisites: Introductory courses in microbiology, immunology and virology or consent of instructor. This course is designed to introduce the concept of a viral etiology of cancer. It will be developed through an examination of the effects of oncogenic viruses on intact animals as well as isolated cells in vitro. Emphasis will be placed on the immunological relationships and host response to viruses using many of the known animal models. The implications of a possible viral etiology of human cancer will be explored.

MIB 6323 - Topics in Bacterial Genetics: Prerequisites: General microbiology, microbial genetics or equivalent, and consent of instructor. Lectures, demonstrations and review of literature on inheritance in bacteria and their viruses with emphasis on aspects relevant to infectious diseases.

Medicine

Carlos Lamar, M.D., Ph.D., Professor and Chairman
Professor
Joseph A. Glennon, M.D.
Associate Professor
William D. Blackwood, M.D.
Assistant Professor
Jose R. Beceiro, M.D.

The Department of Medicine strives to instruct students in the fundamental principles of medicine and to instill in them the desire to seek and to understand the mechanisms, natural history and manifestations of disease. The field encompasses illness and injuries amenable to non-surgical diagnosis and treatment. The students are shown the importance of treating the patient as an entire entity and of establishing empathy for the patient. Current literature is studied and the students learn the importance of keeping abreast of new developments in medicine.

Because the most effective way to learn is experience, the students work at assigned hospitals with the patients. Their work is closely supervised by full-time and part-time medical school clinical faculty members who guide them in their experiences. The teaching techniques include seminars at the hospitals, conferences, and group discussions of the various diseases being treated by the students.

Required Course

MIM 7817 - Internal Medicine: To study the presentation of disease, its diagnosis and treatment primarily by working at the bedside with patients. Some didactic material will be given but principal learning will be by close student-physician-patient interactions.

Neurological Surgery

The objective of the courses in neurological surgery is to acquaint the student with the theories, philosophy, and treatment of the surgical diseases of the nervous system, through his close working relationship with the staff physicians. The program is designed to provide a broad base of experience for the student appropriate to the needs of a comprehensive health care physician.

Neurology

William H. Gordon, Jr., J.D., M.D.,
Clinical Professor and Chairman

The objective of the undergraduate teaching program of the Department of Neurology is to provide a practical application of the information concerning the normal structure and function of the nervous system acquired in earlier phases of study to the understanding and therapy of clinical neurological disorders. Of particular importance to the student's general medical education is the acquisition of skill in history taking and in performing the neurological examination.

Obstetrics and Gynecology

Preston W. DeShan, M.D., Clinical Professor and Chairman

Associate Professor

Philip T. Williams, M.D.

Obstetrics and gynecology are presented as a single discipline because the obstetrician-gynecologist, like the family practitioner, deals with the woman as a primary care patient during her reproductive years, and with those functional aberrations and diseases of the female generative tract occurring at any time during life. The course of study provides the student with a basic knowledge of the reproductive process and an understanding of the function of the female reproductive system especially during pregnancy and childbirth. The student gains practical experience through the management of normal pregnancy, the evaluation of the status of the fetus in utero, the supervision of labor, and in the conduct of delivery. Instruction also includes the diagnosis and management of the various complications of pregnancy and of obstetrical abnormalities.

Gynecology instruction focuses on presenting the basic principles of gynecologic examination and the diagnosis and therapy of diseases of the female reproductive system. This includes the physiology of menstruation, fertility, infertility, and fertility regulation, as well as gynecological disease, cytology, oncology, and pathology.

Required Course

MOB 7847 - Obstetrics-Gynecology: A study of the treatment of female patients by the primary care practitioner. Obstetrics-Gynecology spans the entire age range of womanhood and is extensively health oriented with emphasis on surgical and obstetrical techniques. (The quality and quantity of human life from its development through the birth process to the preventive health care thereafter.)

Ophthalmology

John A. Buesseler, M.D., Professor and Chairman

Professor

George S. Tyner, M.D.

Associate Professor

Mary Van Horn Pratt, M.D.

The basic objective of the instruction in ophthalmology is to enable the students to integrate the principles of basic and clinical science into the understanding and skills necessary for a comprehensive health care practitioner to adequately evaluate and manage ocular disorders. To accomplish this, interdisciplinary instruction is given regarding both intrinsic and systemic diseases affecting the ocular structures. The purpose is to instill in the students appreciation of the disorders which can impair vision and of the eye as a source of useful diagnostic information regarding systemic diseases.

The various techniques of ocular examination and treatment essential to the provision of high quality comprehensive primary health care are taught throughout the medical educational sequences so that the students recognize the integration of such skills into the general physical examination and treatment of patients. Students desiring additional clinical or research experience in ophthalmology can obtain further information about elective course work from the department chairman.

Oral Medicine and Surgery

William G. Seliger, D.D.S., Ph.D., Professor and Chairman

The primary goal of the Department of Oral Medicine and Surgery is to teach the medical student to recognize the oral manifestations of systemic disease. Because oral disease is one of the most common ailments seen by the family physician, it is important that students be trained in the many problems of the mouth and how they should be treated. Advanced courses will be offered dealing with prevention, diagnosis and treatment of the diseases and problems encountered in the various areas of oral medicine and oral surgery.

Orthopaedic Surgery

J. Ted Hartman, M.D., Professor and Chairman

The primary goals of the department are to teach medical students, train physicians in the specialty of orthopaedic surgery, provide high quality medical care and further medical knowledge through clinical and basic research.

The departmental functions are divided into administration, teaching, patient services and research in pediatric orthopaedics, adult orthopaedics, traumatic orthopaedics and orthopaedic research. The principles of orthopaedic surgery are coordinated with the teaching of the basic sciences as applicable.

Otorhinolaryngology

This department involves the sum of knowledge regarding the ear, nose and throat structures, and their diseases, as well as the special senses of hearing, olfaction and taste studied in relation to health and disease. This includes the social, physiological, psychological and physical aberrations of function as they relate to the various organs, and to communication sciences.

The instructional program focuses on the specialized techniques for evaluation of organs of the head and neck, the nature of their maladies, and methods of therapy. The teaching approach will draw on current progress in experimental work as well as established clinical principles. Students are instructed in physical diagnosis of the otorhinolaryngeal region, learn history-taking and physical examinations on selected patients, participate in diagnostic studies and observe surgery and aftercare.

Pathology

Harry F. Sproat, M.D., Professor and Associate Chairman
Associate Professor
Loraine E. Schultz, M.D.

Pathology, often called the bridge between the basic sciences and clinical medicine, is concerned with the study of the causes, progressive mechanisms, and effects of disease. The teaching of laboratory procedures which are helpful in the above studies are correlated with the teaching of the tissue changes which occur in the organ systems in disease processes.

In addition, the pathology department is involved in inter-departmental teaching and participation wherever indicated.

Required Courses

MPA 6743 - Pathology I: General Pathology and Introduction to Clinical Pathology. A study of the major categories of general disease processes with an introduction to basic clinical laboratory procedures in which the students are required to attain a satisfactory degree of proficiency.

MPA 6744 - Pathology II: Organ System Pathology. A study of specific disease states by organ systems. During both trimesters, teams of three or four students also rotate on autopsy call at local hospitals where they observe autopsy examinations under the supervision of local pathologists who are members of the clinical staff.

Pediatrics

Robert Moore, M.D., Clinical Professor and Chairman
Professor and Associate Chairman
Joseph R. Sasano, Jr., M.D.
Assistant Professors
Nabiha Y. Driscoll, M.D.
John A. Menchaca, M.D.

The course of study in the Department of Pediatrics provides each student with an adequate, closely supervised, and progressively responsible learning experience in the care of infants and children, either sick or well. To this end, primary emphasis is placed on practical application of basic science knowledge to the solution of clinical problems. Students observe and participate in diagnostic and care programs concerned with the premature and the newborn, growth and developmental processes, endocrinology, allergy, cardiology, psychiatry, communicable diseases, and in the problems of a nutritional or metabolic nature. There will be emphasis on preventive as well as therapeutic medicine. Both the ambulant and hospitalized patient along with well-baby care offer the student interested in family practice or in pediatrics as a specialty, the necessary broad range of experience.

Required Course

MPD 7837 - Pediatrics: A comprehensive overview of the physician's role in the care of the well and sick baby.

Pharmacology and Therapeutics

Joseph R. Bianchine, Ph.D., M.D., Professor and Chairman

Assistant Professor

J. Barry Lombardini, Ph.D.

Pharmacology is a broadly based health science that, from many aspects, is concerned with the study of drugs or chemicals as therapeutic agents. It is ultimately concerned with the development of effective treatment of disease processes. The framework of modern pharmacology scans an extraordinarily wide range of problems and employs equally diversified approaches to the solution of these problems.

Required Course

MPH 6513 - Clinical Pharmacology: A study of pharmacology with emphasis on mechanisms of drug action, drug interaction and therapeutics.

Graduate Courses

PHM 6513 - Pharmacology: A study of pharmacology with emphasis on mechanisms of drug action, drug interactions, and therapeutics.

PHM 9218 - Advanced Principles of Drug Action: An advanced seminar type course dealing with the intimate mechanisms and dynamics of action of drugs on biological systems.

PHM 9219 - Clinical Pharmacology and Toxicology: In-depth discussions with focus on current major issues in clinical pharmacology by the critical study of actual clinical problems. The rational clinical use and toxicity of drugs will be clearly illustrated by this vehicle.

PHM 9321 - Drug Metabolism and Biochemical Pharmacology: Enzyme kinetics and receptor occupancy theory. Metabolism of foreign compounds in both experimental animals and man with emphasis on basic metabolic pathways, mechanism of drug actions and pharmacodynamics.

PHM 9322 - Advances in Psychopharmacology: Pharmacology of hallucinogens, CNS stimulant and depressants; their mode of action and structure activity relationship. Pharmacological basis of psychopharmacotherapy with emphasis on extrapyramidal disorders and affective states. Extrapyramidal action of psychoactive drugs and their adverse effects.

PHM 9123 - Pharmacology Seminar: (Must have the consent of department to take course.) Pharmacology Staff.

PHM 9324 - Pharmacological Research: (Must have the consent of department to take course.) Pharmacology Staff.

Physical Medicine and Rehabilitation

Lester E. Wolcott, M.D., Professor and Chairman

Associate Professor

Samuel D. Richards, Ph.D.

Assistant Professors

Paul E. Heinrich, M.S.W.

Walter R. Gault, M.S.P.H.

The Department of Physical Medicine and Rehabilitation participates in educational, service and research activities. A comprehensive restorative patient care program offers the environment for the students' clinical experience as well as a service to the community and the region. This clinical experience is supplemented by educational materials for independent study, conferences and seminars related to structural and functional characteristics of human organisms related to health, mobility, self care and other normal human activities. Electrodiagnostic techniques and therapeutic use of physical agents are also demonstrated. Basic and clinical research activities related to physical medicine and rehabilitation are pursued.

Physiology

Larry J. O'Brien, Ph.D., M.D., Professor and Chairman
Associate Professor
Maysie Hughes, Ph.D.
Assistant Professors
L. Shannon Holloway, Ph.D.
L. O. Lutherer, Ph.D.

The primary function of the Department of Physiology is to teach human physiology to students in the first and clinical years of medical school. Course work is all medically oriented with major emphasis on body controlling systems and their inter-relations. The problem solving approach to altered function in the diseased state is also emphasized. Sessions in clinical physiology will demonstrate the applicability of the material presented.

Another important part of this department is the development of medically relevant research programs which lay the foundations for the future practice of medicine.

Required Course

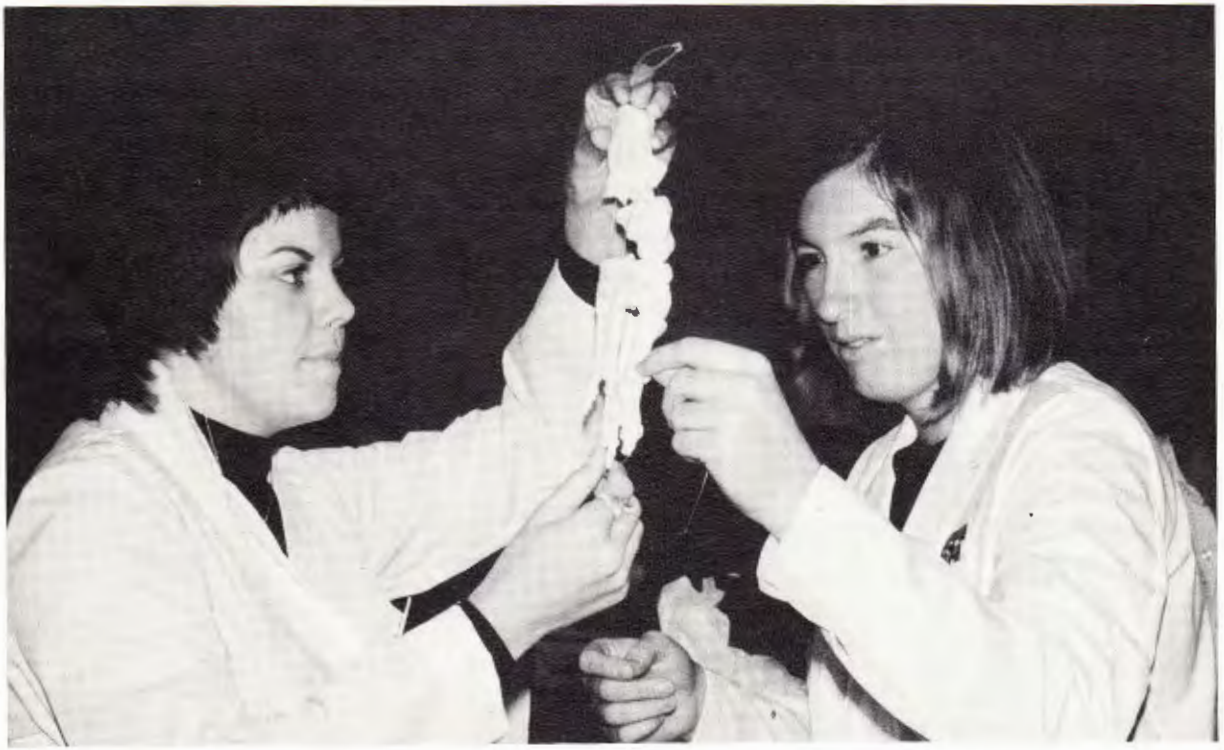
MPY 5822 - Physiology: A study of human physiology with major emphasis on body controlling systems and their inter-relations. Pathophysiological mechanisms are also stressed.

Graduate Courses

PHY 5822 - Physiology: A study of human physiology with major emphasis on body controlling systems and their inter-relations. Pathophysiological mechanisms are also stressed.

PHY 6321 - Cardiodynamics: Prerequisite: medicine clerkship. A consideration of cardiac physiology and pathophysiology and its clinical application.

PHY 6322 - Fetal and Neonatal Physiology: Emphasis on physiological mechanisms unique to life in utero, at birth, and during the first thirty days after birth.



PHY 6323 - Renal Physiology: Discussion and correlation of recent advances in the normal and pathophysiological mechanisms of the kidney.

PHY 6324 - Endocrinology of Pregnancy: Topics related to the role of endocrine glands in the support of the fetus, the maternal-fetal exchange, the development of endocrine function in the fetus, and the changes occurring at birth.

PHY 6325 - Physiology of Neuroeffector Systems: A consideration of adrenergic, cholinergic, histaminic, and serotonin receptor systems and physiological applications.

PHY 6326 - Applied Environmental Physiology: Physiological mechanisms involved in heat prostration, dehydration fever, cold exposure and hypoxia.

PHY 6327 - Pathophysiology of Hypertension: A study of current concepts of etiological mechanisms of hypertension.

PHY 6328 - Advanced Endocrinology: Various endocrinopathies will be discussed in terms of recent advances in the areas of assay of endocrine gland function, control of hormone secretion, actions of hormones, mechanisms of action and the interrelationships between hormones.

Plastic Surgery

The principles of plastic and reconstructive surgery presented cover those conditions which will be of use to the practicing physician. The restoration of function following serious head and neck trauma is an important aspect of the instruction as well as the use of plastic surgery for cosmetic purposes following disfiguring burns or massive trauma to the face, limbs, or body. The student observes and participates in the care and treatment of the plastic surgery patient while under the supervision of the staff physician.

Although students are not expected to learn the many details of plastic surgery technique, their clinical experiences are directed towards learning surgical indications.

Psychiatry

Dan J. Croy, M.D., Associate Professor and Chairman

Professor

Irving Geller, Ph.D.

Associate Professors

Harold M. Erickson, M.D.
Fathy S. Messiha, Ph.D.

Assistant Professors

Sarah J. Baskett, M.D.
Abraham Flemenbaum, M.D.
James E. Goggin, Ph.D.
Stephen Troner, Ph.D.

The major goals of the instructional program for undergraduate medical students are to produce, through the provision of necessary information and clinical skills, a physician capable of dealing effectively with patients presenting the usual emotional and behavioral disturbances seen by the practicing clinician, whether a family physician or a more narrowly specialized practitioner.

The department has the responsibility of disseminating a large spectrum of information and skills during the course of medical education. To accomplish this, the faculty works with the other departments of the medical school and the Texas Tech University Complex. In addition to a curriculum which will provide the student with a wide range of skills and increase his effectiveness as an individual, the department will also provide specialized elective courses, both on and off campus and in conjunction with other departments of psychiatry at other universities.

Required Courses

MPS 5152 - Psychiatry I: An Introductory Course. Introduction to psychiatric interviewing, history-taking and mental status evaluation. Will include an introduction to psychological testing. Lectures, demonstrations, small group discussions and an extensive practicum field experience will be offered.

MPS 6273 - Psychiatry II: An introduction to the major areas of psychopathology, with a descriptive psychodynamic and etiological focus. There will also be consideration of the psychotherapies and the use of psychopharmacological agents. There will be a concentrated clinical experience in ambulant care facilities in the latter half of the course.

MPS 7857 - Psychiatry: A clerkship to provide the student with a basic approach to diagnosis and management of psychological disorders. Investigative procedures are reviewed and substantial emphasis is placed on the integrated approach to management of the clinical problems encountered in utilizing medical, psychiatric, and rehabilitation techniques.

Radiology

Radiology involves the study of the application of radiation to the understanding of biological phenomena, the detection of disease and the maintenance of health.

The diagnostic radiologist is involved in every branch of clinical medicine using X-rays to study physiologic and pathologic processes in vivo. The recordings may be observed in a variety of ways including fluoroscopic images, video recordings or as images on X-ray film.

The therapeutic radiologist is concerned with the use of ionizing radiation in the treatment of diseases involving abnormal tissue formation. Radiation and/or drugs may be utilized by the therapeutic radiologist for the destruction of tumor cells.

The field of radiology also encompasses the use of medical isotopes in the diagnostic testing and treatment of disease. In addition, radiology involves medical physics, which is the study of the biological effects of interaction of electromagnetic radiation and tissues.

Thoracic Surgery

R. Maurice Hood, M.D., Professor and Chairman

Instructor

Patricia A. Gruber, M.S.N.

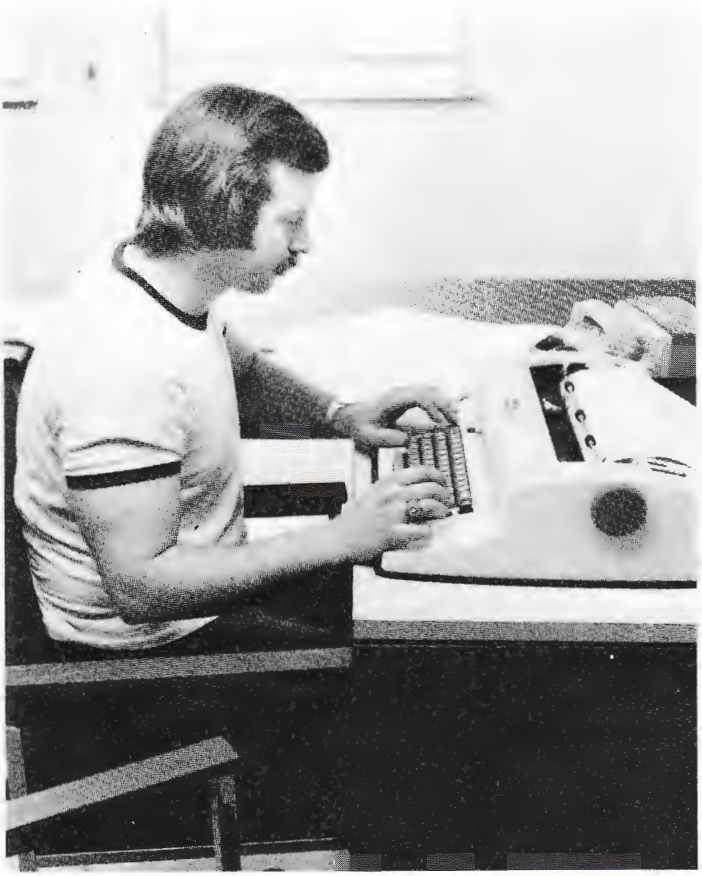
The Department of Thoracic Surgery is concerned with the broad area of training in the surgical aspects of thoracic, cardiac and vascular diseases. The student receives instruction in cardiopulmonary physiology, anatomy and pathology. Beginning in the third year, clinical instruction is initiated as part of the surgical curriculum, and in the senior year students assume patient care responsibilities under the direction of the clinical faculty. Conferences, ward rounds and operating room experience are used to correlate basic knowledge with practical aspects of patient care.

Members of the faculty provide through seminars, presentations and symposia, instruction for family physicians and practicing surgeons as means of continuing education. Short courses of two to four weeks duration in various aspects of thoracic and cardiovascular surgery are offered to practicing physicians. These periods serve to present the current knowledge and practice in this field in such ways as to be of practical use to the family physician and practicing surgeon.

A post-doctoral program of two years' duration is to be inaugurated in 1974 for specialized training in thoracic and cardiovascular surgery. This residency will provide closely supervised instruction and surgical experience in surgical diseases of the thorax, cardiac surgery and surgery of the vascular system. Close correlation of instruction will be maintained in basic sciences such as physiology and pathology. The goal of this program is to produce comprehensively trained thoracic surgeons who are philosophically dedicated to the highest standards of surgical care.

Urology

The course of instruction in the disorders of the genitourinary tract is designed to present the common urological problems and the methods for their diagnosis based on pathology and physiology. The student is instructed in the principles of urological diagnosis and of urological physical examination. Through a combination of lectures, seminars, demonstrations and staff physician-supervised participation in patient care, the student is able to gain knowledge which is of value to the primary care physician as well as to the student interested in urology as his specialty. The urological diagnostic steps, the diagnosis and treatment of common urological disorders, and the basic pathological and abnormal physiological changes which occur in association with these abnormalities are also presented.



Veterinary and Zoological Medicine

Robert H. Kokernot, D.V.M., M.D., Dr. P.H.,
Professor and Chairman

Associate Professor

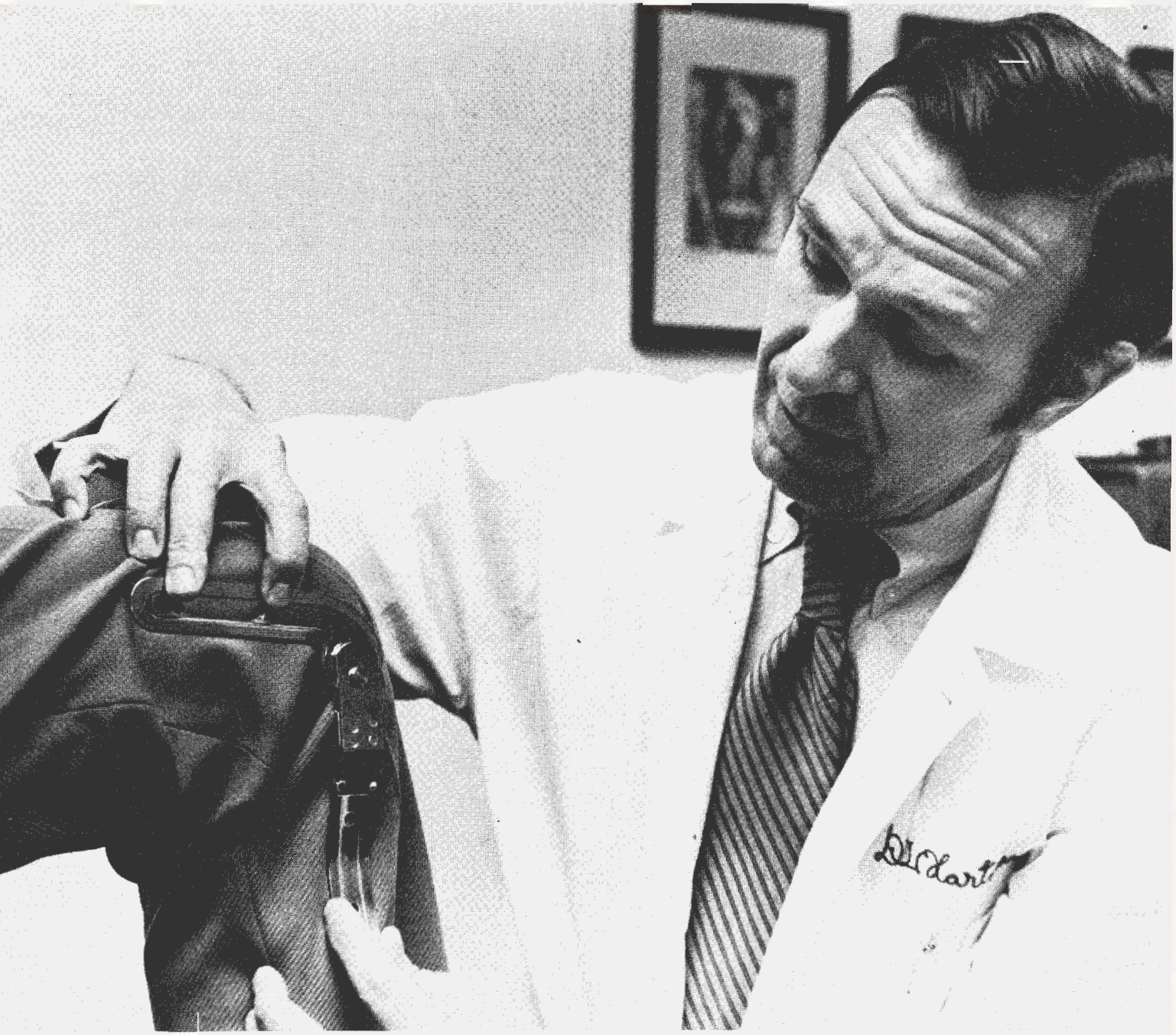
Fred Buddingh, D.V.M., Ph.D.

Assistant Professor

Danny B. Pence, Ph.D.

The program of this department involves consideration of phenomena basic to the normal and to the diseased status of a wide range of species, in addition to man. The objective of this broad biologic approach is to gain an understanding of the mechanisms underlying the spectrum of human health problems in order to develop reasonable means for their control.

This broad scope is intended to provide an opportunity for a greater exchange between medicine and veterinary medicine. In like manner, the teaching program emphasizes the advantage to both of these medical fields in developing a closer interchange between the clinical and the basic disciplines.



Faculty and Professional Staff

Anderson, Dwane E., Ph.D., Southern Methodist University (1968)
Biostatistician, Computer Medicine and Biomathematics

Apgar, Barbara S., M.S., University of Michigan (1968)
Instructor,. Anatomy

Arredondo, Rodolfo M., M.Ed., Texas Tech University (1972)
Instructor, Health Communications
Coordinator, Health Careers Development

Baskett, Russell C., Ph.D., University of Missouri (1971)
Assistant Professor, Microbiology

Baskett, Sarah J., M.D., Indiana University School of Medicine (1965)
Assistant Professor, Psychiatry

Beceiro, Jose R., M.D., University of Santiago, Spain (1964)
Assistant Professor, Medicine

Behal, Francis J., Ph.D., University of Texas at Austin (1958)
Associate Dean of the Graduate School, Texas Tech University Complex
Associate Dean for Research
Professor and Chairman, Biochemistry
Professor and Chairman, Allied Health

Bernard, George R., Ph.D., Boston University (1954)
Professor, Anatomy

Bianchine, Joseph R., Ph.D., Albany Medical College (1959); M.D., State University of New York, College of Medicine at Syracuse (1960)
Professor and Chairman, Pharmacology and Therapeutics

Bishop, R. Gary, M.S., Medical College of Georgia (1968)
Assistant Professor, Health Communications
Associate Director, Division of Educational Media Services

Blackwood, William, D., M.D., University of Texas Medical Branch at Galveston (1955)
Associate Professor, Medicine
Chief, Section of Gastroenterology

Brenner, Donald J., Ph.D., University of Missouri (1965)
Professor and Associate Chairman, Health Communications

Buddingh, Fred, D.V.M., Colorado State University (1951); Ph.D., University of California (1969)
Associate Professor, Veterinary and Zoological Medicine
Director, Division of Vivarium Services

Buesseler, John A., M.D., University of Wisconsin School of Medicine (1944); M.S., University of Missouri (1965)
Vice President for Health Affairs, Texas Tech University Complex
Vice President for Health Sciences, Texas Tech University Complex
Professor and Chairman, Health Organization Management
Professor and Chairman, Ophthalmology
University Professor, Texas Tech University Complex

Burk, Phyllis E., M.S., University of Illinois (1971)
Instructor, Anatomy
Electron Microscope Technician

Cabrera, Ernest E., M.D., Universidad Autonoma De Guadalajara (1969)
Instructor, Family Practice

Chauncey, Mary K., M.S., Texas Tech University (1972)
Instructor, Family Practice

Croy, Dan J., M.D., Kansas University School of Medicine (1961)
Associate Professor and Chairman, Psychiatry

Driscoll, Nabiha Y., M.D., University of Texas Medical Branch at Galveston (1969)
Assistant Professor, Pediatrics

Dyson, James E., Ph.D., University of Michigan (1955); M.Ed., University of Illinois (1972)
Assistant Dean for Education
Associate Professor, Microbiology

Erickson, Harold M., Jr., M.D., University of Oregon Medical School (1964)
Associate Professor, Psychiatry

Evans, Donald L., Ph.D., University of Arkansas (1971)
Assistant Professor, Microbiology

Flemenbaum, Abraham, M.D., University del Valle Medical School (1964)
Assistant Professor, Psychiatry

Freeburg, Charles R., B.S., University of Kansas (1949)
Associate Director, Division of Master Planning

Frye, William W., Ph.D., Iowa State College (1931); M.D., Vanderbilt University School of Medicine (1939)
Dean, Texas Tech University School of Medicine
University Professor, Texas Tech University Complex

Garcia, Ramon A., M.D., Universidad Autonomade, San Luis, Potosi, Mexico (1970)
Instructor, Family Practice

Garner, Charles W., Ph.D., University of Texas at Austin (1969)
Instructor, Biochemistry

Garrett, Sydney A., M.D., Medical College of South Carolina (1955)
Associate Professor, Family Practice

Gault, Donna B., B.S., Kansas State University (1951)
Instructor, Allied Health
Chief Technologist, Division of Laboratory Medicine

Gault, Walter R., M.S.P.H., University of Missouri (1967)
Assistant Professor, Physical Medicine and Rehabilitation

Geller, Irving, Ph.D., American University (1957)
Professor, Psychiatry

Gillett, John F., M.D., University of Colorado School of Medicine (1958)
Associate Professor and Associate Chairman (Amarillo), Family Practice

Gilmer, Emily A., M.A., University of Missouri (1972)
Instructor, Health Communications
Reference Librarian, Health Sciences Information Center

Glennon, Joseph A., M.D., State University of New York (Downstate) Medical School (1957)
Professor, Medicine
Chief, Section of Endocrinology

Godwin, Paul D., M.B.A., Texas Tech University (1973)
Instructor, Health Organization Management
Assistant Director, Division of Operational Management

Goggin, James E., Ph.D., Yeshiva University (1971)
Assistant Professor, Psychiatry

Gruber, Patricia A., M.S.N., St. Louis University (1972)
Instructor, Thoracic Surgery

Harris, W.B., Jr., B.B.A., Texas Tech University (1952)
Institution Development Officer

Hartman, J. Ted, M.D., Northwestern University School of Medicine (1952)
Professor and Chairman, Orthopaedic Surgery

Heinrich, Paul E., M.S.W., University of Missouri (1967)
Assistant Professor, Physical Medicine and Rehabilitation

Henry, Charles E., M.Ed., Texas Tech University (1971)
Instructor, Health Communications
Coordinator, Health Careers Development

Hillman, J. Richard, Ph.D., Colorado State University (1969)
Associate Professor, Anatomy

Hlousek, George J., M.B.A., Texas Tech University (1971)
Assistant Professor, Health Organization Management
Director, Division of Operational Management

Holloway, L. Shannon, Ph.D., University of Florida School of Medicine (1971)
Assistant Professor, Physiology

Hood, R. Maurice, M.D., University of Texas Southwestern Medical School, Dallas (1946)
Associate Dean for Professional Services
Professor and Chairman, Thoracic Surgery

Hughes, Maysie J., Ph.D., St. Louis University (1963)
Associate Professor, Physiology

Jones, Randall T., Ph.D., University of Tennessee (1969)
Assistant Professor, Microbiology

Judkins, Timothy C., M.A., University of Missouri (1971)
Instructor, Health Communications
Associate Librarian for Public Services, Health Sciences Information Center

Klover, Jon A., M.S.P.H., University of California at Los Angeles School of Public Health (1962)
Assistant Professor, Health Organization Management
Teaching Clinic Administrator

Klover, Ruth V., M.S., University of Missouri (1971)
Instructor, Family Practice

Kokernot, Robert H., D.V.M., Texas A & M University (1946); M.D., Baylor University School of Medicine (1950); Dr. P.H., Johns Hopkins University (1952)
Professor and Chairman, Environmental Health
Professor and Chairman, Veterinary and Zoological Medicine
Director, Student Health Service

Lamar, Carlos, Jr., M.D., (1955), Ph.D., Tulane University (1964)
Professor and Chairman, Medicine

Lefkowitz, Stanley S., Ph.D., University of Maryland (1961)
Associate Professor, Microbiology

Little, Gwynne H., Ph.D., Medical College of Georgia (1970)
Assistant Professor, Biochemistry

Lombardini, J. Barry, Ph.D., University of California Medical Center at San Francisco (1968)
Assistant Professor, Pharmacology and Therapeutics

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