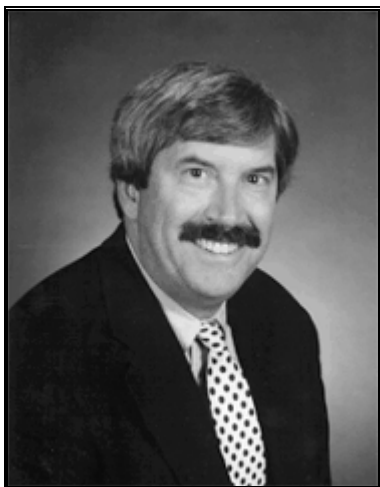




Louisiana State University Health Sciences Center School of Graduate Studies in New Orleans



LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER SCHOOL OF GRADUATE STUDIES IN NEW ORLEANS AND SHREVEPORT



JOSEPH M. MOERSCHBAECHER, III, PH.D., DEAN

Appointed to the Deanship:
July 1, 1998

Appointed to the Health Sciences Center Faculty:
May 1, 1983

Telephone Number: (504) 568-2211

Faculty Academic Rank:
Professor of Pharmacology

LSU Health Sciences Center School of Graduate Studies Homepage
<http://graduatestudies.lsuhscc.edu>

ADMINISTRATION

JOSEPH M. MOERSCHBAECHER, III, Ph.D.
Dean

KATHLEEN H. MCDONOUGH, Ph.D.
Associate Dean - New Orleans

NANCY W. RHODES
Director of Student Affairs, New Orleans

HISTORY

The Louisiana State University Health Sciences Center was established in 1931 for the training of medical and nursing students and graduate students in the basic sciences. For many years the lack of adequate research space limited graduate enrollment severely, and it was not until 1954 that expansion permitted a considerable increase in the student body. Although the Graduate School of LSU, Baton Rouge, granted degrees in the early years of the program, the Graduate School of The LSU System was reorganized in 1965 with separate autonomous units established at Baton Rouge, the University of New Orleans, and the LSU Health Sciences Center. The Faculty of the School of Graduate Studies is composed of selected members of the faculties of the other professional schools of the Health Sciences Center, principally in the basic health sciences. Those faculties at the rank of assistant professor or above are eligible to be nominated for membership in the Graduate faculty. Such nomination must be made by two members of the Graduate faculty, through the Dean, to the Graduate Advisory Council. Membership criteria include: current and continuing interest in creative research as evidenced by publications in recognized journals in the field and interest in the teaching of graduate students.

CHRONOLOGY

Four people have served as Associate Dean or Dean of the Louisiana State University School of Graduate Studies of the Health Sciences Center since its establishment in 1965.

The name of the former Associate Dean, and his period of deanship:

Roland Armstrong Coulson, Ph.D. (1965-1974)

The name of the former Deans, and periods of deanship:

John Charles Finerty, Ph.D. (1974-1984)

Robert F. Dyer, Ph.D. (1984-1989)

Marilyn L. Zimny, Ph.D. (1990-1998)

ADMISSION AND REGULATIONS

REQUIREMENTS FOR ADMISSION

The requirements for admission to the School of Graduate Studies are:

1. A baccalaureate degree from a college or university approved by a regional accrediting agency;
2. Grade point average of at least 3.0 undergraduate work, and 3.0 grade point average for graduate work, on a 4 point scale and based upon all work for which a grade is given;
3. Satisfactory scores on the Graduate Record Examination;
4. Satisfactory standing at the most recent educational institution attended; and
5. Acceptance into a Graduate program. It should be noted that individual Departments may establish requirements more rigid than the minimal standards of the School of Graduate Studies so that a student meeting minimal School requirements may not be adequately prepared to enter graduate study in a particular Program.

In addition, all foreign students must present acceptable scores on the Test of English as a Foreign Language (TOEFL) examination before they will be accepted as graduate students. These examinations are offered several times a year throughout the world.

Acceptance is contingent upon recommendation by one of the Departments offering graduate instruction leading to advanced degrees and the dean.

STUDENT AID

A complete, detailed summary of all provisions governing financial aid available to students of the Health Sciences Center may be found elsewhere in this publication under the Heading: TYPES OF STUDENT FINANCIAL AID AVAILABLE. (See General Information section).

STUDENT HEALTH

A physical examination and selected blood work and immunizations are mandatory prior to registration at the Health Sciences Center. Students will receive information and instructions pertinent to student health in their acceptance packet.

TYPES OF ADMISSION

A student meeting all requirements is normally granted unconditional admission. Applicants who fail to meet all qualifications but who are nevertheless judged by the Departments concerned and by the Dean to show promise for successful graduate work may be considered for probationary admission on the merits of their individual cases. Applicants who appear to be admissible but who are unable, for good reason, to supply the required credentials prior to the stated deadline may request provisional admission. In such cases complete credentials must be received not later than sixty days after the first day of classes (forty five days in the Summer term).

Graduate students who apply for admission to the LSU School of Medicine, or any other professional school, shall not be enrolled in the professional school until they have completed the graduate degree toward which they are working.

ADMISSION PROCEDURE

Admissions forms may be requested from the Office of the Dean or from the Program Coordinator. The completed application form and application fee must be returned to the Dean's Office. Two copies of each official transcript should be sent directly from the Registrar of each college or university the student has attended (including the various institutions in The LSU System) to the School of Graduate Studies of the Health Sciences Center. Letters of recommendation from two former professors are required. Students should request that results of the Graduate Record Examination be sent directly to the School of Graduate Studies by the Educational Testing Service. (Our School Code is #6385).

The completed application, including transcripts, letters of recommendation, goal letters and GRE scores, will be sent to the Department for review and recommendation. Students will be notified of acceptance into the graduate program by the graduate coordinator or department head and then by the Dean of the School of Graduate Studies.

DEADLINES

Deadline dates for each Department vary, depending upon number and quality of applicants, so early application is advised. Contact individual Departments for their deadlines.

REGISTRATION

All students are expected to comply with the general Health Sciences Center provisions governing registration as specified in the general information section of this publication.

Dates for registration are listed in the Calendar of this section. Late registration is permitted only under unusual circumstances and a fee will be required.

It is sometimes necessary for a student to carry more than 15 hours of credit per semester in the first year of graduate study. Permission to exceed the usual 15 hour credit limit may be granted by the Dean.

All full time students engaged in research should register for it. Although only six hours will be counted for the master's degree and fifteen for the doctoral degree, students should continue to register for research every semester in which they are engaged in research.

REAPPLICATION

Students once registered in the School of Graduate Studies who wish to resume work after an absence of more than one semester will be required to submit an application for re-admission at least ten days before registration. Supplementary transcripts must be submitted if any work has been taken at another institution during the interim.

Exceptions to this requirement must be by successful petition of the Dean.

GRADE REQUIREMENTS

To receive a graduate degree a student must have at least a B average on all work taken as a graduate student. A student will be dropped from the rolls of the School of Graduate Studies if the student's cumulative average is below a B for three consecutive semesters. Credits received in thesis or dissertation research are not used in computing the grade point average. A Summer term is counted as a semester. Students in serious scholastic difficulties may be dropped from the rolls at the end of any semester if the Department and Dean feel that the student is not qualified to continue.

GRADING SYSTEM

In the School of Graduate Studies a grade of A has the value of 4 quality points per semester hour. A grade of B has the value of 3 quality points per semester hour. C has the value of 2 quality points per semester hour and in some Departments a course with a C grade or less may not be accepted for credit toward a degree. D has one quality point value. F grades carry no quality points; I grades indicate unfinished work. The grading system of the School of Dentistry, and the School of Medicine in New Orleans may be different from that of the School of Graduate Studies, and graduate students enrolled for graduate credit in them will receive letter grades.

Consistent grades below A in the major field may be considered evidence of unsatisfactory performance by some Departments.

No regular letter grades will be given for research or seminar courses, but they will be allowed for special topics or methods courses. Methods courses given for letter grades must be approved in advance by the Curriculum Committee and by the Dean.

For research or seminar courses, "Satisfactory" will be indicated by "S" and "Unsatisfactory" by "U".

INCOMPLETE GRADES

Work which is of passing grade but which, because of circumstances beyond the student's control is not complete, may be marked I, incomplete. An I grade is given only upon receipt by the faculty of an appropriate excuse. If an excuse is not received, the faculty is to consider that the incomplete work is of failing quality and an F grade is to be given. It is the responsibility of the student to initiate the excuse.

A grade of I will be converted to F unless it is removed prior to the deadline for adding courses for credit as published in the School calendar. In extraordinary cases, such as a student going into military service, the Dean may authorize that the I grade become permanent, or may authorize an extension of time for removing the grade.

FOR EXAMINATION ONLY

If a student registered "for examination only" does not take the examination, a "S" grade will be recorded and the registration carried over for the next semester. An unsuccessful examination or any delay greater than 3 registration periods will require registration of at least 3 hours.

SATISFACTORY-UNSATISFACTORY GRADES

A student, at the discretion of the student's Department, may take up to two courses outside of the major Department, which are normally evaluated by letter grade A-F, for a grade of "S" or "U". If an "S" grade is earned (Equivalent to A,B or C), credit hours will be given for the value of the course. If a "U" is incurred (D-F), credit hours will not be given for the value of the course. In neither case will the grade effect the grade point average of the student.

The nature of the arrangement must be recorded at the time of registration. If a student intends to register for a course on a "satisfactory-unsatisfactory" basis, the student fills out the registration form in the usual manner except that the student puts the letters "S-U" after the number of the course.

WITHDRAWAL GRADES

Students who withdraw from a class after the second week will receive a grade of W. Withdrawal within two weeks of the course termination will result in a grade of F.

STATEMENT OF SATISFACTORY ACADEMIC PROGRESS

A student who is permitted continuous enrollment is considered making satisfactory progress. The Departments and the Dean review the qualitative and quantitative academic progress of each student. A student may be permitted to remediate upon the recommendation of the student's Department and concurrence by the Dean. Such a student is considered to be making satisfactory academic progress.

TIME LIMIT FOR EARNING DEGREES

The School of Graduate Studies requires that all work towards a Ph.D. degree be completed in not more than eight calendar years and all work towards a M.S. degree must be completed in not more than four years. Any requests for extension of this policy are subject to approval by the student's Graduate Research Committee and the Dean.

DEGREES FOR FULL TIME FACULTY AND STAFF

The School of Graduate Studies will not award graduate degrees to full time faculty of the Health Sciences Center above the rank of Instructor or to other employees of equivalent status.



FULL TIME EMPLOYEES

LSUHSC employees may not register for more than six hours of credit per semester. No full time employee will be permitted to register without written approval of the employee's immediate supervisor and Department Head. The employee must deliver the letter to the Director of Student Affairs of the School of Graduate Studies - Resource Center at least two weeks before registration. The employee must also complete a Graduate School application form and pay the \$30 application fee. At registration the employee will pay for the course according to the Health Sciences Center Fee Schedule. Employees may qualify for Tuition and Fee exemption. Criteria and eligibility information may be obtained from the Assistant Vice Chancellor for Administration and Finance, 8th Floor - Resource Center.

If approval is granted, the student must bring the original request form and two copies to registration.

All employees must comply with LSUHSC Student Health requirements and also maintain health insurance. A Course Schedule Form must be completed, signed by employee's supervisor and submitted at Registration.

MULTI CAMPUS REGISTRATION

To cross enroll students must complete the LSU Multi-Campus Application Form available from the School of Graduate Studies. This form must be approved and signed by the Dean of the School of Graduate Studies and the Registrar.

At registration, the student registers for UNO/LSUBR courses here at the Health Sciences Center (home school) and submits a copy of the LSU Multi-Campus Form with his course schedule sheet to the Graduate School.

The student then registers at UNO/LSUBR. At that time the student submits the Multi Campus Application Form and a copy of his Fee Bill to: UNO/LSUBR.

AUDITING CLASSES

Enrolled students may audit courses without credit. Persons not enrolled in the School of Graduate Studies will not be permitted to audit.

REQUIREMENTS FOR GRADUATION

Satisfactory completion of individual program requirements and all requirements as noted in both the "Requirements for the Master of Science Degree" or the "Requirements for the Doctor of Philosophy Degree" must be documented.

The student is expected to have satisfactorily met all financial obligations to the LSU Health Sciences Center and the LSU System at least ten days prior to graduation.

REQUIREMENTS FOR THE MASTER OF SCIENCE DEGREE

Residence - One academic year, two semesters, or four Summer terms represents the minimum requirement. Two years' residence represents a more realistic average.

Semester Hours - The minimum requirement is 30 semester hours of graduate work, not over six hours of which is allowed for research and composition of a thesis, and not more than two credit hours of seminars. At least 15 semester hours must be in graduate courses outside the medical or dental curriculum. Departmental requirements

will generally exceed these minimal requirements. Although concentration is required in the major field of interest, every program for a master's degree should include at least six semester hours of credit in one or more related fields as defined by the Department concerned. INT 220 and INT 260 are required courses for all students.

Transfer Credit - Candidates for the master of science degree may receive up to fifteen hours of transfer credit at the discretion of the Department involved, providing they have completed courses which are comparable to School of Graduate Studies courses in another graduate level institution, and satisfy the subject matter requirements. No transfer credit is permitted for course work receiving a grade below B and transfer of the credit does not reduce the residency requirement.

Candidacy - A student becomes a candidate if the student has completed 12 semester hours of work with a B average and has received Departmental approval.

Foreign Language - There is no School of Graduate Studies requirement for foreign languages, but individual Departments may require one or more.

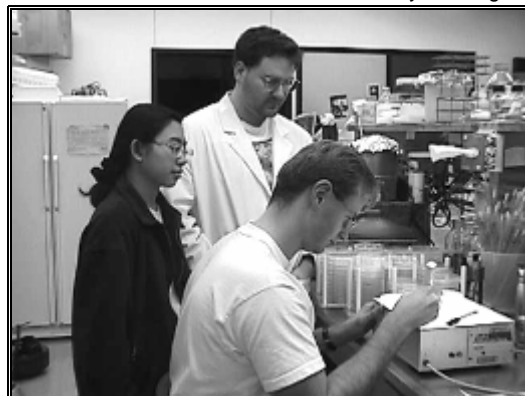
Thesis Instructions - Instructions on preparation of the thesis may be obtained from the School of Graduate Studies office or on the LSUHSC web site. The format of the thesis should follow the rules formulated in the current edition of Scientific Style and Format: The CBE Manual for Authors, Editors and Publishers. For the planned graduation date, the student should check the school calendar for the final date for submission of the thesis to the School of Graduate Studies. Final approval of the thesis rests with a committee of not less than three graduate faculty members, one of whom must be from a Department other than the Student's Department, nominated by the Head of the Department, and appointed by the Dean. The Dean may serve as a member or may appoint members to the Committee.

Thesis Defense - When the thesis is nearly complete the candidate will be required to successfully defend the thesis. This examination may be written, oral, or both. The Committee votes by secret ballot, and to pass the examination there may be no more than one negative vote. Examination and defense request forms are available from the Student Affairs Office.

REQUIREMENTS FOR THE DOCTOR OF PHILOSOPHY DEGREE

The doctor of philosophy degree is the highest degree offered by universities. It is conferred only for work of distinction in which the student displays original scholarship.

Residence - Three years (9 semesters) of residence are required, although in most programs more time is needed. Exceptions may be made by petition to the Graduate Dean. One year (three consecutive semesters) must be taken in residence at the Medical Center following completion of the preliminary examination. Credit may be transferred from other institutions if approved by the Major professor and Department Head. Written notification clearly listing the courses to be transferred must be sent to the Dean who will notify the Registrar.



Course Requirements - Specific course requirements are dependent upon individual Departmental policy. However, in general, a minimum of 60 credit hours is required and at least 30 of those hours must be taken in courses which require a letter grade for evaluation. The minimum courses required by each Department are listed in the COURSE DESCRIPTIONS in this catalog. Some of the credit must be earned in one or more minor fields and ordinarily it is expected that a student should have at least twelve hours outside of the major field. At least 15 hours must be in courses outside of the medical or dental curriculum. No more than fifteen credits may be counted for research and dissertation and no more than four credits for seminar, even though both may be carried throughout the program. Departments may have additional requirements for students to participate in teaching in the graduate, medical, dental, nursing, allied health, and undergraduate courses. INT 220 and INT 260 are required courses for all students.

Qualifying Process - Each Department will be responsible for the qualifying process and will develop appropriate policies which will be on file in the Dean's Office.

Foreign Languages - There is no School of Graduate Studies requirement for foreign languages, but individual Departments may require one or more.

Preliminary Examination - The applicant becomes eligible for the Preliminary Examination at a time chosen by the Department but not less than one academic year (three consecutive semesters) before graduation. The student and his/her major professor, with the approval of the Department Head and the Dean, will recommend a research committee and petition the Dean to appoint the committee and allow the student to schedule the examination.

The preliminary examination committee will ordinarily consist of the student's major professor and at least four other Graduate Faculty members representing major and minor disciplines. At least one member must be from another Department and one member could be from outside the Medical Center. Substitution or addition of committee members may be made by the Dean after consultation with the major professor and Department Head, but continuity of membership is sought to provide consistent guidance of the student through the program. This examination is the most thorough in the doctorate program. It should require the candidate to demonstrate competence in a broad segment of the major and minor fields. Although the examination may be either oral or written or both, a written section is strongly recommended. If there is no more than one negative ballot out of a minimum of five, the student becomes a "candidate" after the Dean has been notified by the student's major professor and Department Head of successful completion of the preliminary examination.

Dissertation - The dissertation must be a significant contribution to the field, suitable for publication in a referred journal of international repute. Instructions on the preparation of the dissertation may be obtained from the School of Graduate Studies. The format of the dissertation should follow the rules formulated in the current edition of the CBE Style Manual: A Guide for Authors, Editors and Publishers in the Biological Sciences. For the planned graduation date, the student should check the school calendar for the final date for submission of the dissertation to the School of Graduate Studies.

Dissertation Defense — One year (three consecutive semesters) following the preliminary examination, the student is eligible to take this final examination, if the dissertation is complete to the satisfaction of the Research Committee. The Defense may be preceded by an open seminar of the student's dissertation research. The student must petition the Dean for permission to take the examination. The examining committee is made up of no less than 5 graduate faculty members, one of whom must be from a Department other than the Student's Department, nominated by the Major Professor, Head of the Department and appointed by the Dean. The Dean may serve as a member or may appoint members to the Committee. Traditionally, this examination is a test of the student's intimate knowledge of the area of the field in which the student is working. However, at the discretion of the Committee or the Dean, the examination may include questions

from the major or minor fields in general. Voting is by secret ballot, and to pass the examination there may be no more than one negative vote.

Certification - If not more than one member of the examining committee dissents and if the dissertation is accepted, the candidate will be certified to the Graduate Faculty and Chancellor as having met all requirements for the degree of doctor of philosophy.

COMBINED GRADUATE AND PROFESSIONAL DEGREE PROGRAM

A combined M.D./Ph.D. program is offered in New Orleans. This program is an option for a limited number of students with superior academic records and unusual research potential. In the course of this program, a student will pursue the medical curriculum for two years, spend three to four years as a graduate student to acquire the Ph.D., and finally spend two years completing the medical curriculum. Prospective students must first apply to and be accepted to the Medical School. When applying, they should state their desire to enter the M.D./Ph.D. program. Criteria for consideration of admission are: MCAT scores, a mean of 10 ; GPA 3.5 (on a 4.0 scale); and GRE (Combined Verbal and Quantitative 1,200). The GRE is optional. Students must maintain a B average, or the equivalent, in Graduate School to remain in good standing in the program. Students must fulfill all the requirements of the Doctor of Medicine and the Doctor of Philosophy degrees.

If a student withdraws from or is asked to resign from either the M.D. or the Ph.D. portion of the program, the student is required to reimburse the School of Medicine for any tuition received while in medical school. Credit for graduate course work will be transferred to the Medical School transcript.

MASTER OF SCIENCE - ORAL BIOLOGY

This program allows students already enrolled in an advanced dental education program as well as individuals who have a specialized interest in dentistry or the allied dental sciences to earn the degree, Master of Science in Oral Biology. This program is offered through the School of Graduate Studies and administered by the School of Dentistry and the Center of Excellence in Oral and Craniofacial Biology.

The Master of Science Program in Oral Biology is an option for those students with superior academic records and research potential. The criteria for admission to the School of Graduate Studies must be met. A minimum score of 1,000 on the Graduate Record Examination (combined verbal and quantitative) is required. Students must have earned a Bachelor of Science degree, D.D.S. or D.M.D. degree, or equivalent from an accredited program.

The program can be tailored to the requirement of each individual student. Curriculum design and course selection must be approved by the student's curriculum using the following guidelines.



Program Curriculum And Requirements

The minimum requirement is 33 semester hours of graduate work to include:

	Credit Hours
Advanced Dental Core Requirements -----	9
Advanced Dental Specialty Courses -----	9
Basic Sciences Courses -----	9
Thesis Research Requirements -----	6

Biomedical Sciences Concentration Program (A Collaborative Masters Degree Program)

The Masters of Science, Biomedical Sciences Concentration, Collaborative Graduate Program has been established between the University of New Orleans (UNO), Department of Biology, and the Louisiana State University Health Sciences Center School of Graduate Studies–New Orleans (LSUHSC). The degree is awarded by the student's home institution, but the transcript will specify completion of the Biomedical Sciences Concentration Program.

Admission

Students are to be accepted into their parent institution and then apply for admission into the Collaborative Program. The student's major professor or graduate coordinator, as well as the faculty of the Department at the affiliated institution, shall approve the student's entry into the Program. Completion of the Program is required before application to the LSUHSC Medical School can be considered.

Continuance

Students must maintain a B average (3.0) to avoid probation. A student on probation has one semester to rectify his grade deficiency before being dropped from the Program.

Curriculum

Masters level courses from the University of New Orleans and LSUHSC will be determined jointly by the departments involved from each campus. Core courses for each department have been defined and generally include a laboratory rotation course. Elective courses, chosen by the student's major professor and thesis committee, shall include at least 3 hours at the affiliated campus.

Thesis Committee

All faculty serving on the thesis committee must be members of the Graduate Faculty of their own institution and will receive adjunct appointments at the student's home institution. The Committee will be chaired by the student's major professor and members will be selected by the student and major professor. At least one member will be from the affiliated institution.

Awards

The Chancellor's Award - A cash award of \$500 is presented annually. Selection of the awardee is based upon research performance as demonstrated by the quality of the dissertation and related research accomplishments while a student in the School of Graduate Studies. Selection is made by a committee of the faculty appointed by the Dean. This award was established by the Chancellor of the Health Sciences Center in 1979.

The Dean's Award - A cash award of \$200 and a plaque are presented annually. Selection of the awardee is based upon research performance as demonstrated by the quality of the dissertation and related research accomplishments while a student.

NEW ORLEANS DIVISION ADVISORY COUNCIL

JOSEPH M. MOERSCHBAECHER, III, Ph.D.
Dean

KATHLEEN MCDONOUGH, Ph.D.
Associate Dean

IRIS LINDBERG, Ph.D., appointed
Biochemistry and Molecular Biology

DONALD SCOTT, Ph.D.,
Biochemistry and Molecular Biology, elected

STEPHEN LOONEY, Ph.D.
Biometry, appointed

CRUZ VELASCO, Ph.D.
Biometry, elected

RANNEY MIZE, Ph.D.
Cell Biology and Anatomy, appointed

JUDITH M. VENUTI, Ph.D.
Cell Biology and Anatomy, elected

DIPTASRI MANDAL, Ph.D.
Genetics, appointed

PAULA GREGORY, Ph.D.
Genetics, elected

RICHARD J. O'CALLAGHAN, Ph.D.
Microbiology, Immunology and Parasitology, appointed

ANGELA AMEDEE, Ph.D.
Microbiology, Immunology and Parasitology, elected

THEODORE WEYAND, Ph.D.
Neuroscience Center of Excellence, appointed

JEFFREY ERICKSON, Ph.D.
Neuroscience Center of Excellence, elected

MARCUS BLATZ, Ph.D., D.D.S.
Oral Biology, appointed

THOMAS E. LALLIER, Ph.D.
Oral Biology, elected

W. DOUGLAS SCHEER, Ph.D.
Pathology, appointed

BARBARA SCHNEIDER, Ph.D.
Pathology, elected

EMEL SONGU-MIZE, Ph.D.
Pharmacology and Experimental Therapeutics, appointed

KURT J. VARNER, Ph.D.
Pharmacology and Experimental Therapeutics, elected

GREGORY BAGBY, Ph.D.
Physiology, appointed

RAYMOND E. SHEPHERD, Ph.D.
Physiology, elected

August, 2004 (Fall Semester)

Wednesday 11 - Registration.
 Thursday 12 - Classes begin.
 Wednesday 25 - Final date for adding courses for credit.

September, 2004

Monday 06 - Labor Day.
 Thursday 30 - Final date for dropping courses without receiving a grade of "W".

November, 2004

Tuesday 09 - Final date for submission of theses/dissertations and committee examination reports for Fall commencement.
 Tuesday 23 - Thanksgiving Holiday begins at 5:00 pm.
 Monday 29 - Classes resume.

December, 2004

Wednesday 08 - Fall Semester Ends.
 Thursday 09 - Commencement.

January, 2005 (Spring Semester)

Wednesday 5 - Registration.
 Thursday 6 - Classes begin.
 Monday 17 - Martin Luther King Jr. Holiday.
 Wednesday 19 - Final Date for adding courses for credit.
 Tuesday 25 - Final Date for dropping courses without receiving a grade of "W".

February, 2005

Friday 04 - Mardi Gras Holiday begins at 5:00 p.m.
 09 Classes resume

March, 2005

Thursday 4 - Independence Day holiday.
 Tuesday 24 - Easter Holidays begin at 5:00pm
 29 - Classes resume

April, 2005

Thursday 14 - Final date for submission of theses/dissertations and committee examination reports for Spring commencement.

May, 2005

Friday 13 - Fall Semester Ends.
 Saturday 14 - Commencement, 10:00 a.m.

May, 2005 (Summer Semester)

Wednesday 18 - Registration.
 Thursday 19 - Classes begin.

June, 2005

Wednesday 1 - Final date for adding courses for credit
 Tuesday 7 - Final Date for dropping courses without Receiving a "W"

July, 2005

Monday 4 - Independence Day Holiday
 Wednesday 13 - Final date for submission of approved theses /dissertations and committee examination reports for Summer Commencement.

August, 2005

Friday 12 - Summer Semester ends.
 Saturday 13 - Commencement.

August, 2005 (Fall Semester)

Wednesday 17 - Registration.
 Thursday 18 - Class begin.
 Wednesday 31 - Final Date for adding courses for credit

September, 2005

Monday 5 - Labor Day
 Tuesday 6 - Final Date for dropping courses without receiving a grade of "W".

November, 2005

Monday 7 - Final date for submission of theses/dissertations and committee examination report for Fall commencement
 Tuesday 22 - Thanksgiving holidays begin at 5:00 p.m.
 Monday 28 - Classes Resume

December, 2005

Wednesday 07 - Fall Semester ends.
 Thursday 08 - Commencement.

January, 2006 (Spring Semester)

Wednesday 4 - Registration.
 Thursday 5 - Classes begin.
 Monday 16 - Martin Luther King, Jr. holiday.
 Wednesday 18 - Final date for adding courses for credit.
 Tuesday 24 - Final date for dropping courses without receiving a grade of W.

February, 2006

Friday 24 - Mardi Gras holiday begins at 5:00 p.m.

March, 2006

Wednesday 1 - Classes Resume

April, 2006

Thursday 13 - Easter holiday begins at 5:00 p.m.
 Tuesday 18 - Classes resume.
 Wednesday 20 - Final date for submission of approved theses, dissertations and committee examination reports for Spring Commencement.

May, 2006

Friday 19 - Spring semester ends.
 Saturday 20 - Commencement at 10:00 a.m.

May, 2006 (Summer Semester)

Wednesday 24 - Registration.
 Thursday 25 - Classes begin.

June, 2006

Wednesday 7 - Final date for adding courses for credit.
 Tuesday 13 - Final date for dropping courses without receiving a grade of W.

July, 2006

Tuesday 4 - Independence Day holiday

August, 2006

Friday 11 - Summer semester ends

NEW ORLEANS DIVISION COURSE DESCRIPTIONS

Below are listed the courses of instruction carrying graduate credit which are offered by the Departments. No credit is given for any course unless the student has been duly registered in that course.

The amount of credit given for the completion of a course is based on the number of lectures or recitations a week for one semester of seventeen weeks; for example, one credit represents one hour of lecture or recitation a week for one semester. Two hours of laboratory work (in certain courses, three hours) is considered the equivalent of one lecture or recitation hour. When a course consists entirely or partly of laboratory, that fact is stated in the description of the course. When not otherwise specified, the course consists of lectures or recitations.

If the number of credits listed for a course is variable (for example, "2-4 cr."), the credit hours to be obtained by a student must be determined and recorded at the time of the student's registration. Any subsequent increase in the amount of credit will be equivalent to adding a new course, and this will not be permitted after the expiration of the period during which course changes may be made.

Graduate courses may be offered only when required by a minimal number of students enrolled for degrees.

BIOCHEMISTRY AND MOLECULAR BIOLOGY - M.S., PH.D.

The goals of graduate education in the Department of Biochemistry and Molecular Biology are to provide the foundation necessary to design and execute biochemical experiments and to communicate the findings of these experiments to others in the scientific community. Skills gained through study and practice in the use of scientific methods help qualify the graduate to pursue a career in biomedical science in industry or at a university, research institute, or hospital. The program is flexible and designed to meet the needs of each student individually. Some areas of biochemistry in which faculty members are focusing their research efforts include cell signaling, enzymology, oncogene and tumor suppressor genes, neurochemistry, metabolism, developmental biochemistry, cancer biology, endocrinology, and the biochemistry of aging. Topics of interest in molecular biology include gene expression, cloning, and DNA sequencing. Concepts and principles that will be required as the student progresses in the program are stressed in both teaching and research. Laboratory research and investigation are vigorously emphasized at all stages in the program. Research is performed within the Health Sciences Center, at the Ochsner Medical Institution and elsewhere under special arrangement. Health Sciences Center positions available include laboratories in the Departments of Pathology, Ophthalmology, and Genetics, as well as Biochemistry and Molecular Biology. Introductory and advanced courses in many areas of biochemistry are offered. A student should consult the course director to ascertain adequacy of preparation for each particular course before registering for that course. Requests for information and application materials may be submitted to the School of Graduate Studies. A combined score of at least 1,100 (quantitative plus verbal) on the Graduate Record Examination General Test is required. The advanced test of Chemistry or Biology is recommended. Other requirements are proof of acquisition of a suitable undergraduate degree and payment of a nominal application fee. A Departmental selection committee will screen all candidates prior to final consideration by the School of Graduate Studies.

Core Requirements

The Program for obtaining the Ph.D. can be tailored to the requirements of each individual student, but the core requirements for all students are:

BIOCH 201	Fundamentals of Biochemistry -	5 Credits
BIOCH 240	Molecular Biology -----	5 Credits
BIOCH 251	Molecular Structure and Function of the Cell -----	3 Credits
BIOCH 207	Special Methods of Research --	12 Credits
BIOCH 298	Seminar -----	3 Credits
BIOCH 299	Seminar -----	3 Credits
Electives *	-----	17 Credits
BIOCH 400	Dissertation Research -----	15 Credits

* At least 8 cr. must be taken from Departments other than Biochemistry and Molecular Biology.

Biochemistry And Molecular Biology Course Descriptions

BIOCH 201 Fundamental Biochemistry. 5 Credits

This course represents a comprehensive introduction to the chemical principles associated with living organisms. The following topics are included: bioenergetics; proteins; enzymes; membranes; oxidative phosphorylation; carbohydrate, lipid, amino acid and nucleotide metabolism; and regulation of intermediary metabolism. The molecular logic of living systems is emphasized. The course consists of lectures, student presentations, and discussion.

BIOCH 207 Introduction to Special Methods of Research. 1-9 Credits

(Credits to be specified at time of registration.) Theoretical discussions and laboratory work in an area of research methodology, directed by an expert in the use of the method.

BIOCH 208 Cell Culture Techniques. 1 Credit

Cell Culture Techniques. Prerequisite, consent of instructor. Class limited to 6 students.

BIOCH 216 Endocrinology. 3 Credits

The topics presented include endocrine control systems, and hormone secretions and their mechanism of action at the physiologic, cellular and molecular levels. (Conducted jointly with the Department of Physiology; this is the same course as Physiology 216 and may be used toward a major in either Department).

BIOCH 221 Protein Chemistry. 2 Credits

Two hours of lecture a week. Discussions include the isolation, properties, structure, and biology of the protein molecule.

BIOCH 223 Physical Biochemistry. 3 Credits

Three hours of conference and lecture per week involving discussions of physical and chemical techniques used in biochemistry to study macromolecular architecture and interactions. Two semesters of physical chemistry is prerequisite.

BIOCH 240 Molecular Biology. 3-6 Credits

A lecture and seminar course devoted to a consideration of gene expression in eukaryotic and prokaryotic organisms. Topics include replication, gene structure, ribonucleic acid, and protein biosynthesis.

BIOCH 251 Molecular Structure and Function of the Cell. 3 Credits

The course is intended to explore the central role of the cell in modern biology. An integrative approach will be used beginning with historical precedents in anatomy and incorporating knowledge gained as the tools of biochemistry, electron microscopy, immunology and molecular genetics are focused upon cellular structure and operation. (Conducted jointly with the Departments of Physiology and Anatomy; this is the same course as Physiology 251 and Anatomy 251 and may be used toward a major in either Department.)

BIOCH 256 Neurochemistry. 3 Credits

Three hours of lecture per week. A basic exposition of the chemical and metabolic characteristics of nervous tissue. The basic properties of neurons, neurotransmitters, metabolism and receptor action are covered.

BIOCH 260 Molecular Biology of Cancer. 3-4 Credits

This is an advanced level course that deals with the biochemistry, cell biology, molecular biology, and genetics of cancer. The current scientific literature on this topic will be emphasized. Selected clinical faculty will also present the medical aspects of cancer. Biochemistry 201 and 240 are prerequisites for taking this course.

BIOCH 280 and BIOCH 281 Advanced Topics in Biochemistry. 1-4 Credits

One to four hours of lecture and discussion per week. The topics will be arranged by consultation with faculty members expert in the areas. The topics will add breadth and depth to the fundamentals taught in other courses and will be chosen on the basis of their timeliness and student and faculty interest. Biochemistry of the cell cycle, comparative biochemistry, enzymology, intermediary metabolism, vitamins and nutrition, mass spectrometry, and bioenergetics are representative topics. A given topic will recur on a cycle of two to three years. The student's transcript will indicate, in addition to the course title, the particular topic covered during the given semester. This procedure will serve to clarify the repeat appearance of Biochemistry 280 and 281 on the student's transcript.

BIOCH 298 Seminar 1 credit

Reports on research progress and on current literature.

BIOCH 299 Professional Skills for Graduate Students 1 Credit**BIOCH 300 Thesis Research. Variable Credits**

(only 6 hours may be used for credit toward the master's degree). Registration by permission of the major professor. Amount of credit must be stated at time of registration.

BIOCH 400 Dissertation Research. 1-9 Credits

Registration by permission of the major professor. Amount of credit must be stated at time of registration.

BIOMETRY - M.S.

The School of Public Health offers a program in biometry leading to the M.S. degree. Both classical and newly developed techniques are emphasized. Special areas of faculty competence include design and analysis of clinical research studies, categorical data analysis, sampling, survival analysis, microarray data analysis, multivariate analysis, and cost-effectiveness/cost-benefit analysis. The program is designed to provide sound preparation for students planning a career in biostatistics. Each student is required to write and defend a thesis that would be publishable in the statistical literature.

Biometry Program Core Requirements

The core requirements for the M.S. Program in Biometry for all students are:

BIOS 6221	Introduction to Biostatistics -	3 Credits
BIOS 6222	Biostatistics II -----	3 Credits
BIOS 6223	Introduction to Theory of Probability -----	3 Credits
BIOS 6224	Introduction to Statistical Inference -----	3 Credits

Biometry Course Descriptions**BIOS 6221 Introduction to Biostatistics. 3 Credits**

Three hours of lecture per week. General introduction to descriptive and inferential statistics: The role of biostatistics in the health sciences, techniques and principles for summarizing data, estimation, hypothesis testing and decision-making. Examples and problems from the health sciences are used.

BIOS 6222 Biostatistics II. 3 Credits

Three hours of lecture per week. Continuation of BIOS 6221. Additional biostatistics techniques in health sciences: Hypothesis testing via the general linear model, including analysis of variance and linear regression, methods of correlation analysis, and multiple regression techniques. Examples and problems from the health sciences are used.

BIOS 6223 Introduction to Theory of Probability. 3 Credits

Three hours of lecture per week. Introduction to probability theory and distributions. Elementary concepts of probability, Markov chains, Bayes' theorem, random variables and probability distributions, multivariate distributions, joint, conditional and marginal distributions; functions of random variables, moments, moment generating functions, covariance and correlation, conditional expectation; properties of the sample mean, the law of large numbers, stochastic convergence, and the central limit theorem.

BIOS 6224 Introduction to Statistical Inference. 3 Credits

Three hours of lecture per week. A comprehensive, but elementary survey of the theory of classical and Bayesian statistical inference. Prior and posterior distributions, maximum likelihood estimation, Bayesian decision procedures; unbiased estimation, sufficiency, consistency, sampling distributions of estimators, Fisher information, confidence intervals; likelihood ratio tests, uniformly most powerful tests, unbiased tests, goodness of fit tests; introduction to non-parametric methods, robust estimation and linear statistical models. Prerequisite: BIOS 6223.

BIOS 6227 Introduction to Computer Programming. 3 Credits

Four and one-half hours of lecture per week, summer semester. An introductory programming course oriented toward scientific applications. Topics include data types, assignment statements, operators, sequential control, conditional control, iteration, subprograms, arrays, character manipulation and ethical issues. Prerequisite: Permission of the instructor.

BIOS 6241 Sampling Methods in the Health Sciences. 3 Credits

Three hours of lecture per week. Methods for conducting sample surveys in the health sciences: Biases and non-sampling errors, probability and non-probability samples, simple random sampling, stratification, varying probabilities of selection, multi-stage sampling, systematic sampling, cluster sampling, double sampling, and ratio estimation.

BIOS 6242 Design and Analysis of Experiments.**3 Credits**

Three hours of lecture per week. Principles of experimentation. Completely randomized designs, randomized complete block designs, factorial designs, Latin squares, crossover designs, blocking, response surface designs. Applications are in the health sciences. Prerequisite: Permission of the faculty.

BIOS 6244 Analysis of Categorical Data in the Health Sciences. 3 Credits

Model formulation, parameter estimation, and hypothesis testing for categorical data from different types of experimental and survey research situations: Characterization of interaction in multi-dimensional contingency tables, stepwise regression procedures for proportions, and exact inference.

BIOS 6245 Introduction to Measurement and Evaluation. 3 Credits

The purpose of this course is to expose students to mathematically rigorous measurement theory and to explicate the meaning and utility of no-arbitrary units of measurement. The course will provide students with the opportunity to apply these measurement concepts to data, employing computer software in applications of measurement theory to problems involving the evaluation of experimental and programmatic treatment effects.

BIOS 6250 Multivariate Methods. 3 Credits

Three hours of lecture per week. Review of matrix algebra, multivariate normal distribution, multivariate general linear model, principal components, factor analysis, cluster analysis, discriminant analysis. Applications are in the health sciences. Prerequisites: BIOS 6222, 6223.

BIOS 6262 Statistical Methods in Biological Assay.**3 Credits**

Three hours of lecture per week. Statistical methods for bioassay: Dosage response curves, potency estimation, validity tests, quantitative and quantal responses, tolerance distributions; parallel line and slope ratio assays, topics in design, and shortcut methods.

BIOS 6264 Clinical Trials and Sequential Methods.**3 Credits**

Three hours of lecture per week. Introduction to the conduct of clinical trials and clinical trials methodology. Topics covered include selection of primary and secondary research questions and hypotheses, use of surrogate variables, defining study population, generalizability of results, basic study design, randomization process, blinding, sample size estimation, using baseline assessments, recruitment of study participants, data collection and quality control, assessing and reporting adverse events, assessing quality of life, participant adherence, survival analysis techniques and issues, monitoring response variables, data analysis issues, study closeout, and reporting and interpreting results.

BIOS 6267 Applied General Linear Models. 3 Credits

Three hours of lecture per week. This is a practical course on the use of general linear models. Topics include a review of relevant matrix algebra; general linear models including multiple regression, analysis of variance, analysis of covariance, multivariate response, and logistic regression models; methods for estimation, hypothesis testing and diagnostics; model specification for designed experiments and for observational studies; applications are in the health sciences. Prerequisites: BIOS 6221, 6222, 6223, 6224 or equivalent.

BIOS 6269 Theory of General Linear Models. 3 Credits

Three hours of lecture per week. This course presents the essentials of statistical inference theory for general linear models. Topics include a review of relevant matrix algebra; distributions of quadratic forms; theoretical aspects of estimation, hypothesis testing and diagnostics. Prerequisite: Permission of the instructor.

BIOS 6283 Advanced Theory of Inference. 1-3 Credits

Three hours of lecture per week. A mathematical study of the classical theory of statistical inference. Moment generating functions and characteristic functions, distributions of order statistics, exponential family of distributions, models of convergence, the Cramer-Rao inequality, efficiency, best unbiased estimation, completeness, minimal sufficiency, maximum likelihood estimators; monotone likelihood ratio, unbiased and invariant hypothesis tests, generalized likelihood ratio tests, Bayes' and minimax procedures. Prerequisite: BIOS 6224.

BIOS 6284 Advanced Theory of Inference. 2-3 Credits

Three hours of lecture per week. A mathematically rigorous survey of selected topics in the theory of statistical inference such as: Bayesian inference, decision theory, information theory, large sample theory, multivariate distributions, nonparametric inference, sequential analysis, stochastic processes, time series, components of variance. Prerequisite: BIOS 6283.

BIOS 6296 Statistical Consulting in the Health Sciences. 1-3 Credits

A practical course designed to expose students to real-life consulting situations and the statistical problems that arise in the health sciences. The student will work on a consulting project under the supervision of a faculty member and will present a progress report each week. Prerequisites: BIOS 6221, 6223.

BIOS 6298 Seminar in Biostatistics. 1 Credit

Reports on research progress in current literature.

BIOS 6501-6504 Special Topics in Biostatistics. 1-4 Credits

Hours and credits to be arranged depending on the particular topic. This course is designed, depending upon the students' interest and staff availability, to cover advanced topics such as stochastic processes, time series analysis, analysis of survival distributions, experimental design, multivariate analysis, etc.

BIOS 6901-6906 Thesis Research, 1-6 Credits

Registration by permission of the school. Amount of credit must be stated at time of registration.

CELL BIOLOGY AND ANATOMY - M.S., PH.D.

The Department of Cell Biology and Anatomy offers programs leading to the M.S. and Ph.D. Degrees. The Department has two sub-programs: Development, Cell, and Neurobiology (DCN) and Clinical Anatomy (CAP). Areas of concentration in the DCN are cellular and molecular biology, developmental biology, and neurobiology. There is considerable overlap in these fields, with, for example, some faculty working in the areas of cellular or developmental neurobiology, and others with interests in the cell biology of reproduction and development. The goal of the program is to train promising students for careers in research and teaching. Students in the DCN program are encouraged to develop broad expertise in the disciplines of biochemistry, molecular biology, immunology, and cell physiology. The CAP program is designed to prepare students for professional careers involving study and dissection of the human body with emphasis upon clinically related sciences. The Departmental Graduate Program Committee evaluates applications for these programs. Admission is based upon Graduate Record Examinations (a minimum combined score of 1100 on verbal and quantitative portions), undergraduate grade point average (minimum of 3.0), and three letters of recommendation. The Advanced Subject GRE is recommended, and will also be taken into consideration.

Expected time for completion of the Masters degree is 2-3 years; for the Ph.D. 4-6 years. Students in the DCN program become involved in ongoing research projects during the first year in a laboratory rotation format, and are encouraged to identify a dissertation advisor during this period, or shortly thereafter. Students in both programs may take any of the courses listed below. Faculty members are integrally involved with the LSUHSC Neuroscience Center of Excellence, the LSUHSC Eye Center, the Alcohol and Drug Abuse Center, the Center for Oral and Craniofacial Biology, and the Center for Molecular and Human Genetics. Interaction with members of these centers is encouraged.

Cell Biology and Anatomy Course Descriptions

Development, Cell, and Neurobiology Program

ANAT 195 Anatomy. 6 Credits

An introduction to the structure and function of the nervous system, as well as its dysfunction. This course is also taken by first-year medical students.

ANAT 227 Cell and Developmental Biology. 3 Credits

Lectures and group discussions will focus on selected topics involving cell and developmental biology. Topics may include gametes and their interactions, embryogenesis, cell-cell and cell-matrix interactions, differentiation, etc. A wide range of developmental systems will be considered.

ANAT 251 Molecular Structure and Function of the Cell. 3 Credits

The course is intended to explore the central role of the cell in modern biology. An integrative approach will be used beginning with a historical perspective and incorporating knowledge gained as the tools of biochemistry, electron microscopy, immunology and molecular genetics are focused upon cellular structure and operation. (Conducted jointly with the Departments of Biochemistry and Physiology; this is the same course as Biochemistry 251 and Physiology 251 and may be used toward a major in either Department).

ANAT 252 Developmental Neuroscience. 3 Credits

This course will focus on recent advances in developmental neuroscience. Two hour formal lectures and a one hour seminar component per week will cover neural induction, neurogenesis, cell-ECM interactions, neural crest cell migration, neurotrophins, signal transduction, apoptosis axon guidance, axon-target interactions, synaptogenesis and activity-dependent refinement of neural connections. Students will be required to critically evaluate and present current literature on these subjects and write short essays.

ANAT 270 Laboratory Rotation. 3 Credits

Students will work in one or more faculty laboratories to become acquainted with the various types of research conducted in the Department and with techniques used in these labs.

ANAT 271 Biomedical Imaging. 3 Credits

This course will be useful for individuals from both basic science and clinical Departments who would like to become educated users of image analysis software and computer equipment. The use of image analysis programs and associated computer hardware has made the non-invasive clinical diagnosis more widespread and opened up new avenues in basic research in many different fields that was not possible only a few years ago. Overall, this course does not intend for the students to be experts at either the software or hardware used in image analysis and processing or to become experts. Therefore, the prerequisites are an interest and professional need for the use of image analysis. Using these systems is the most important part of making image analysis more useful in the students own work;

therefore, small projects will form the backbone of the course. The course will bring in experts in particular fields to address special topics, as well as using faculty from a number of Departments at the LSU Health Sciences Center. Topics that will be discussed are as follows: the use of image analysis and image processing; software packages of several types, including their pitfalls and cost-to benefit ratio; statistical methods in image processing; an introduction to the types of filters applied to images and how these are implemented; 2D and 3D image processing, including how these can be applied with specific examples; computers for image processing, which will include a discussion by technical representatives from the industry; use of image analysis in specific applications in basic and clinical science, pointing to similarities and differences; and new developments in image analysis and their impact.

ANAT 280 Special Topics in Cell Biology and Anatomy. 2-4 Credits

Lectures discussions, research and/or laboratories will be arranged on areas not adequately covered in other scheduled courses. This course is designed to permit graduate students to explore one or more areas of particular interest in detail. Emphasis will be placed on those areas of special interest to faculty members of the Anatomy Department.

ANAT 280G Special topics: Synaptic Organization of the Brain. 3 Credits

This course will provide an in-depth examination of the physiologic and anatomic organization of the major structures of the brain and spinal cord. The course will consist of two 2-hour lectures per week, each week being devoted to a different CNS structure and taught by a different instructor with expertise in the field. The organization of each CNS structure, including the cellular physiology, major synaptic inputs, intrinsic synaptic organization, and primary outputs of the structure will be emphasized in the lectures.

ANAT 290 Seminar. 1 Credit

Students are required to attend and participate in oral presentations of research data and review of current topics of interest in Anatomy. A maximum of 4 credits toward the Ph.D. or MS degrees may be earned. Students in the Anatomy Program are required to participate in Seminar each semester regardless of credit.

ANAT 300 Thesis Research. variable Credits

(only 6 hours may be used for credit toward the master's degree). Registration by permission of the major professor. Amount of credit must be stated at time of registration.

ANAT 400 Dissertation Research. 1-9 Credits

Registration by permission of the Head of the Department. Amount of credit to be stated at the time of registration. Laboratory investigation of the problem selected by the student for the student's doctoral dissertation must be pursued by every candidate.

Clinical Anatomy Program

ANAT 189 Human Gross Anatomy of Upper Extremity, Thorax and Back. 3 Credits

This course is centered around dissection of the upper extremity, thorax and back of the human body. Dissection is supplemented with films, cross-sections, models and clinical correlations of these specific areas. An accompanying lecture series is designed to orient, guide and stimulate the student toward independent effort.

ANAT 190 Human Gross Anatomy of the Head and Neck. 3 Credits

This course is centered around dissection of the Head and neck of the human body. Dissection is supplemental with films, cross-sections, models and clinical correlations of these specific areas. An accompanying lecture series is designed to orient, guide and stimulate the student toward independent effort.

ANAT 191 Human Gross Anatomy of Abdomen, Pelvis, Perineum and Lower Extremity. 3 Credits

This course is centered around dissection of the abdomen, pelvis perineum and lower extremity of the human body. Dissection is supplemented with films, cross-sections, models and clinical correlations of these specific areas. An accompanying lecture series is designed to orient, guide and stimulate the student toward independent effort.

ANAT 192 Cell Biology and Microscopic Anatomy. 5 Credits

The initial portion of the course stresses organization of the cell, the biology of cellular organelles and the localization of important chemical constituents at the subcellular level. Additional presentation and discussion sessions throughout the course present the student with comprehensive information of the physiology, biochemistry, and molecular biology of cellular function. Histology lectures and laboratories emphasize the structural and functional relationships of human tissues.

ANAT 193 Human Development. 1 Credit

The normal and abnormal aspects of human prenatal development are presented in a lecture series which is coordinated, when possible, with the dissection schedule in gross anatomy. Definitive adult structures and their relations are appreciated through an understanding of their formation and relations during the embryonic period. Included are important features of fetal development which are essential for normal birth and adaptation to the extrauterine environment.

ANAT 194 Radiographic Anatomy. 1 Credit

The fundamentals of radiology are presented in a series of lectures and demonstrations. Emphasis will be placed on the interpretation of normal radiographs from each body region. Presentations will be coordinated with the gross anatomy dissection schedule and given jointly with the Department of Radiology.

ANAT 220 Advanced Special Dissection. Hours and credits to be arranged. Students perform detailed dissections of specific selected regions of the body.

ANAT 255 Advanced Head and Neck Anatomy. 4 Credits

One and one-half hours of lecture and two and one-half hours of laboratory. This course is designed as an advanced course in Head and neck anatomy for post-graduate students in medicine, dentistry and the School of Graduate Studies. The course will include segments on the basic gross anatomy, neuro-anatomy and neuro-physiology of the Head and neck. Special emphasis on functional considerations and clinical correlations will be given in the course.

ANAT 256 Microanatomy and Cell Biology of the Oral Cavity. 2 Credits

This course includes a study of the development, microanatomy, and cell biology of structures associated with the oral cavity. The lectures will include basic and current information on the development and structure of all components of teeth (enamel, dentin, cementum, and pulp), the supporting structures of teeth (periodontal ligament and alveolar bone), oral mucosa, and salivary glands. Current theories on tooth eruption will also be discussed. The laboratory will consist of demonstrations and self-study. Prerequisite: Anatomy 192.

ANAT 280 Special Topics in Cell Biology and Anatomy. 2-4 Credits

Lectures discussions, research and/or laboratories will be arranged on areas not adequately covered in other scheduled courses. This course is designed to permit graduate students to explore one or more areas of particular interest in detail. Emphasis will be placed on those areas of special interest to faculty members of the Anatomy Department.

ANAT 300 Thesis Research. variable Credits

(only 6 hours may be used for credit toward the master's degree). Registration by permission of the major professor. Amount of credit must be stated at time of registration.

ANAT 400 Dissertation Research. 1-9 Credits

Registration by permission of the Head of the Department. Amount of credit to be stated at the time of registration. Laboratory investigation of the problem selected by the student for the student's doctoral dissertation must be pursued by every candidate.

HUMAN GENETICS - M.S., PH.D.

The goal of the graduate program in human genetics is to provide the student with the skills and expertise necessary for a successful research career through course work, seminars, and laboratory research. Core course work covers a variety of topics in human, molecular, medical and statistical genetics, and gene therapy, and can be designed for the individual needs of each student. Faculty members have a broad range of research interests including identification, characterization, and functional studies of disease genes, gene therapy, genetic epidemiology, and genetic education.

Core course requirements for the Ph.D. degree in Human Genetics are:

GENET	231	Basic Human Genetics	-----	3 Credits
GENET	236	Genetic Epidemiology and Population Genetics	-----	3 Credits
GENET	246	Topics in Gene Therapy	-----	3 Credits
GENET	247	Proposal Writing	-----	2 Credits
GENET	253	Laboratory Rotation in Molecular Genetics	-----	3 Credits
GENET	271	Medical Genetics Clinic	-----	3 Credits
INT	220	Ethics in the Biomedical Sciences	-----	1 Credit
INT	221	Biometric Methods in the Health Sciences 1	-----	3 Credits
INT	260	Responsible Conduct in Research	-----	1 Credit
BIOCH	201	Fundamental Biochemistry	-----	5 Credits
BIOCH	240	Molecular Biology	-----	5 Credits
PHYS	251	Molecular Structure and Function of the Cell	-----	3 Credits

**HUMAN GENETICS
COURSE DESCRIPTIONS****GENET 231 Basic Human Genetics. 3 Credits**

Three hours of lecture per week. An introduction to the basic principles of Mendelian genetics, quantitative and multifactorial inheritance, molecular and biochemical genetics, cytogenetics, statistical genetics, and genetic counseling. Examples from human genetics illustrate these principles; selected classical experiments from basic genetics are also presented.

GENET 236 Genetic Epidemiology and Population Genetics. 3 Credits

Three hours of lecture per week. An introduction to the fundamental elements of mathematical and population genetics. Topics include probability, Bayes' theorem, Hardy-Weinberg equilibrium, inbreeding, selection, mutation, models for polygenic and multifactorial inheritance, linkage and simple segregation analysis. Prerequisite: 231.

GENET 238 Genetic Linkage Analysis. 3 Credits

Three hours of lectures per week. This advanced course covers the theoretical and methodological aspects of human genetic linkage, including pairwise and multioint analyses, and parametric and non-parametric approaches. Current scientific literature will be emphasized. Prerequisite: 236.

GENET 246 Topics in Gene Therapy. 3 Credits

Three hours of lectures per week. The purpose of this course is to provide graduate students with an overview of the current state of development of gene therapy and its future prospects. The course will cover gene transfer strategies, as well as preclinical and clinical applications of gene therapy.

GENET 247 Proposal Writing. 2 Credits

This course provides students with the concepts and structure to prepare a successful proposal. Students will learn to develop a rigorous, well-defined experimental plan. The course will concentrate on NIH style proposals and format.

GENET 253 Laboratory Rotation in Molecular Genetics. 3 Credits

Student works in faculty laboratory to become acquainted with research projects and techniques.

GENET 271 Medical Genetics Clinic. 3 Credits

Three hours of clinic per week. Patient contact in a clinical setting provides experience in interviewing and counseling techniques, risk assessment, medical and genetic aspects of inherited disease, an understanding of the limitations, interpretations and significance of specialized laboratory and genetic procedures, and a knowledge of available health care resources for appropriate referral. Up to four semesters may be taken for credit. Prerequisite: 231.

GENET 291 Special Topics in Human Genetics.

1-4 Credits

Hours and credits to be arranged depending on the particular topic. This course is designed, depending upon the students' interest and staff availability, to cover advanced aspects of topics already covered at an elementary level, or new topics such as cytogenetics, comparative genomics, immunogenetics, developmental genetics, genomic instability, and protein evolution.

GENET 299 Seminar in Human Genetics. 1 Credit

Reports on research progress and on current literature. A total of four credits must be earned during the period of graduate work.

GENET 300 Thesis Research. Variable Credits

Registration by permission of the Department. Amount of credit must be stated at time of registration.

GENET 400 Dissertation Research. 1-9 Credits

Registration by permission of the Head of the Department. Amount of credit to be stated at the time of registration.

MICROBIOLOGY, IMMUNOLOGY AND PARASITOLOGY - M.S., PH.D.

The program accepts qualified candidates for the M.S. and Ph.D. degrees. For the M.S. degree, a minimum of two years of full time study will generally be required for completing course work and a thesis. For the Ph.D. degree, it will be expected that a period of at least four years will be devoted to full time study, including dissertation research and defense. Important requirements to be fulfilled before initiation of dissertation research include medical microbiology, biochemistry courses and a selection of microbiological specialty courses, depending on the candidate's aims. The faculty has major areas of competence in bacteriology, virology, mycology, immunology and parasitology. Application is made through the School of Graduate Studies and is referred to the Department. Additional inquiries for admission or course details should be forwarded to the following e-mail address: jcampb@lsuhsc.edu. All applicants are required to submit Graduate Record Examination scores. Subject tests are optional. Medical College Admission Test scores may be acceptable for students or recent graduates from Medical School. All candidates will be evaluated by the Departmental faculty before final action is taken by the School of Graduate Studies. Applicants should have taken courses in general and organic chemistry with laboratory, college algebra and

trigonometry, a general biology course (e.g. zoology, botany, comparative anatomy) and one course in general microbiology. Microbiological subspecialty courses (e.g. bacteriology, microbiology, genetics, immunology, virology) are highly desirable.

Core Requirements

The Program for obtaining the Ph.D. can be tailored to the requirement of each individual student.

The minimum core requirements are:

	Credits
MICRO 221 Medical Microbiology -----	10
MICRO 225 Medical Bacteriology -----	3
MICRO 226 Preparation for Instruction in Micro--	3
MICRO 228 Laboratory Rotations in Microbiology--	3
MICRO 229 Analysis of Research Literature -----	1
MICRO 276 General and Molecular Virology -----	3
MICRO 280 Techniques in Microbiology -----	2-3
MICRO 296 Fundamentals of Immunology -----	3
MICRO 298 Seminar -----	4
MICRO 299 Research Proposals in Microbiology --	3
MICRO 400 Dissertation Research Total of -----	15
MICRO 201 Fundamental Biochemistry -----	5
MICRO 240 Molecular Biology -----	3

MICROBIOLOGY, IMMUNOLOGY AND PARASITOLOGY COURSE DESCRIPTIONS**MICRO 221 Medical Microbiology. 10 Credits**

Five or six hours of lecture and six or ten hours of laboratory. A comprehensive course covering the principles of bacteriology, mycology, virology, parasitology, immunology, and the application of these principles to the diagnosis, prevention, and treatment of infectious diseases. In illustration of these principles, a series of clinical correlations is included in the lecture time.

MICRO 222 Medical Immunology. 2 Credits

A comprehensive course covering the principles of immunology and the application of these principles to the diagnosis and control of immunologic and infectious diseases (the Immunology portion of 221 Medical Microbiology).

MICRO 225 Advanced Medical Bacteriology. 2-4 Credits

Number of hours and amount of credit to be stated at time of registration. Permission required. An advanced study of bacteria pathogenic to man, their cultural and antigenic characteristics, their pathogenic mechanisms, the immune responses of the human host to their invasion, the epidemiology of the diseases they produce, and their antibiotic and chemotherapeutic sensitivity.

MICRO 226 Preparation for Instruction in Microbiology.

3 Credits

Students will be required to demonstrate proficiency in diagnostic and clinical microbiology and immunology and to develop instructional presentations in these topics. Students will be evaluated by both written examinations and on the quality of their presentations. Registration is by permission only.

MICRO 228 Laboratory Rotations in Microbiology.

3 Credits

This course allows students to participate in ongoing research in two or three laboratories during a semester. Registration is by permission only.

MICRO 229 Analysis of Research Literature, 1 Credit

Student will present research articles and critically evaluate the methods, approaches, and interpretations of the research. Students will be graded Pass or Fail.

MICRO 230 Oral Immunology, 2 Credits

Fundamentals of immunology with special reference to the biology, in both health and disease, of the oral cavity. Host microbial interactions important in caries and periodontal diseases are examined in detail. Experiments in immunology are designed to illustrate basic principles of immunobiology.

MICRO 263 Tropical Medicine. Up to 6 Credits

Opportunities for supervised training in research, clinical tropical medicine, epidemiology, field and laboratory investigation, and public health in Latin America are available in limited numbers. Applications should be submitted eight to 12 months in advance of the training period. Graduate students with appropriate interests will be considered. Applicants should begin the study of Spanish before or immediately after approval of their applications.

MICRO 276 General and Molecular Virology. 3-5 Credits

Number of hours and amount of credit to be stated at time of registration. Permission required. An introduction to the cellular and molecular biology of bacterial and animal viruses. Particular emphasis is given to virus cell interactions at the molecular level, including the immune response to viral infections, as well as to current research on mechanisms of viral replication and its effects on biochemical regulatory mechanisms in host cells. Lectures and seminars.

MICRO 277 Advanced Virology. 3-6 Credits

By arrangement.

MICRO 280 Techniques in Microbiology. 1-6 Credits

Number of hours and amount of credit to be stated at time of registration. Permission required. A laboratory course designed to familiarize the student with modern technology of molecular biology, including analytical and preparative centrifugation, electrophoresis, spectrophotometry, column chromatography, etc. Additional techniques commonly used in immunology, bacteriology, and virology laboratories are also included. Emphasis will be on applications to simple problems conducted at the laboratory bench.

MICRO 281 Selected Topics in Microbiology.

Topic and credit by arrangement.

MICRO 296 Fundamentals of Immunology. 3-5 Credits

Number of hours and amount of credit to be stated at time of registration. Permission required. Fundamentals of immunology, including immunochemistry and cellular aspects of the immune response, with illustrative reference to immunological factors in human health and disease.

MICRO 297 Advanced Immunology. 3-6 Credits

By arrangement.

MICRO 298 Seminar in Microbiology. 1 Credit**MICRO 299 Research Proposal in Microbiology. 3 Credits**

A required course for all doctoral candidates in which the student prepares, in National Institutes of Health grant format, a written proposal on the candidates dissertation research. The student presents and defends his proposal to his/her research committee as a basis for the Preliminary Examination.

MICRO 300 Thesis Research. variable Credits

(only 6 hours may be used for credit toward the master's degree). Registration by permission of the major professor. Amount of credit must be stated at time of registration.

MICRO 400 Dissertation Research. 1-9 Credits

Registration by consent of the Head of the Department. Amount of credit to be stated at the time of registration.

INTERDISCIPLINARY NEUROSCIENCE GRADUATE PROGRAM

The multidisciplinary graduate program in Neuroscience is an important educational program of the LSU Neuroscience Center of Excellence that prepares students for careers in teaching and research in academic institutions, the biomedical industry, or government agencies. The training program consists of course work, seminars, and the development of independent research ability. In the first two years, students take all required basic biomedical science and Neuroscience graduate courses. Advanced courses and individual directed research are undertaken to fulfill the particular educational needs of the graduate student. At the beginning of the second year of graduate school, students are expected to choose a particular area of research and a major professor who will supervise their doctoral research.

Applications for admission to the graduate program in Neuroscience are reviewed by a faculty committee. To be considered for acceptance into the program, applications should be received by February 1st of the year in which the students intend to enroll. Usually all accepted students receive a graduate stipend. Minimum requirements for admission to the program include a degree from a university or its equivalent and achievement of a 2.5 grade point average overall and a 3.0 average in science courses as an undergraduate, on a 4.0 scale. Applicants are expected to have taken the GRE and to have obtained a minimum combined score of 1200 on the verbal and quantitative portions of the exam. An advanced GRE examination in a science area must also be taken prior to acceptance to the graduate program in neuroscience. Foreign students are required to achieve at least 550 on the TOEFL exam. In the fall of the first year all students are expected to take Investigative Neuroscience, which provides an introduction to neuroscience and a broad overview of both fundamental and important clinical areas of neuroscience. Other courses that are required for the curriculum are listed. After passing the examinations for admission to doctoral candidacy, students have the opportunity to fulfill their individual course requirements in the areas that they specifically need.

Core Requirements

BIOCH 201	-----	5 credits
BIOCH 240	-----	5 credits
BIOS 221	-----	3 credits
NRSC 203	-----	5 credits
NRSC 250	-----	4 credits
NRSC 270	-----	9 credits
NRSC 290	-----	4 credits
ANAT 195	-----	6 credits

COURSE DESCRIPTIONS**ANAT 195 Anatomy. 6 Credits**

An introduction to the structure and function of the nervous system, as well as its dysfunction. This course is also taken by first-year medical students.

BIOCH 201 Fundamental Biochemistry. 5 Credits

This course represents a comprehensive introduction to the chemical principles associated with living organisms. The following topics are included: structure of proteins, carbohydrates and nucleic acids; bioenergetics; enzymology; intermediary metabolism and its regulation.

NRSC 203 Investigative Neuroscience. 5 Credits

An introduction to cellular and synaptic neurophysiology. The course covers a breath of topics addressing both normal and pathophysiologic processes at the cellular and systems level.

BIOCH 240 Molecular Biology. 5 Credits

Classes will be held in Seminar Room 8, Medical Education Building at 1:00 pm on Mondays, Wednesdays, and Fridays. This course will cover all aspects of molecular and cellular biology including the molecular biology of prokaryotes, eukaryotic gene expression, protein synthesis, and DNA replication and repair. Biochemistry 201 is a prerequisite for this course. Students that have not taken Biochemistry 201 will require permission by the course director to enroll in this course

NRSC 250 Molecular Neurobiology. 4 Credits

Covers the molecular, cellular, and biochemical pathways relevant to the nervous system.

NRSC 270 Laboratory Rotation. 4 Credits

For the first two semesters (Fall and Spring) students enroll for four credits and take two eight week rotations (each semester) to familiarize themselves with specific laboratory techniques, use of laboratory equipment, and data analysis and presentation. With the help of the laboratory supervisor, the student initially writes a paragraph on the project to be undertaken, and at the end of the rotation is expected to write a two-page paper on the project, comprising an Introduction, Materials and Methods, Results, and Conclusions sections. The student is expected to contact the investigator(s) well ahead of time to obtain permission and to make all necessary arrangements for the rotation. Scheduling of times is highly flexible and arranged by mutual agreement between the student and the investigator. Maximum eight credits toward degree.

NRSC 290 Neuroscience Seminar. 1 Credit

Students receive credit (Pass/Fail) for attending Neuroscience Center research seminars.

NRSC 298 Seminar. 1 Credit

This is the Neuroscience Center's series of seminars, and its attendance is required of all students in the Program. A maximum of 4 credit hours, generally over the student's first two years, may be earned toward the doctorate.

NRSC 400 Dissertation Research. 1-9 Credits

Registration by permission of the Director of the Interdisciplinary Neuroscience Training Program.

NEUROSCIENCE FACULTY

Bazan, N; Anand, R; Bazan, H; Chen, C; DeCoster, M; Erickson, J; Lukiw, W; Magee, J; Pappolla, M; Ricci, A; Xia, H.

In addition, jointly appointed faculty from several departments of LSU Health Sciences Center and the University of New Orleans host neuroscience students in laboratory rotations and may serve as Thesis Directors.

PATHOLOGY - M.S., PH.D.

The goal of the program is to provide the education and training necessary for graduates to assume positions in academic pathology departments, service clinical and forensic laboratories, or in industry related to the clinical laboratory specialties. The recommended curriculum provides the student with knowledge in the clinical sciences considered particularly relevant to their pathology specialty: general and systemic pathology, clinical pathology, biochemistry, clinical chemistry, molecular pathology and toxicology. Research activities are clinically oriented, examining the causes, mechanisms and effects of disease. The didactic course work and the research is conducted in the Medical Center, and the clinical training in the clinical laboratories at Medical Center of Louisiana at New Orleans or at the Veterans Administration Medical Center, New Orleans. General entry requirements are those of the School of Graduate Studies. Special requirements include a minimum of 16 semester hours of undergraduate chemistry, and biology.

Core Requirements

Program for obtaining the Ph.D. is tailored to the requirements of each individual student, but the core requirements for all students are:

BIOCH 201	-----	5 credits
PATH 201	-----	3 credits
PATH 202	-----	1-6 credits
PATH 210	-----	1-6 credits
PATH 280	-----	1-4 credits
PATH 291	-----	4 credits
PATH 291A	-----	2 credits
PATH 292	-----	4 credits
PATH 292A	-----	2 credits
PATH 293	-----	4 credits
PATH 293A	-----	2 credits
PATH 400	-----	15 credits

PATHOLOGY COURSE DESCRIPTIONS**PATH 201 Introduction to Methods in Pathology 1. 1-3 Credits**

A survey course on the principles of research, experimental design, biostatistics, laboratory safety and the theoretical background of the analytical methods and procedures encountered in research and clinical pathology laboratories.

PATH 202 Introduction to Methods in Pathology 2. 1-6 Credits

(credit to be specified at the time of registration). Laboratory work in an area of the Department's research or service laboratories designed to introduce the student to the research and service activities under the direction of an expert in the use of the methodology.

PATH 210 Topics in Pathology. 2-6 Credits

(credit to be specified at time of registration). The course is intended to permit students to explore in detail, primarily through laboratory work, some areas of particular interest in pathology, for example clinical chemistry, medical informatics, molecular pathology, toxicology, research in atherosclerosis and cardiovascular disease or cancer epidemiology. The specialty area studied will be indicated on the student transcript in addition to the course title.

PATH 232 Advanced Pathology. 1-3 Credits

One to three hours of lecture per week, to be arranged appropriate to topic and credit to be earned. The course is designed to permit graduate students to explore in an organized format, through lectures, and discussions (conferences), advances in specialized areas or subjects in general, systemic or clinical pathology which are not fully covered in other scheduled courses.

PATH 240 Forensic Pathology 1-3 Credits

One to three hours of lecture per week. The purpose of the course is to introduce the student to the disciplines of Forensic Science with particular emphasis on forensic pathology – the practice of laboratory medicine as it applies to the law and legal issues.

PATH 280 Pathology Seminar. 1 Credit

A maximum of four credits only may be earned during the period of graduate work. Discussions of topics of general interest in pathology, including reports on current literature, are included.

PATH 291 General and Systemic Pathology 1. 4 Credits

Four hours of lecture. Prerequisite: Permission. This course introduces students to the study and language of human disease its causes, mechanisms and effects on the body, by in-depth discussion of the general principles and reactions to different types of injury shared by most tissues.

PATH 291A General and Systemic Pathology 1 Laboratory.

2 Credits Six hours of laboratory. Prerequisite: concurrent registration in Pathology 291. A laboratory course that enables the student to study gross organs and microscopic slides of tissues containing characteristic features of the disease processes studied in Pathology 291.

PATH 292 General and Systemic Pathology 2. 4 Credits

Four hours of lecture. Prerequisite: Pathology 291 (General and Systemic Pathology I). This course introduces the student to the characteristic effects of common types of injury and of diseases on specific organ systems. The major disease processes are studied in terms of etiology, pathogenesis and lesions.

PATH 292A General and Systemic Pathology 2 Laboratory. 2 Credits

Six hours of laboratory. Prerequisite: Pathology 291a and concurrent registration in Pathology 292. A laboratory course that enables the student to study gross organs and microscopic slides of tissues containing the characteristic features of the disease processes studied in Pathology 292.

PATH 293 Clinical Pathology. 4 Credits

Four hours of lecture. Prerequisite: Pathology 291 and 292 (General and Systemic Pathology 1 and 2). This course introduces the students to general concepts in clinical pathology and to the diagnostic and prognostic application of laboratory testing to patients with various diseases of metabolism and of the hematopoietic, genitourinary, gastrointestinal, cardiovascular, and endocrine systems studied in Pathology 292 and 292a.

PATH 293A Clinical Pathology Laboratory. 2 Credits

Six hours of laboratory. Prerequisites: Pathology 291, 291a, 292, 292a and concurrent registration in Pathology 293. A laboratory course designed to enable students through laboratory exercises, case studies, and microscopic examination of blood and urine specimens to evaluate the significance of clinical laboratory test results in the management of disease.

2 PATH 94 Introduction to the Clinical Laboratory. 6 Credits

24 hours laboratory/tutorials per week. An introduction to the principles and practice of the analytical instrumentation, methods and procedures used in the core clinical laboratory (clinical chemistry hematology, urinalysis), and their application to disease diagnosis and treatment. Theory will be presented in tutorials (2 hours/week) that complement the practical experience (22 hours/week) students gain in the laboratory. Included are study and experience in quality control and quality assurance procedures used in the laboratory, and administrative procedures used in the management of the laboratory.

PATH 295 Clinical Chemistry. 6 Credits

24 hours laboratory/tutorials per week. Prerequisite: a degree in Medical Technology or successful completion of Pathology 294. Studies in specialist areas of clinical chemistry that includes analytical instrumentation and methods and the application of laboratory data for disease diagnosis and treatment. Areas of specialization include laboratory diagnosis of endocrine disorders, infectious diseases, cancer, immunological diseases, cardiovascular disease, fetal development, and nutritional disorders. During the course the student will rotate through the clinical laboratory sections in which the tests in their areas of specialization are performed. Included are study of the instrumentation and methods used to provide data for patient care, quality control and quality assurance procedures and exposure to the application of the data in clinical situations.

PATH 296 Toxicology. 2 Credits

Two hours lecture/tutorial per week. Prerequisites: a degree in Medical Technology or successful completion of Pathology 294 and concurrent registration in Pathology 296a. A basic introduction to the general principles of toxicology and their application to clinical toxicology and pharmacology. Consideration of specific toxic and therapeutic agents will include discussions of composition of the agent, mode of action and pathologic sequelae.

PATH 296A Toxicology Laboratory. 4 Credits

20 hours laboratory per week. Prerequisites: a degree in Medical Technology or successful completion of Pathology 294 and concurrent registration in Pathology 296. A laboratory course designed to provide the student with knowledge in the laboratory diagnosis of disorders caused by toxic and therapeutic agents, including the underlying principles of methodological approaches and consideration of the pathologic sequelae of specific agents.

PATH 300 Thesis Research. 1-6 Credits

Registration by permission of the major professor. Amount of credit must be stated at time of registration.

PATH 400 Dissertation Research. 1-9 Credits

Registration by permission of the major professor. Amount of credit must be stated at time of registration.

PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS -M.S. , PH.D.

The program is designed to provide graduate training through advanced courses, seminars, and laboratory research leading to the Doctor of Philosophy degree in Pharmacology. The Master of Science degree program is available for individuals possessing professional doctorates and desirous of research training or at the discretion of the staff, as a terminal degree. The length of time required to obtain the degree varies with the nature of the research program, but generally will be two to three years for the M.S. and four to five years for the Ph.D. Students enrolled in the doctoral program are required to take introductory graduate courses in biochemistry, physiology, biometry, radioisotope use, principles of pharmacology, ethics, and general pharmacology. Other courses may also be required depending upon the student's background and interests. In addition to the required courses, students are also required to participate in the departmental teaching program. The area of thesis or dissertation research is chosen by the student in consultation with the faculty. Students are allowed to register for graduate courses only after consultation with, and approval by the course director.

Core Requirements

The Program for obtaining the Ph.D. can be tailored to the requirement of each individual student, but the core requirements for all students are:

	Credits
BIOCH 201 Biochemistry -----	5
BIOS 221 Biometry -----	3
PHYS 205 Basic Physiology -----	6
PHARM 195 General Pharmacology -----	5
PHARM 199 Seminar -----	1
PHARM 251 Research in Pharmacology -----	Variable
PHARM 252 Research in Pharmacology -----	Variable
PHARM 205 Principles of Pharmacology -----	5
PHARM 300 Thesis Research -----	Variable
PHARM 400 Dissertation Research -----	Variable

PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS COURSE DESCRIPTIONS

PHARM 195 General Pharmacology. 5 Credits

Course consists of lectures, laboratory exercises, conferences, and demonstrations, leading to a broad general understanding of the effects of drugs.

PHARM 202 History of Pharmacology. 2 Credits

Two hours of faculty/student presentations and discussions on the history of pharmacology and experimental therapeutics, with an emphasis on classical experiments.

PHARM 203 Methods in Pharmacology. 1-3 Credits

Hours and credit by arrangement. Course provides instruction in classical methods used in investigating the action of drugs.

PHARM 204 Current Concepts in Pharmacology. 2 Credits

Two hours of faculty/student presentations and discussions on recent advances in the field of pharmacology. All areas of pharmacological research will be included, with an emphasis on the implications of recent research findings.

PHARM 205 Principles of Pharmacology. 5 Credits

This course is designed to introduce basic concepts in pharmacology to beginning students. The course will introduce students to pharmacokinetic and pharmacodynamic principles, drug metabolism, and a comprehensive discourse on drug receptor interactions. The application of these principles to specific endeavors will also be discussed.

PHARM 206 Principles of Pharmacology II: Integrative and

Systems Pharmacology. 3 Credits The objective of this course is to utilize an experimental approach to understanding the development of therapeutic agents for the treatment of diseases. Lectures will provide the pathophysiological basis of diseases and the rationale for developing specific therapeutic agents.

PHARM 207 Drug Receptor Interactions. 2 Credits

Lecture, discussion and laboratory exercise related to drug receptor theory.

PHARM 211 Renal Pharmacology. 2 Credits

Lecture, discussion and laboratory exercises covering diuretics and factors affecting renal blood flow and electrolyte excretion.

PHARM 221-224 Advanced Topics in Pharmacology. 1-4 Credits

Hours and credits as well as lecture and laboratory to be arranged depending upon the special topic. This course is designed for advanced studies of special groups of drugs.

PHARM 225 Sensory Pharmacology. 2 Credits

Lecture and discussion of drugs acting on the neural pathways involved in perception of sensory information. Drugs used in therapeutics, diagnoses and research will be included. A paper written on a subject involving a sensory system(s) and a drug/drug class or related topic is required for successful completion of the course. Summer Semester.

PHARM 231 Drug Abuse. 3 Credits

This course is designed to provide the student with a basic understanding of behavioral and pharmacological principles underlying various problems of drug abuse. The course will expose the student to both basic science and clinical issues as they relate to drug abuse and dependence.

PHARM 232 Autonomic Pharmacology. 2-3 Credits

Lecture, discussion and laboratory exercises designed to provide the student with the basics of peripheral autonomic functions and their regulation by CNS mechanisms. Course will also cover advanced mechanisms including newer receptor sub-types and co-transmitters.

PHARM 233 Neuropharmacology. 2-3 Credits

Lectures and discussions will be on chemical transmitters in the central nervous system with special emphasis on drug modifications of transmitter action and neuronal function.

PHARM 234 Psychopharmacology. 3 Credits

Lecture and laboratory designed to provide the student with an understanding of the effects of drugs on behavior. Special emphasis is given to pharmacological methods useful in the elucidation of normal and abnormal behaviors.

PHARM 236 Gastrointestinal Pharmacology. 2 Credits

Lecture and reading assignments designed to provide students with a basic understanding of drugs affecting selected aspects of gastrointestinal function through central nervous system and peripheral mechanisms.

PHARM 237 Biochemical Pharmacology. 2 Credits

Lecture and discussion designed to provide the student with the basics of drug metabolism and the use of biochemical techniques in pharmacology.

PHARM 238 Cardiovascular Pharmacology. 2-3 Credits

The study of drugs used to treat cardiovascular disorders with the primary emphasis on their fundamental mechanisms of action.

PHARM 240 Behavioral Pharmacology. 3 Credits

Basic principles of the experimental analysis of behavior, including operant and classical conditioning are discussed. The utility of using scheduled controlled behavior to investigate drug effects is the primary focus of the course. Behavioral mechanisms of drug action are discussed within the context of a variety of environmental situations.

PHARM 251-252; 253-254 Research in Pharmacology.

Amount of credit to be stated at the time of registration. This course offers an in-depth experience in research development, design, methodology and implementation. Students will undertake specific projects of limited scope and develop their findings under the guidance and direction of faculty preceptors.

PHARM 280 Advanced Topics in Cell Signaling and Integrated Pharmacological Science. 3 Credits

The objective of this course is to provide a forum for discussing emerging topics in the field of cell signaling in the context of integrated experimental approaches that include model organisms, human disease and molecular therapeutics. Students will be introduced to significant discoveries and encouraged to develop the necessary analytical skills to identify important questions and define experiments to determine their answers. This course is intended for advanced graduate students and postgraduate students and will be coordinated with Special Seminar Series organized through the Department.

PHARM 298-299 Seminar. 1 Credit.

PHARM 300 Thesis Research. Variable Credits (only 6 hours may be used for credit toward the master's degree). Registration by permission of the major professor. Number of credits must be stated at time of registration.

PHARM 400 Dissertation Research. 1-9 Credits

Registration by permission of major professor. Number of credits must be stated at time of registration.

PHYSIOLOGY- M.S., PH.D.

The graduate program leading to the Ph.D. in Physiology is designed to provide advanced education and training for a career in biomedical research and/or teaching in a university, research institution or industry. The length of time required to obtain the Ph.D. generally is four to five years. The program is flexible and designed to meet the needs and interests of the individual student. During the first year, most of the student's time is devoted to basic course work, including some medical courses. The student also is expected to examine current research programs in the Department and to select an area in which he or she will work. Dissertation research should be under way early in the second year before the student has completed formal course requirements. Beginning in the second year, all students participate in the teaching programs of the department to gain the skills important for future academic positions. The second year and beyond include advanced courses consistent with the student's training and needs, with at least 12 hours in one or more minor disciplines. The student's research occupies an increasing amount of time as the course requirements are fulfilled. The M.S. degree program is designed to prepare the candidate for biomedical research positions in academic, clinical or industry settings or to continue in graduate education. The time required to complete the M.S. program is generally two to three years. Qualified students will be accepted for graduate courses in physiology only after consultation with and approval by the Graduate Faculty of the Department.

Core Requirements

The program for obtaining the Ph.D. can be tailored to the requirements of each individual student, but the core requirements for all students are:

PHYSIO 205, 206, 207 Physiology -----	10 credits
PHYSIO 251 Molecular Structure and Function of the Cell -----	3 credits
PHYSIO 298, 299 Seminar All semesters of enrollment-----	1 credit
BIOCH 201, Biochemistry for Graduate Students -----	5 credits
INT 220, Ethics in the Biomedical Sciences	1 credit

PHYSIOLOGY COURSE DESCRIPTIONS

PHYSIO 201-202; 203-204 Research in Physiology. 1-9 Credits

A research course designed to acquaint new graduate students with a research laboratory. This represents research credit before the qualifying process.

PHYSIO 205 Basic Physiology. Lecture 6 Credits

Function of tissues, organs and organ systems; mechanisms of control and integration of the various functions. An introduction to the pathophysiology of some diseases will be included.

PHYSIO 206 Basic Physiology Laboratory. 3 Credits

Laboratory experiments that emphasize precision in observation, analysis and interpretation of data. The topics are correlated with Basic Physiology Lectures (Physiology 205). Registration in Physiology 205 is required for registration in Physiology 206.

PHYSIO 207 Basic Physiology Discussion. 1 Credit

Additional discussion, enrichment lectures, special assignments and additional examinations designed to expand coverage of the topics presented in Physiology 205 and Physiology 206. Registration in Physiology 205, Physiology 206 and Physiology 207 is required for Physiology majors.

PHYSIO 212 Cardiovascular Physiology. 3 Credits

This course covers normal function and pathophysiology of the heart and circulation. Emphasis will be placed on using the literature to gain a greater depth of understanding of cardiovascular function. Students will write a small grant proposal as part of the course requirements.

PHYSIO 216 Endocrinology. 3 Credits

The topics presented include endocrine control systems, and hormone secretions and their mechanism of action at the physiologic, cellular and molecular levels. (Conducted jointly with the faculty in biochemistry; this is the same course as Biochemistry 216 and may be used toward a major in either Department.)

PHYSIO 217 History and Philosophy of Science. 2 Credits

The history, methodologies and philosophy of science are considered in a study discussion course.

PHYSIO 250 Scientific Writing for Graduate Students. 2 Credits

Two hours of lecture discussion per week. Topics covered include grammar, usage, and writing style; writing and submitting articles to scientific journals; writing research proposals, grant applications, dissertations, abstracts and test questions; and preparing curriculum vitae. Students must contribute portions of their ongoing writing projects for use in class discussions.

PHYSIO 251 Molecular Structure and Function of the Cell. 3 Credits

The course is intended to explore the central role of the cell in modern biology. An integrative approach will be used beginning with historical precedents in anatomy and incorporating knowledge gained as the tools of biochemistry, electron microscopy, immunology and molecular genetics are focused upon cellular structure and operation. (Conducted jointly with the Departments of Anatomy and Biochemistry; this is the same course as Anatomy 251 and Biochemistry 251 and may be used toward a major in either Department).

PHYSIO 280-289 Special Topics in Physiology. 1-4 Credits

Credits hours, and lecture/laboratory time distribution to be independently arranged for each course as appropriate. An opportunity to explore, in an organized format and under supervision, specialized areas or specific subjects not adequately covered in other scheduled courses. By permission of the Head of the Department of Physiology only.

PHYSIO 298-299 Seminar. 1 Credit

A maximum of two credits towards the M.S. or four credits towards the Ph.D. may be earned.

PHYSIO 300 Thesis Research. 1-6 Credits

Amount of credit to be stated at time of registration.

PHYSIO 400 Dissertation Research. 1-9 Credits

Amount of credit to be stated at time of registration.



LSU Health Sciences Center School of Dentistry and the LSU Health Sciences Center School of Graduate Studies in New Orleans – M.S.

A Master of Science Degree in collaboration with LSU School of Dentistry is flexible and designed to meet the needs of individual students. Thesis research can be done in any basic science or clinical science Department participating in the program. The thesis committee will be comprised of five graduate faculty, at least two will be from the participating MS degree program.

Although this program will require dual enrollment in the School of Dentistry and the School of Graduate Studies, students will pay tuition to the School of Dentistry. Prospective students must first apply to and be accepted by the School of Dentistry. Students should state their desire to enter the M.S./Advanced Dental Education Program, preferably at the time of application, but no later than the end of the Fall semester, first year.

In addition to the requirements for entering the Advanced Dental Education Program, the criteria for admission to the Master of Science Degree Program for the School of Graduate Studies must be met. In lieu of the baccalaureate degree requirement, students must have earned a D.D.S. or D.M.D. degree, or equivalent, from an accredited dental program. A minimum of two years of full-time study will generally be required for completing course work and thesis requirements for this collaborative MS/Advanced Dental Education Program.

The Program for obtaining the M.S. can be tailored to the requirement of each individual student. Curriculum design and course selection must be approved by the student's committee using the following guidelines. The minimum requirement is 33 semester hours of graduate work to include:

Advanced Dental Core Course Requirements -----	9 credits
Basic Science Courses Minimum Requirements -----	9 credits
Advanced Dental Education Specialty Courses Minimum Requirements -----	9 credits
Thesis Research Requirements -----	6 credits
Minimum Total -----	33 credits

**MASTER OF SCIENCE IN ORAL BIOLOGY
LSU Health Sciences Center School of Dentistry and the LSU Health Sciences Center School of Graduate Studies in New Orleans**

This program allows students already enrolled in an advanced dental education program as well as individuals who have a specialized interest in dentistry or the allied dental sciences to earn the degree, Master of Science in Oral Biology. This program is offered through the School of Graduate Studies and administered by the School of Dentistry and the Center of Excellence in Oral and Craniofacial Biology.

The Master of Science Program in Oral Biology is an option for students with superior academic records and research potential. The criteria for admission to the School of Graduate Studies must be met. A minimum score of 1,000 on the Graduate Record Examination (combined verbal and quantitative) is required. Students must have earned a Bachelor of Science degree, D.D.S. or D.M.D. degree, or equivalent, from an accredited program.

The program can be tailored to the requirement of individual students. The thesis committee will be comprised of three graduate faculty of the Center of Excellence in Oral and Craniofacial Biology, and at least one must be from a Basic Science department. Curriculum design and course selection must be approved by the student's committee using the following guidelines. The minimum requirement is 33 semester hours of graduate work to include:

Advanced Dental Core Course Requirements -----	9 credits
Basic Science Courses Minimum Requirements -----	9 credits
Advanced Dental Education Specialty Courses Minimum Requirements -----	9 credits
Thesis Research Requirements -----	6 credits
Minimum Total -----	33 credits

**MASTER OF SCIENCE DEGREE PROGRAM
ADVANCED DENTAL CORE COURSE
REQUIREMENTS AND DESCRIPTIONS**

ANAT 255 Advanced Head and Neck Anatomy. 3 Credits This course is designed as an advanced course in head and neck anatomy and includes segments on basic gross anatomy, neuro-anatomy and neuro-physiology. Special emphasis on functional considerations and clinical correlations is given in the course. This course is equivalent to ANAT 5407).

OBIOL 201 Statistical Methods in Health Sciences. 3 Credits This course is designed to present statistical techniques for analysis of dental data. It prepares the advanced education student for: analyzing research results; presenting analyses to an audience; and understanding of analyses that appear in dental literature. (This course is equivalent to BIOM 5419 and BIOM 221)

OBIOL 202 Research Methodology. 1 Credit This course is designed to enhance the advanced education dental student's comprehension of the research process from initiation of a research project to presentation of findings. Traditional as well as innovative approaches to oral health research are presented.

OBIOL 203 Advanced Oral Biophysiology. 2 Credits The objective of this course is to provide the student with a contemporary view of cell biology and relate this to developmental, structural, functional, and pathologic events associated with the craniofacial complex.

**MASTER OF SCIENCE DEGREE PROGRAM
ADVANCED DENTAL EDUCATION
SPECIALTY COURSE REQUIREMENTS
AND DESCRIPTIONS**

All students are required to successfully complete a minimum of 9 credit hours from the following:

ENDO 5407 Pulpal and Periodontal Biology. 2 Credits This course provides the students the experience of reviewing, consolidating, and enhancing their knowledge of the biology and pathology of the pulp and periodontium, and of treatment materials and methods in order to allow precise and accurate diagnosis and appropriate treatment of disease of these tissues.

PROS 5505 TMJ Dysfunction, Occlusion, and Facial Pain. 2 Credits Advanced instruction is provided in the differential diagnosis of pain and dysfunction, with an awareness of the available methods for management of these disorders. Emphasis is placed on the precautions that should be taken in any dental specialty practice when caring for patients suffering from temporomandibular disorders. Special emphasis is placed on the masticatory system as similar to other musculoskeletal systems.

MICRO 241 Microbiology and Oral Disease. 1 Credit
This course provides a review of fundamentals and survey of current literature in oral microbiology. Topics include: contemporary methods in oral microbiology; oral microbial ecology; microbiology of dental plaque; microbiology of caries and periodontal diseases; microbiology of endodontic and periapical infections; antibiotics; viruses of oral importance. Lectures, term paper, and student presentations are included.

MICRO 242 Advanced Dental Immunology. 1 Credit
This course is designed as an advanced course in the immunology of oral disease with special reference to the biology, in both health and disease, of the oral cavity. Host microbial interactions important in caries and periodontal diseases are examined in detail. Experiments in immunology are designed to illustrate basic principles of immunobiology.

DENT 5507 Advanced Radiology. 1 Credit
This course is designed to advance the student's understanding of the clinical and research aspects of dental radiology. Topics include: Image formation, localization of foreign bodies in jaws; differential diagnosis; salivary gland disease; sialography.

DENT 5407 Oral Medicine and Clinical Diagnosis. 2 Credits This course is intended to expand the advanced education dental student's understanding of current concepts in Oral Medicine and Clinical Diagnosis. Special emphasis is given to specific areas of disease which might significantly influence treatment modalities by dental specialists. The course also provides a current overview of diagnostic laboratory procedures, their interpretation, and appropriate utilization.

OPATH 5100. Differential Diagnosis of Oral Lesions. 2 Credits The purpose of this course is to educate the advanced education dental student in the methodology of diagnosing oral diseases. Each session is organized around a clinicopathologic conference format during which students are presented with selected oral pathology cases via projected slides and asked to derive a differential diagnosis.

OPATH 5501 Pediatric Oral Pathology. 2 Credits
The purpose of this course is to educate the advanced education dental students concerning diseases which may affect the child or adolescent patient. Emphasis is placed on oral and systemic diseases occurring in the pediatric population, focusing on systemic diseases with oral manifestations and of oral diseases with systemic manifestations.

PHARM 5400 Advanced Dental Pharmacology. 1 Credit
This course provides the student with advanced instruction in dental pharmacology. Recent advances in pharmacologic agents used in dentistry, functional considerations, and clinical correlations are emphasized.

Selected Topics in Dentistry.
Topic and credit arranged by Department and declared at time of enrollment. Course number assigned by Department.

Thesis Research. 1-6 Credits
Registration by consent and permission of the major professor. Amount of credit to be stated at the time of registration. Course number assigned by Department.

MASTER OF SCIENCE DEGREE PROGRAM BASIC SCIENCE COURSE REQUIREMENTS AND DESCRIPTIONS

Basic Science Collaborative Program

All students are required to successfully complete a minimum of 9 credit hours from an appropriate M.S. Program in the School of Graduate Studies. The student, under the direction of his/her committee, will select those courses from the curriculum of the collaborative Basic Science department that will facilitate the student's research and academic interests and needs.

Oral Biology

All students are required to complete a minimum of 9 credit hours from the Basic Science departments in the School of Graduate Studies. The courses may be from only one or from several departments. The student, under the direction of his/her committee, will select those basic science courses that will facilitate the student's research and academic interests and needs.

FACULTY ROSTER

EMERITI

BARKER, LOUIS A. - Ph.D., Tulane University, 1968
Emeritus Professor of Pharmacology and Experimental Therapeutics

BEELER, MYRTON F. - M.D., New York Medical College, 1949
Emeritus Professor of Pathology

CARVEL, ROSA I. - D.D.S., Loyola University (Louisiana), 1967
Emeritus Professor of Oral Pathology

COULSON, ROLAND A. - Ph.D., University of London (England), 1944
Emeritus Professor of Biochemistry and Molecular Biology

DASCOMB, HARRY E. - M.D., University of Rochester, 1943
Emeritus Professor of Medicine

DAVIS, GEORGE D. - Ph.D., Yale University, 1951
Emeritus Professor of Physiology

DESSAUER, HERBERT C. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1952
Emeritus Professor of Biochemistry and Molecular Biology
DYER, ROBERT F. - Ph.D., University of Pittsburgh, 1966
Emeritus Professor of Cell Biology and Anatomy

GUZMAN, MIGUEL A. - Ph.D., North Carolina State University, 1961
Emeritus Professor of Biometry and Genetics and Pathology

KASTEN, FREDERICK - Ph.D., University of Texas, 1954
Emeritus Professor of Cell Biology and Anatomy

MALCOM, GRAY T. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1978
Professor of Pathology

MAYO, JOHN A. - Ph.D., University of New Mexico, 1970
Emeritus Professor of Microbiology, Immunology, and Parasitology

MILLER, JOSEPH H. - Ph.D., New York University, 1953
Emeritus Professor of Microbiology, Immunology, and Parasitology

MORGAN, LEE R., JR. - Ph.D., Tulane University, 1960
Emeritus Professor of Pharmacology and Experimental Therapeutics

NANCE, F. CARTER - M.D., University of Tennessee, 1959
Emeritus Professor of Physiology, and Surgery

NARAYANAN, CHANDRASEKARAPURANH - Ph.D., University of Kansas, 1963
Emeritus Professor of Cell Biology and Anatomy

ROHEIM, PAUL - M.D., Medical College of Budapest Hungary, 1951
Emeritus Professor of Physiology

SPENCE, H. Adele - Ph.D., LSU MEDICAL CENTER,
Emeritus Professor of Microbiology, Immunology and Parasitology

SPITZER, JOHN - M.D., University of Munich, 1950
Emeritus Boyd Professor and Head of Physiology

SPITZER, JUDY - Ph.D., Hahnemann Medical College, 1963
Emeritus Professor of Physiology

TOTH, LOUIS A. - Ph.D., University of Rochester, 1936
Emeritus Professor of Physiology

WARREN, LIONEL G. - Sc.D., Johns Hopkins University, 1957
Emeritus Professor of Microbiology, Immunology, and Parasitology

WILSON, LAWRENCE A. - Ph.D.,
University of North Carolina at Chapel Hill, 1969
Emeritus Professor of Microbiology, Immunology and Parasitology

ZIMNY, MARILYN L. - Ph.D., Loyola University (Illinois), 1954
Emeritus Professor of Cell Biology and Anatomy

ASSOCIATE MEMBERSHIP

BARKEMEYER, BRIAN M. - M.D., Louisiana State University School of Medicine, 1987
Associate Professor of Pediatrics

BLACKWELL, TERRY - ED.D., University of Northern Colorado, 1980
Clinical Associate Professor of Rehabilitation Counseling

BOULARES, HAMID - PH.D., University of Connecticut, 1997
Assistant Professor of Pharmacology

CATLING, ANDREW - PH.D., University of Glasgow, 1992
Assistant Professor of Pharmacology

CORK, JOHN - PH.D., University of Leeds, 1980
Assistant Professor of Cell Biology and Anatomy

COULTER, W. ALAN - Ph.D., University of Texas, 1991
Assistant Professor of Interdisciplinary Human Studies

CROW, ROBERT E. - Ph.D., Utah State University, 1972
Professor of Interdisciplinary Human Studies

DICK, GREGORY - Ph.D., University of Missouri
Assistant Professor of Physiology

DOLAN, JOHN - Rh.D., Southern Illinois University, 1983
Professor of Rehabilitation Counseling

EASON, JANE - PH.D., University of Florida, 1996
Associate Professor of Physical Therapy

FOX, DEBORAH S. - Ph.D., University of Cincinnati
Assistant Professor of Pediatrics

Gould, Harry - M. D., Ph.D. LSU Medical School, 1990
Associate Professor of Neurology

HARRISON, JAMES D. - D.D.S., St. Louis University, 1951
Professor of Prosthodontics

HUNT, JOHN P. - M.D., University of North Carolina, 1998
Associate Professor of Surgery

LEIGH, JANET - M.D., University of Pennsylvania, 1991
Associate Professor of General Dentistry

MARIER, JOANNE, J.D., Tulane University, 1981
Associate Professor of Clinical Physical Therapy

MCCARTHY, HENRY - Ph.D., University of Kansas, 1977
Professor of Rehabilitation Counseling

MANDAL, DIPTASRI - Ph.D., LSU Medical Center, School of Graduate Studies, 1992
Assistant Professor of Genetics

PARISER, GINA - PH.D., University of Tennessee, 1989
Assistant Professor of Physical Therapy

PARKINS, CHARLES W. - M.D., University of Rochester Medical School, 1963
Professor of Otolaryngology

PELLETT, ANDREW - Ph.D., LSU Medical Center School of Graduate Studies, 1991
Associate Professor of Cardiopulmonary Science

RAYFORD, WALTER, M.D., Ph.D., University of Kansas School of Medicine, 1991
Assistant Professor of Urology

SHETTY, KISHORE., - University of Bombay, DDS, 1994
Assistant Professor of General Dentistry

SIMONSEN, NEAL R., - Ph.D., University of North Carolina - Chapel Hill, 1993
Assistant Professor of Public Health and Preventive Medicine

STRICKLIN, SARINTHA - Ph.D., University of New Orleans, 1997
Associate Professor of Interdisciplinary Human Studies

SU, L JOSEPH - Ph.D., University of North Carolina at Chapel Hill, 1998
Assistant Professor of Public Health and Preventive Medicine

TAYLOR, EVE - PH.D., Tulane University, 1984
Professor and Head of Occupational Therapy

THOMPSON, HILARY - Ph.D., Louisiana State University, Baton Rouge, 1986
Assistant Professor, Genetics and School of Public Health

TUNE, JONATHAN - Ph.D., University of North Texas Health Science Center
Assistant Professor of Physiology

TURNER, ROBERT G. - Ph.D., University of Florida, 1975
Professor of Communication Disorders

WANG, GUOSHUN - Ph.D., Peking University of China, 1992
Assistant Professor of Medicine and Genetics

WANG, PING - Ph.D., Cornell University, 1999
Assistant Professor of Pediatrics and Microbiology

WEISS, LARRY - M.D., Hahnemann Medical College, 1979
Clinical Professor of Medicine and Public Health

WILSON, PHILIP G. - Ph.D., University of Illinois at Urbana-Champaign, 1991
Associate Professor of Interdisciplinary Human Studies

WINKLER, MARK M. - Ph.D., Northwestern University, 1991
Associate Professor of Operative Dentistry and Biomaterials

XU, XIAOMING - Ph.D., University of New Orleans, 1996
Assistant Professor of Operative Dentistry and Biomaterials

AFFILIATE MEMBERSHIP

ARMBRUSTER, PAUL C., DDS, LSU School of Dentistry
Assistant Professor of Orthodontics and Dentofacial Orthopedics

BEDIMO, ARIANE LISANN, Ph.D., Tulane University
Assistant Professor of Research, Public Health and Preventive Medicine

BLATZ, MARKUS B., D.M.D., Ph.D., Albert Ludwigs University, Germany 1998
Professor of Prosthodontics

BRESLIN, MARY B. - PH.D., Louisiana State University, 1998
Assistant Professor of Pediatrics and Biochemistry

CORRIVEAU, RODERICK - Ph.D., University of California at San Diego, 1994,
Assistant Professor of Cell Biology and Anatomy

CUI, YAN - Ph.D., University of Alberta, Canada, 1995
Assistant Professor of Genetics

GERAK, LISA - Ph.D. LSU Health Sciences Center, School of Graduate Studies, 1997
Assistant Professor of Pharmacology

GORDON, WILLIAM. - Ph.D., University of South Florida, 1977
Associate Professor of Ophthalmology and Neuroscience

HORSWELL, RONALD, Ph.D., Louisiana State University, Baton Rouge, 1990
Assistant Professor. School of Public Health

LAN, MICHAEL S. - Ph.D., Duke University, 1986
Associate Professor of Pediatrics/Genetics

LEMEN, LISA C. - Ph.D., University of Texas HSC, 1998
Assistant Professor of Radiology

MARCHESELLI, VICTOR, - Ph.D., University of New Orleans, 2003
Associate Professor of Ophthalmology and Neuroscience

RICCI, ANTHONY, - Ph.D., Tulane University Medical Center, 1992
Associate Professor of Otolaryngology and Neuroscience
 ROBERTS, ELLIOTT, - M.A., George Washington University, 1963
Professor, School of Public Health
 SPRIGGS, LOUAINE - Ph.D., Tulane University, 1990
Associate Professor of Cell Biology and Anatomy
 THOMSON, JESSICA, Ph.D., University of Louisiana at Lafayette, 2002
Assistant Professor, School of Public Health
 VELASCO, CRUZ - Ph.D., Tulane University Graduate School
Assistant Professor, School of Public Health

FULL MEMBERSHIP

ALAM, JAWED - Ph.D., Purdue University, 1983
Associate Professor of Biochemistry and Molecular Biology
 ALDRIDGE, KENNETH E. - Ph.D., University of Mississippi, 1974
Professor of Medicine, Obstetrics and Gynecology, and Pathology
 ALLIEGRO, MARK C. - Ph.D., State University of New York, Buffalo, 1986
Professor of Cell Biology and Anatomy
 AMEDEE, ANGELA M., PH.D., LSU Health Sciences Center, School of Graduate Studies, 1992
Assistant Professor of Microbiology, Immunology and Parasitology
 ANAND, RENE - Ph.D., Ohio State University, 1989
Associate Professor of Biochemistry and Molecular Biology
 BACKES, WAYNE L. - Ph.D., West Virginia University, 1979
Professor of Pharmacology and Experimental Therapeutics
 BAGBY, GREGORY J. - Ph.D., Washington State University, 1976
Professor of Physiology and Medicine
 BARATTA, RICHARD V., PH.D., Tulane University, 1989
Professor of Orthopaedics
 BARBEE, JAMES G. - M.D., Tulane University, 1978
Professor of Pharmacology and Experimental Therapeutics and Psychiatry
 BAZAN, HAYDEE E. P. - Ph.D., Universidad Nacional del Sur (Argentina), 1975
Professor of Biochemistry and Molecular Biology, Ophthalmology, Neuroscience
 BAZAN, NICOLAS G. - Ph.D., University of Tucuman (Argentina), 1971
Professor of Ophthalmology, Biochemistry, and Molecular Biology, Neurology, Neuroscience
 BEUERMAN, ROGER W. - Ph.D., Florida State University, 1973
Professor of Cell Biology and Anatomy, and Ophthalmology
 BHATTACHARYYA, ASHIM K. - Ph.D., Calcutta University (India), 1965
Professor of Pathology, and Physiology
 BLOCK, MICHAEL S. - D.M.D., Harvard University, 1979
Professor of Oral and Maxillofacial Surgery
 BOBBIN, RICHARD P. - Ph.D., Tulane University, 1969
Professor of Otorhinolaryngology and Biocommunication, and Pharmacology and Experimental Therapeutics and Physiology
 BOUDREAU, DONALD A. - Ph.D., Louisiana State University, Baton Rouge, 1971
Professor of Pathology
 BURGESS, JOHN O., DDS, Emory University, School of Dentistry
Professor and Head of Operative Dentistry and Biomaterials
Assistant Dean of Clinical Research
 BROUSSARD, LARRY A. - Ph.D., University of Texas at Austin, 1974
Assistant Professor of Medical Technology
 BROWN, JULIE - Ph.D., University of Virginia, 1989
Assistant Professor of Biochemistry and Molecular Biology
 BROWN, KEVIN D. - Ph.D., Alabama at Birmingham, 1991
Associate Professor of Biochemistry and Molecular Biology
 CADE, JAMES E. - D.D.S., University of Tennessee, 1979
Professor of Oral Diagnosis/Medicine/Radiology; and Oral Pathology
 CAIRO, JIMMY M. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1986
Professor of Cardiopulmonary Science and Physiology
 CARR, RONALD F. - D.D.S., Loyola University (Louisiana), 1964
Professor of Oral Pathology and Pathology
 CHEN, CHU, Ph.D., Tulane University, 1993
Assistant Professor of Otorhinolaryngology

CHEN, VIVIEN W. - Ph.D., University of Oklahoma, 1978
Professor of Pathology and Public Health and Preventive Medicine
 CHICHE, GERALD - D.D.S., University of Paris (France), 1977
Professor and Head of Prosthodontics
 CHILIAN, WILLIAM. - Ph.D., University of Missouri, 1980
Professor and Head of Physiology
 CLAYCOMB, WILLIAM C. - Ph.D., Indiana University, 1969
Professor of Biochemistry and Molecular Biology
 COHEN, CRAIG - Ph.D., University of Mississippi, 1972
Professor of Medicine and Genetics
 COOK, JULIA - Ph.D., North Carolina State, 1986
Associate Professor of Biochemistry and Molecular Biology
 CORREA, PELAYO - M.D., University of Antioquia (Columbia), 1952
Professor of Pathology
 CRANFORD, JERRY L., - Ph.D., Vanderbilt University, 1968
Professor and Head of Communication Disorders
 CSERJESI, PETER - Ph.D., McGill University, 1991
Associate Professor of Cell Biology and Anatomy
 CUTLER, JIM E., Ph.D., Tulane University, 1972
Professor of Pediatrics and Microbiology
 DANILOFF, RAYMOND - PH.D., University of Iowa, 1967
Professor and Head of Communication Disorders
 De BENEDETTI, ARRIGO, Ph.D., SUNY, Albany, 1985
Associate Professor of Biochemistry and Molecular Biology
 DEDERICH, DOUGLAS N. - D.D.S., University of Iowa, 1983
Associate Professor and Head of Periodontics
 DELCARPIO, JOSEPH B. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1986
Professor of Cell Biology and Anatomy
 DeTURCO, ELENA BEATRIZ R. - Ph.D., Universidad Nacional del Sur, Argentina, 1982
Associate Professor of Ophthalmology
 DIAZ, JAMES - M.D., Tulane School of Medicine, 1990; Dr.PH Tulane University, 1995
Professor of Public Health and Preventive Medicine
 DUMMETT, CLIFTON O. JR - D.D.S., Indiana University, 1969
Professor and Head of Pediatric Dentistry
 ERICKSON, JEFFREY D., Ph.D.,
Associate Professor of Neuroscience, and Pharmacology and Experimental Therapeutics
 ERZURUMLU, REHA S. - Ph.D., University of California-Irvine, 1981
Professor of Cell Biology and Anatomy and Neuroscience Center
 EVERSON, JANE MCVICKER - Ph.D., Virginia Commonwealth University, 1989
Associate Professor of Interdisciplinary Human Studies
 FERRIS, MICHAEL J., Ph.D., Montana State University, 1996
Assistant Professor of Pediatrics and Microbiology
 FIDEL, PAUL L. - Ph.D., University of Oklahoma, 1988
Professor of Microbiology, Immunology and Parasitology
 FONTHAM, ELIZABETH T. - Dr. P.H., Tulane University, 1983
Dean, School of Public Health and Preventive Medicine
 FREISTADT, MARION S. - Ph.D., The Rockefeller University, 1985
Associate Professor, Microbiology Immunology and Parasitology
 FROHLICH, EDWARD D. - M.D., University of Maryland, 1956
Professor of Medicine, and Physiology, Part-Time
 GALLAHER, WILLIAM R. - Ph.D., Harvard University, 1971
Professor of Microbiology, Immunology, and Parasitology
 GARDINER, DIANA L. - Ph.D., University of Alabama, 1979
Professor and Assistant Dean of Educational Services
 GASSER, RAYMOND F. - Ph.D., University of Alabama, 1965
Professor of Cell Biology and Anatomy
 GAUMER, H. RICHARD R. - Ph.D., University of North Carolina, 1971
Associate Professor of Pathology
 GEBHARDT, BRYAN M. - Ph.D., Tulane University, 1967
Professor of Microbiology, Immunology, and Parasitology; and Ophthalmology
 GNARRA, JAMES. - Ph.D., University of Virginia, 1987
Associate Professor of Biochemistry and Molecular Biology
 GRABCZYK, EDWARD L. - Ph.D., Harvard University, 1992
Assistant Professor of Genetics
 GREEN, JEFFREY D. - Ph.D., State University of New York, 1981
Professor of Cell Biology and Anatomy
 GREGORY, PAULA - Ph.D., Tulane University, 1989
Associate Professor of Genetics

GUIDO, WILLIAM - Ph.D., University of North Carolina, Greensboro, 1985

Professor of Cell Biology and Anatomy and Neuroscience Center
HAGENSEE, MICHAEL E. – Ph.D., M.D., Baylor College of Medicine
Associate Professor of Microbiology, Immunology and Parasitology and Medicine

HAPPEL, LEO T. JR. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1972

Professor of Neurology, Neurosurgery, Physiology and Neuroscience

HARRISON-BERNARD, LISA – Ph.D., Tulane University, 1990

Associate Professor of Physiology

HAYCOCK, JOHN W. - Ph.D., University of California, 1975

Professor of Biochemistry and Molecular Biology

HEMPE, JAMES - Ph.D., University of Missouri, 1987

Assistant Professor of Pediatrics

HERBERT, JACK D. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1967

Associate Professor of Biochemistry and Molecular Biology

HILL, JAMES M. - Ph.D., Baylor College of Medicine, 1971

Professor of Microbiology, Immunology and Parasitology;

Ophthalmology; and Pharmacology and Experimental Therapeutics

HOBDEN, JEFFERY A., LSU Medical Center, School of Graduate Studies, 1992

Assistant Professor of Microbiology, Immunology and Parasitology

HOCHSTEDLER, J. L. - D.D.S., University of Tennessee, 1976

Assistant Professor of Prosthodontics

HOOD, LINDA, Ph.D., University of Maryland, 1983

Associate Professor of Otorhinolaryngology

HORNICK, CONRAD A. - Ph.D., University of Hawaii, 1980

Professor of Physiology and Pathology

HOVLAND, ERIC J. - D.D.S., Baltimore College of Dental Surgery, Dental School University of Maryland

Dean, LSU School of Dentistry; Professor of Endodontics

HUNT, JAY D. III - Ph.D., University of Tennessee, 1990

Associate Professor of Biochemistry and Molecular Biology

JACOB, JEAN T., Ph.D., Tulane University, 1988

Professor of Ophthalmology

JAZWINSKI, STANISLAW. M. - Ph.D., Stanford University, 1975

Professor of Biochemistry and Molecular Biology

JEANSONNE, BILLIE GAIL - D.D.S.; Loyola University (Louisiana), 1968

Associate Professor of Endodontics

JOHNSTON, KENNETH H. - Ph.D., McMaster University (Canada), 1972

Professor of Microbiology, Immunology and Parasitology

KHAN, IMTIAZ A., PH.D., B.H.U., India 1983

Professor of Microbiology, Immunology and Parasitology

KAPUSTA, DANIEL R - Ph.D. L.S.U. Medical Center School of Graduate Studies, 1986

Professor of Pharmacology and Experimental Therapeutics

KAUFMAN, HERBERT E. - M.D., Harvard University, 1956

Professor of Ophthalmology, and Pharmacology and Experimental Therapeutics

KEATS, BRONYA - Ph.D., Australian National University (Australia), 1976

Professor and Head of Genetics; Neuroscience, Otorhinolaryngology and Communication and Pathology

KENT, JOHN N. - D.D.S., University of Nebraska, 1963

Boyd Professor and Head of Oral and Maxillofacial Surgery

KIRKENDOL, PAUL L. - Ph.D., University of Tennessee, 1971

Associate Professor of Pharmacology and Experimental Therapeutics

KISSINGER, PATRICIA – Ph.D., Tulane University School of Public Health and Tropical Medicine, x

KLYCE, STEPHEN D. - Ph.D., Yale University, 1971

Professor of Ophthalmology

KRATZ, KENNETH E. - Ph.D., Kansas State University, 1975

Professor of Cell Biology and Anatomy and Neuroscience Center

KROWICKI, ZBIGNIEW – Ph.D., Silesian University, 1985

Associate Professor of Pharmacology and Experimental Therapeutics

LALLIER, THOMAS E. - Ph.D., University of California (Irvine), 1990

Associate Professor of Cell Biology and Anatomy

LAN, MICHAEL S. – Ph.D., Duke University, 1986

Associate Professor of Pediatrics/Genetics

LANIER, STEPHEN, Ph.D. - Ph.D., University of Tennessee Center for Health Sciences, 1982

Professor and Head of Pharmacology and Experimental Therapeutics

LAWRENCE, LOUANN - Dr. P.H., University of Texas School of Public Health, 1994

Associate Professor of Medical Technology

LAYMAN, DON L. - Ph.D., George Washington University, 1970

Associate Professor of Cell Biology and Anatomy

LEIERER, STEPHEN J. - Ph.D., Florida State University, 1993

Assistant Professor of Rehabilitation Counseling

LEVITZKY, MICHAEL G. - Ph.D., Albany Medical College, 1975

Professor of Physiology and Anesthesiology

LILES, SAMUEL L. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1968

Professor of Physiology and Neuroscience

LINDBERG, IRIS - Ph.D., University of Wisconsin, 1980

Professor of Biochemistry and Molecular Biology

LOONEY, STEVEN – Ph.D., University of Georgia, 1980

Professor, School of Public Health

LUFTIG, RONALD B. - Ph.D., University of Chicago, 196

Professor and Head of Microbiology, Immunology, and Parasitology

LUKIW, WALTER, Ph.D., University of Toronto, 1979

Assistant Professor of Ophthalmology and Neuroscience

MAGEE, JEFFERY C. – Ph.D., Tulane University School of Medicine, 1992

Associate Professor of Cell Biology And Anatomy and Neuroscience

MALLOY, RANDOLPH - Ph.D., L.S.U. School of Graduate Studies of the Medicine, 1975

Clinical Assistant Professor of Cell Biology and Anatomy

MARTIN, DAVID – M.D., Harvard Medical School, 1969

Professor and Chief, Section of Infectious Disease, Dept. of Medicine

MARTINEZ, I. RICARDO, JR. - M.D., LSU School of Medicine in New Orleans, 1965

Ph.D., Boston University, 1971

Associate Professor of Cell Biology and Anatomy, and Dermatology

MC CLUGAGE, SAMUEL G. JR. - Ph.D., University of Cincinnati, 1970

Professor of Cell Biology and Anatomy

MC CULLOCH, JOSEPH M. - Ph.D., University of New Orleans, 1981

Professor of Physical Therapy

MC DONOUGH, KATHLEEN H. - Ph.D., University of Missouri, 1979

Professor of Physiology

MENDEZ, ARTURO J. - D.D.S., National Autonomous University of Mexico (Mexico), 1974

Professor of Prosthodontics

MENERAY, MICHELE A. - Ph.D., Colorado State University, 1979

Professor of Physiology and Neuroscience

MERCANTE, DONALD E. - Ph.D., Virginia Polytechnic Institute, 1990

Associate Professor of Public Health and Preventive Medicine

MILLER, HARVEY - Ph.D., Hahnemann Medical College, 1961

Professor of Physiology

MILLINGTON, MICHAEL J. - Ph.D., University of Wisconsin, 1993

Assistant Professor of Rehabilitation Counseling

MIZE, R. RANNEY - Ph.D., University of Chicago, 1975

Professor of Cell Biology and Anatomy

MOERSCHBAECHER, JOSEPH M., III - Ph.D., American University, 1976

Dean, School of Graduate Studies, Professor of Pharmacology and Experimental Therapeutics

MOHAMED, SHAWKY E. - D.D.S., University of Iowa, 1970

Professor of Prosthodontics

MOHANAKRISHNAN, PAREKKAT., - Ph.D., Indian Institute of Science, 1976

Assistant Professor of Radiology

MOLINA, PATRICIA – M.D., PH.D.

Professor of Physiology

MUSSELMAN, ROBERT J. - D.D.S., Indiana University, 1964

Professor of Pediatric Dentistry

MUZYKA, BRIAN C. - D. M.D., Temple University, School of Dentistry, 1990

Associate Professor of Oral Diagnosis/Medicine/Radiology

NAKAMOTO, TETSUO - D.D.S., Nihon University (Japan), 1964

Ph.D. Massachusetts Institute of Technology, 1978

Professor of Physiology

NELSON, STEVE - M.D., McGill University, 1978

Professor of Medicine and Physiology

NEWMAN, WILLIAM P., III - M.D., LSU School of Medicine in New Orleans, 1967

Professor of Pathology and Medical Technology

O'CALLAGHAN, RICHARD J. - Ph.D., University of Mississippi, 1970
Professor of Microbiology, Immunology, and Parasitology
 OESCHGER, MAX P. - Ph.D., Johns Hopkins University, 1964
Associate Professor of Microbiology, Immunology, and Parasitology
 PALKAMA, ARTO K., Ph.D., University of Helsinki, 1962
Research Professor of Ophthalmology
 PARTHASARATHY, SAMPATH, Ph.D., Indian Institute of Science, India, 1975
Professor of Pathology
 PAUL, DENNIS J. - Ph.D., University of British Columbia, 1988
Associate Professor of Pharmacology and Experimental Therapeutics
 PELON, WILLIAM - Ph.D., Kansas State University, 1954
Professor of Microbiology, Immunology, and Parasitology
 PINCUS, SETH - M.D., New York University, 1973
Professor/Vice Chairman of Pediatrics and Professor of Microbiology
 PORCHE, DEMETRIUS - PH.D., LSU Health Sciences Center, New Orleans, 1995
Professor of Public Health and Preventive Medicine
 POWELL, THOMAS - Ph.D., Indiana University, 1989
Associate Professor of Communication Disorders
 PORTER, J. R. - Ph.D., LSU School of Graduate Studies of the Medical Center, 1973
Professor of Physiology, Medicine, Neuroscience and Pharmacology
 POTTER, B. J. - Ph.D., University of London, 1975.
Associate Professor of Physiology
 QUAYLE, ALISON J. - PH.D., University of Edinburgh Medical School, Scotland, 1988
Associate Professor of Microbiology, Immunology and Parasitology
 RAGAN, FRANCIS A., JR. - Ph.D., University of Alabama, 1977
Associate Professor of Pathology
 RAMSAY, ALISTAIR - Ph.D., University of Otago, New Zealand, 1985
Professor of Medicine and Gene Therapy
 RAO, JAYARMAN - M.B.B.S., University of Mysore (India), 1969
Professor of Neurology, Otorhinolaryngology and Biocommunication and Cell Biology and Anatomy
 REDDIX, RHODA - Ph.D., Indiana University, 1990
Assistant Professor of Pharmacology and Experimental Therapeutics
 REID, DENNIS H. - Ph.D., Florida State University
Associate Professor of Interdisciplinary Human Studies
 REISER, JAKOB - Ph.D., University of Basel, 1976
Associate Professor of Medicine and Microbiology
 ROSKOSKI, ROBERT, JR. - M.D., University of Chicago, 1964
 Ph.D., University of Chicago, 1968
Professor of Biochemistry and Molecular Biology
 RUIZ, BERNARDO - M.D., Universidad del Valle School of Medicine (Columbia), 1983
 Ph.D., LSU Medical Center School of Graduate Studies, 1995
Associate Professor of Pathology
 SARKAR, NIKHIL K. - Ph.D., Northwestern University, 1973
Professor of Biomaterials
 SARPHE, THEODORE G. - Ph.D., University of Mississippi, 1972
Associate Professor of Cell Biology and Anatomy
 SCHEER, W. DOUGLAS - Ph.D., LSU School of Graduate Studies of the Medical Center, 1976
Professor of Pathology, Genetics, and Medical Technology
 SCHNEIDER, BARBARA G. - Ph.D., University of Texas Health Science Center, San Antonio, 1989
Associate Professor of Pathology
 SCHNEIDER, PAUL E. - D.D.S., Indiana University, 1968
Professor of Pediatric Dentistry
 SCOTT, DONALD K. - Ph.D., Saint Louis University School of Medicine, 1991
Assistant Professor of Biochemistry and Molecular Biology
 SCRIBNER, RICHARD - M.D., University of Southern California, Los Angeles, 1984
Assistant Professor of Public Health and Preventive Medicine
 SHEPHERD, RAYMOND E. - Ph.D., Washington State University, 1974
Professor of Physiology
 SLOOP, GREGORY D. - M.D., LSU School of Medicine in New Orleans, 1989
Associate Professor of Pathology
 SMITH, DIANE E. - Ph.D., University of Pennsylvania, 1968
Professor of Cell Biology and Anatomy and Neuroscience Center

SNYDER, PATRICIA - Ph.D., University of New Orleans, 1992
Associate Professor of Occupational Therapy
 SOLOMONOW, MOSHE, - Ph.D., M.D. (hon), University of California - L.A., 1976
Professor of Orthopaedic Surgery, Physiology and Kinesiology
 SONGU-MIZE, EMEL - Ph.D., University of Pennsylvania, 1979
Professor of Pharmacology and Experimental Therapeutics
 SPRIGGS, LOUAINE - Ph.D., Tulane University, 1990,
Associate Professor of Cell Biology And Anatomy - Research
 STARY, HERBERT C. - M.D., Heidelberg University, 1958
Professor of Pathology
 STRONG, JACK P. - M.D., LSU School of Medicine in New Orleans, 1951
Professor and Head of Pathology
 STROHMER, DOUGLAS C. - Ph.D., Michigan State University, 1979
Professor of Rehabilitation Counseling
 STURTEVANT, JOY - Ph.D., Duke University, 1985
Assistant Professor of Microbiology
 SVEC, FRANK - M.D., Case Western Reserve University, 1974
 Ph.D., Case Western Reserve University, 1974
Professor of Medicine
 SWARTZ, WILLIAM J. - Ph.D., Loyola University (Illinois), 1971
Professor of Cell Biology and Anatomy
 THOMPSON, JAMES J. - Ph.D., University of Iowa, 1970
Professor of Microbiology, Immunology, and Parasitology
 THUNTHY, KAVAS H. - B.D.S., University of Bombay (India), 1969
Professor of Oral Diagnosis/Medicine/Radiology
Professor of Oral and Maxillofacial Radiology
 TRACY, RICHARD E. - M.D., University of Chicago, 1961
 Ph.D., University of Chicago, 1961
Professor of Pathology
 VARNER, KURT J. - Ph.D., Michigan State University, 1987
Professor of Pharmacology and Experimental Therapeutics
 VEDECKIS, WAYNE V. - Ph.D., Northwestern University, 1974
Professor of Biochemistry and Molecular Biology
 VENUTI, JUDITH - Ph.D. - The State University of New York at Buffalo, 1986,
Associate Professor of Cell Biology And Anatomy
 VIJAYAGOPAL, PARAKAT - Ph.D., University of Kerle (India), 1973
Associate Professor of Medicine and Cell Biology and Anatomy
 WEINBERG, ROGER - Ph.D., University of Texas, 1954
 Ph.D., University of Michigan, 1970
Professor of Biometry and Genetics
 WEIR, JIM C. D.D.S., - University of Tennessee, 1974
Professor of Oral Pathology
 WEYAND, THEODORE G. - Ph.D., University of Connecticut, 1983
Associate Professor of Cell Biology and Anatomy and Neuroscience Center
 WHITWORTH, RICHARD H., JR. - Ph.D., West Virginia University, 1981
Associate Professor of Cell Biology and Anatomy
 WINSAUER, PETER J. - Ph.D., American University, 1989
Associate Professor of Pharmacology and Experimental Therapeutics
 WOLTERING, EUGENE, M.D., Ohio State University College of Medicine, 1975
Professor of Surgery
 YUKNA, RAYMOND A. - D.M.D., Tufts University, 1968
PROFESSOR OF PERIODONTICS

RECAPITULATION OF FACULTY

Below are listed the nine Graduate Programs of the Health Sciences Center in which degrees may be earned through the School of Graduate Studies and the respective graduate faculty of each in alphabetical order by rank:

Biochemistry and Molecular Biology

PROFESSOR: Claycomb, Haycock, Jazwinski, Lindberg, Roskoski, Vedeckis
 ASSOCIATE PROFESSOR: Brown, K., Gnarra, Herbert, Hunt
 ASSISTANT PROFESSOR: Scott, Brown, J.

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Cell Biology And Anatomy

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Genetics

PROFESSOR: Cohen, Keats, Ramsay
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Microbiology, Immunology And Parasitology

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Neuroscience

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 Associate Professor: Anand, Erickson, Magee
 Assistant Professor: Chen, Lukiw, Ricci

Pathology

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Pharmacology And Experimental Therapeutics

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