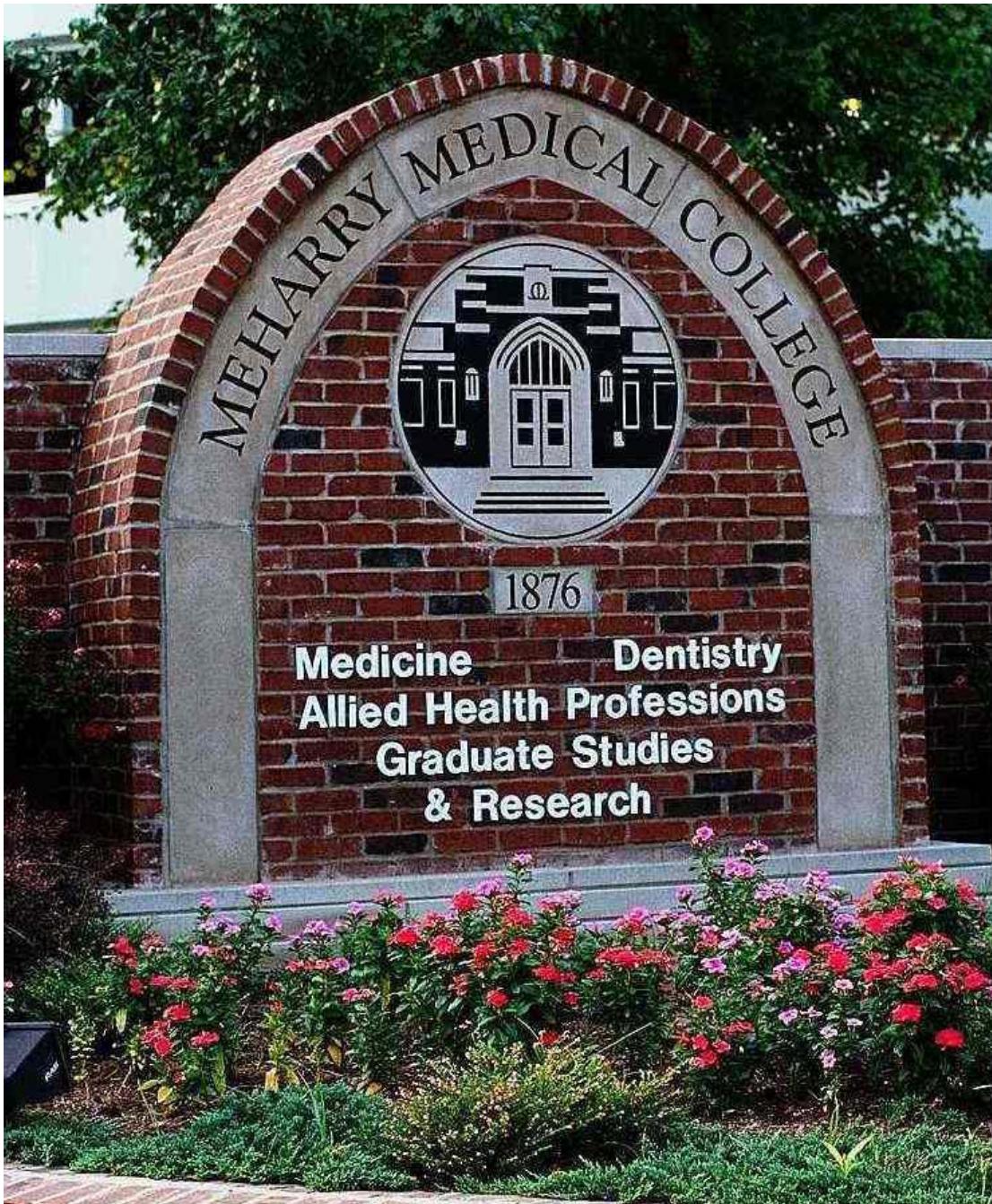


Meharry Medical College



**General Information and
Academic Catalog
2006-2008**

College Address

Meharry Medical College
1005 Dr. D.B. Todd Jr. Blvd.
Nashville, TN 37208-3599
www.mmc.edu

Key Contacts

General Inquiries: Campus Operator
(615) 327-6000

Office of Admissions
(615) 327-6223

Office of Records
(615) 327-6805

Office of Financial Aid
(615) 327-6826

Office of Student Services and Enrollment Management
(615) 327-6084

Office of Student Services
(615) 327-6792

Office of Information Technology
(615) 327-6231

Department of Public Safety and Security
General: (615) 327-6254
Non-Emergency: (615) 327-6290
EMERGENCY: (615) 327-6666

Legal Affairs
(615) 327-6141

Counseling Services
(615) 327-6312

Pastoral Services
(615) 327-6915

Health, Life & Disability Insurance
(615) 327-6084

School of Dentistry
(615) 327-6207

School of Graduate Studies and Research
(615) 327-6533

School of Medicine
(615) 327-6204

Center for Educational Development and Support
(615) 327-6760

Library
(615) 327-6318

Bookstore
(615) 327-6269

Mailroom
(615) 327-6278

Office of Corporate Compliance
(615) 327-6419

Office of the Treasurer
(615) 327-6220

Mentoring Program
(615) 327-6944
(615) 327-6204

Student Health Services
(615) 327-5757

Meharry Medical College



General Information and Academic Catalog

NOTICES

Meharry Medical College is accredited by the Southern Association of Colleges and Schools to offer academic programs leading to the following degrees: Doctor of Philosophy, Doctor of Medicine, Doctor of Dental Surgery, Master of Science, Master of Science in Public Health and Master of Science in Clinical Investigation. Certificates in health professions training are also offered, and these programs are also fully accredited.

Southern Association of Colleges and Schools
Commission on Colleges
1866 Southern Lane
Decatur, Georgia 30033-4097
404-679-4501
www.sacscoc.org

The School of Medicine is a member of the Association of American Medical Colleges. It is accredited by the Liaison Committee of Medical Education of the American Medical Association and the American Association of Medical Colleges.

The School of Dentistry is a member of the American Dental Education Association and is fully accredited by the American Dental Association's Commission on Dental Accreditation.

Meharry Medical College is an EOE/AA employer and does not discriminate on the basis of gender, age, race, religion, color, national origin, handicap, veteran, or immigrant status in its admissions, employment and education programs or activities. Inquiries concerning the College's non-discrimination policies may be referred to the Office of the General Counsel, S.S. Kresge Learning Resources Center, (615) 327-6435, or to the Affirmative Action Officer, Office of the President, (615) 327-6904.

Disclaimer

The information in this catalog is current and accurate as of July 2006. The College reserves the right to change prerequisites for admission, programs of study, courses, requirements for graduation, tuition and fees, policies, academic programs, lecturers, faculty, teaching staffs and other matters described in the catalog without prior notice. Changes will be posted on the College Web site and made available in hard copy in the Office of College Relations.

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Calendar

ACADEMIC CALENDAR 2006-2008

JUNE 2006

5 Classes begin for the School of Graduate Studies and Research
6 School of Dentistry Evaluation and Promotions Committee meeting
9 Grades due for Freshman Medical Students
12 Post-baccalaureate Orientation and Registration for School of Dentistry
Post-baccalaureate Orientation and Registration for School of Medicine
13 Post-baccalaureate Classes begin for School of Dentistry
Post-baccalaureate Classes begin for School of Medicine
16 Final submission of grades for Spring 2006 for June graduates
Junior & Senior Spring Session ends
19 Freshman orientation for School of Medicine
20 Freshman medical classes begin
23 Sophomore Spring Session ends for School of Medicine
24 Sophomore registration & classes begin for the School of Medicine
26 School of Medicine orientation to Clinical Year (rising junior medical students)
School of Medicine Freshman White Coat Ceremony
School of Medicine Junior Registration
27-30 School of Medicine Orientation continues
School of Dentistry Clinics Close
Final submission of all grades for all students

JULY 2006

3 School of Medicine Junior & Senior Classes begin
4 Independence Day – Official Holiday – all schools
5 School of Dentistry grades due in Student Academic Affairs
6 School of Dentistry grades due in Office of Records
School of Medicine USMLE, Step 2, Review
7 School of Dentistry Evaluation and Promotions Committee meeting
14 School of Graduate Studies and Research session ends
19 School of Dentistry Sophomore, Junior, and Senior Registration (July 19-23)
School of Graduate Studies and Research Grades due in Student Affairs
School of Medicine Electronic Residency Application Service (ERAS) Orientation
21-26 National Dental Association Meeting, July 21-26, 2006, Nashville, Tennessee
21 School of Graduate Studies and Research grades are due in Office of Records
School of Medicine grades due in Office of Records
School of Medicine Cardiopulmonary Resuscitation (CPR) training (freshman)
24 School of Medicine Sophomore Classes Begin
26 School of Medicine Evaluation and Promotions Committee meeting
27 School of Graduate Studies and Research Evaluation and Promotions Committee meeting
28 Post-baccalaureate program ends

AUGUST 2006

3 School of Dentistry freshman registration
School of Graduate Studies and Research freshman registration
School of Graduate Studies and Research returning student's registration
4 School of Dentistry freshman registration continues
School of Graduate Studies and Research Freshman Registration Continues
School of Graduate Studies and Research Returning Students Registration
5-10 National Medical Association Meeting, August 5-10, 2006, Dallas, Texas

7 School of Dentistry classes begin for freshman
 School of Graduate Studies and Research classes begin for Ph.D. students
 School of Graduate Studies and Research returning MSPH students registration
 14 School of Graduate Studies and Research classes begin for MSPH students
 16 School of Medicine - General Assembly "Lunch on the Lawn" Mentoring Program
 17 Rite of Passage Ceremony (sponsored by the Pre-Alumni Association)
 21 School of Dentistry classes begin for all dental upperclassmen

SEPTEMBER 2006

4 Labor Day – official holiday – all schools
 6 School of Graduate Studies and Research General Assembly
 11 School of Graduate Studies and Research last day to drop/add classes
 13 School of Medicine - Dean's Lecture Series-General Assembly -3:00 p.m. M001 West Basic Sciences Building, Dr. Jordan Cohen, M.D., Emeritus President of the American Association of Medical Colleges (Mandatory for all Medical Students)
 4:15 p.m. – Reception
 15 School of Dentistry Last Day to Drop/add Classes
 20 School of Dentistry - General Assembly

OCTOBER 2006

9 131st Fall Convocation – 10:00 a.m., Compton-Nelson Auditorium
 Speaker: Dr. Louis Sullivan, M.D.
 All Schools
 14-15 School of Dentistry Southern Regional Licensure Examination
 18 School of Medicine – General Assembly (Mandatory for all Medical Students)
 27 School of Graduate Studies and Research MSPH Thesis and Graduate Management Proposals

NOVEMBER 2006

TBA School of Medicine – Dean's Lecture Series -
 Dr. Cecil Pickett, M.D., PhD.
 Sr. Vice President Schering-Plough
 (Mandatory for all Medical Students)
 15 School of Medicine - General Assembly (Mandatory for all Medical Students)
 23-24 Thanksgiving – official holiday – all schools
 30 School of Graduate Studies and Research registration

DECEMBER 2006

1 School of Graduate Studies and Research registration
 4-5 School of Dentistry National Board Dental Examination, Part I
 School of Dentistry National Board Dental Examination, Part II
 School of Dentistry National Board Dental Examination, Dental Hygiene
 15 School of Graduate Studies and Research Fall Session ends
 15 School of Dentistry Fall Session ends
 School of Medicine Fall Session ends
 Charges placed on student accounts
 Student Schedules for Spring 2007 loaded for all schools.
 15 School of Dentistry grades due in Academic Affairs
 18 Christmas Break (Dec. 18-Jan. 2) – all schools
 19 School of Graduate Studies and Research grades due in Academic Affairs
 19 School of Dentistry grades due in Office of Records
 School of Medicine grades due in Academic Affairs
 School of Graduate Studies and Research grades due in Office of Records
 20 School of Dentistry Evaluations and Promotions Committee meeting
 21 Funds requested
 22 School of Medicine grades due in Office of Records

25-26 Christmas Holiday -- College closed
 27 Funds posted to student accounts
 31 New Year's Eve – official holiday – College closed

JANUARY 2007

1-2 New Year's Eve Holiday - College Closed
 3 School of Dentistry classes resume
 School of Medicine classes resume
 5 School of Medicine Evaluation and Promotion Meeting Committee
 8 School of Graduate Studies and Research classes resume
 School of Graduate Studies and Research Evaluation and Promotions Committee make-up meeting
 Refund checks will be ready for student pickup
 12 Martin Luther King Commemorative Program – all schools
 Grades released to Dental students
 15 Martin Luther King Birthday --College closed
 17 Class rosters distributed to all schools for spring 2007 to Student Academic Affairs
 17 School of Dentistry Occupational Health and Safety Administration (OHSA) Infection Control Lecture Series
 18 Grades released to Graduate Students
 22 Class rosters returned to Student Academic Affairs
 22 Grades released to Medical students for fall 2006
 24 School of Dentistry General Assembly
 25 Class Rosters for spring 2007 due in Office of Records
 29 School of Dentistry Match Day

FEBUARY 2007

2 School of Dentistry Mobley-Singleton Heritage Lecture
 5 School of Dentistry Children's Dental Health Day
 8-9 Board of Trustees Winter Meeting
 9 School of Graduate Studies and Research last day to drop/add classes
 14 School of Medicine General Assembly (Mandatory for all Medical Students)
 15 Diploma Cards for May graduation due in the Office of Records for all schools
 21 School of Medicine Match Orientation for rising seniors
 NRMP Rank Order List Deadline (9:00 pm EST)

MARCH 2007

2 School of Dentistry Samuel O. Banks Memorial Heritage Lecture
 13-14 School of Medicine SCRAMBLE
 13-15 School of Graduate Studies and Research MSPH Week
 15 School of Medicine Match Day
 19-21 School of Graduate Studies and Research Student Research Week
 19-23 Spring Break- School of Dentistry
 21 School of Graduate Studies and Research – Research Day – All Graduate School classes canceled
 22-23 School of Graduate Studies and Research - semester break for 1st and 2nd Year MSPH
 26 School of Dentistry National Board Dental Examination, Part II
 School of Dentistry National Board Dental Examination, Dental Hygiene
 27 School of Dentistry National Board Dental Examination, Part II
 School of Medicine Ralph Cazort Scholars Heritage Lecture

APRIL 2007

4 School of Dentistry Adopt a Grandparent Day
5-10 Spring Break, School of Medicine (freshman and sophomore students only)
School of Graduate Studies and Research semester break – 1st and 2nd year Ph.D.
6 Good Friday – Meharry Day – College Closed
11 School of Medicine –General Assembly
School of Medicine OB/GYN Research Symposium
13 School of Medicine WFB James Symposium & Carr A. Treherne Memorial Heritage Lecture
School of Medicine Center for Women's Health Research 2007 Benefit Concert
15 School of Graduate Studies and Research Last Day to Publicly Defend
Thesis/Dissertation for May Commencement
27 School of Graduate Studies and Research – final day to submit thesis/dissertation to
Dean's Office/Doctoral & MSPH for May Commencement
School of Medicine – Matthew Walker Symposium/Hale McMillan Heritage Lecture

MAY 2007

7-25 School of Medicine USMLE, Step I review
4 School of Graduate Studies and Research Spring Session ends for graduation candidates
8 School of Dentistry grades due in Student Academic Affairs for May graduates
School of Medicine grades due in Student Academic Affairs for May graduates
9 School of Dentistry grades due in Office of Records for May graduates
School of Medicine grades due in Office of Records for May graduates
School of Graduate Studies and Research grades due in Student Academic Affairs for candidates
for graduation
11 School of Dentistry Evaluation and Promotions Committee meeting for May graduates
School of Medicine Evaluation and Promotions Committee meeting for May graduates
School of Graduate Studies and Research grades due in Records for May graduates
School of Graduate Studies and Research Session ends for all other students
14-19 School of Dentistry Clinics close for Commencement
15 School of Graduate Studies and Research Evaluation and Promotions Committee meeting for
May graduates
16 School of Graduate Studies and Research grades due in Student Academic Affairs for all other
students
School of Medicine Robert A. Brown, Jr., Memorial Heritage Lecture
School of Medicine Cleve W. Ewell, Jr., Memorial Heritage Lecture
18 School of Medicine graduating seniors spring session ends
19 Commencement
22 School of Dentistry Session begins
23 School of Dentistry grades for Spring Session due in Student Academic Affairs
24 School of Graduate Studies and Research Evaluation Committee Meeting for all other graduate
students
25 School of Dentistry grades due in Office of Records
School of Medicine Post-baccalaureate and Freshman Session ends
28 Memorial Day – Official Holiday – College closed
29 School of Graduate Studies and Research registration for graduate students
30 School of Dentistry Evaluation and Promotions Committee meeting

JUNE 2007

1-3 School of Dentistry Southern Regional Licensure Examination
1-23 USMLE Step 1 Examination (all rising junior students)
4 School of Graduate Studies and Research session begins
7-9 School of Medicine Post-baccalaureate Orientation
11 Post-baccalaureate classes begin (Schools of Medicine and Dentistry)
17 School of Medicine Spring Semester Ends for juniors and seniors

- 18 School of Medicine freshman registration & orientation
- 22 School of Medicine sophomore Spring Semester ends
- 23 School of Medicine last day for sophomore
- 25-29 School of Medicine Junior Student Orientation
- 29 School of Dentistry Clinics closed for the summer

JULY 2007

- 3 School of Dentistry grades due in Student Academic Affairs
- 4 Independence Day – Official Holiday – College closed
- 5 School of Dentistry grades due in the Office of Records
- 6 School of Dentistry Evaluation and Promotions Committee meeting
- 7 - 28 School of Medicine USMLE, Step 2, review
- 10 School of Medicine Match Orientation for seniors
- 13 School of Graduate Studies and Research summer session ends
- 18 School of Graduate Studies and Research grades due in Student Academic Affairs
- School of Medicine grades due in Student Academic Affairs
- 20 School of Graduate Studies and Research grades due in Office of Records
- School of Medicine grades due in Office of Records
- 26 School of Graduate Studies and Research Evaluation and Promotions Committee meeting
- 27 School of Medicine Evaluation and Promotions Committee meeting

AUGUST 2007

- 2-3 School of Dentistry freshman registration/orientation
- School of Graduate Studies and Research freshman registration/orientation
- 6 School of Dentistry freshman classes begin
- School of Graduate Studies and Research classes begin for all PhD students
- School of Graduate Studies and Research returning MSPH registration
- 13 School of Graduate Studies and Research classes begin for all MSPH students
- 15 Class rosters distributed to Student Academic Affairs (all schools)
- 20 School of Dentistry classes begin for all upperclassmen
- 22 Class rosters returned to Student Academic Affairs
- 24 Class rosters due to Office of Records

SEPTEMBER 2007

- 3 Labor Day – Official Holiday – College closed
- 14 School of Graduate Studies and Research last day to drop/add class
- 26 School of Dentistry General Assembly

OCTOBER 2007

- 8 Fall Convocation – All schools
- 10 School of Dentistry – Southern Regional Licensure Examination
- 26 School of Dentistry – Healthy Halloween
- School of Graduate Studies and Research MSPH Thesis/Graduate Management Proposals due

NOVEMBER 2007

- 22-23 Thanksgiving - Official Holiday – College closed
- 29-30 School of Graduate Studies and Research Registration

DECEMBER 2007

- 1 School of Graduate Studies and Research Registration
- 3 School of Dentistry National Board Dental Examination, Part I
- School of Dentistry National Board Dental Examination, Part II

4 School of Dentistry National Board Dental Examination, Dental Hygiene
 8 School of Dentistry National Board Dental Examination, Part II
 13 School of Graduate Studies and Research Fall Session ends
 14 School of Graduate Studies and Research grades due in Student Academic Affairs
 14 School of Dentistry Fall Session ends
 14 School of Medicine Fall Session ends
 17 School of Dentistry grades due in Student Academic Affairs
 School of Medicine grades due in Student Academic Affairs
 18 School of Graduate Studies and Research grades due in Office of Records
 School of Dentistry grades due in Office of Records
 School of Medicine grades due in Office of Records
 20 School of Graduate Studies and Research Evaluation and Promotions Committee meeting
 20 School of Dentistry Evaluation and Promotions Committee meeting (9-12)
 20 School of Medicine Evaluation and Promotions Committee meeting (12-3)
 24-25 Christmas Holiday – College closed
 31 New Year's Eve – official holiday – College closed

JANUARY 2008

1 New Year's Day – official holiday -- College closed
 2 School of Dentistry classes resume
 7 School of Medicine classes resume
 7 School of Graduate Studies and Research classes resume
 Refund checks will be ready for student pickup
 10 School of Graduate Studies and Research Evaluation and Promotions Committee makeup
 11 Martin Luther King Commemorative Program – all schools
 14 Martin Luther King Birthday – official holiday – College closed
 16 Class Rosters sent to Student Academic Affairs (all schools)
 17 School of Dentistry Occupational Health and Safety Administration (OHSA) Infection Control Lecture Series
 20 Grades released to students
 22 Class rosters returned to Student Academic Affairs
 24 School of Dentistry General Assembly
 Class Rosters due in Office of Records
 29 School of Dentistry Match Day

FEBUARY 2008

2 School of Dentistry Mobley-Singleton Heritage Lecture
 5 School of Dentistry Children's Dental Health Day
 7-8 Board of Trustees Winter Meeting
 8 School of Graduate Studies and Research last day to drop/add classes
 14 School of Medicine General Assembly (Mandatory for all Medical Students)
 15 Diploma Cards for May graduates due to Office of Records for all schools
 21 School of Medicine Match Orientation for rising seniors

MARCH 2008

2 School of Dentistry Samuel O. Banks Memorial Heritage Lecture
 11-13 School of Graduate Studies and Research MSPH Graduate Week
 11-12 School of Medicine SCRAMBLE
 13 School of Medicine Match Day
 19-23 Spring Break- School of Dentistry
 20-25 Spring Break, School of Medicine (freshman and sophomore students only)
 21 Good Friday – Meharry Day – College Closed
 24-26 School of Graduate Studies and Research Student Research Week
 26 School of Graduate Studies and Research – Research Day – All classes cancelled

27-28 School of Graduate Studies and Research - semester break for 1st and 2nd Year MSPH
 26 School of Dentistry National Board Dental Examination, Part II
 School of Dentistry National Board Dental Examination, Dental Hygiene
 27 School of Dentistry National Board Dental Examination, Part II
 School of Medicine Ralph Cazort Scholars Heritage Lecture

APRIL 2008

4 School of Dentistry Adopt a Grandparent Day
 11 School of Medicine –General Assembly
 School of Medicine OB/GYN Research Symposium
 13 School of Medicine WFB James Symposium & Carr A. Treherne Memorial Heritage Lecture
 School of Medicine Center for Women's Health Research 2007 Benefit Concert
 15 School of Graduate Studies and Research Last Day to Publicly Defend Thesis/Dissertation for May Commencement
 25 School of Graduate Studies and Research – final day to submit thesis/dissertation to Dean's Office/Doctoral & MSPH for May Commencement
 School of Medicine – Matthew Walker Symposium/Hale McMillan Heritage Lecture

MAY 2008

5-30 School of Medicine USMLE, Step I Review
 2 School of Graduate Studies and Research Spring Session ends for graduation candidates
 7 School of Graduate Studies and Research grades due in Student Academic Affairs for candidates for graduation
 8 School of Dentistry grades due in Student Academic Affairs for May graduation
 School of Medicine grades due in Student Academic Affairs for May graduation
 School of Dentistry grades due in Office of Records for May graduation
 School of Medicine grades due in Office of Records for May graduation
 9 School of Dentistry Evaluation and Promotions Committee meeting for graduation candidates
 9 School of Medicine School Evaluation and Promotion meeting for May graduates
 9 School of Graduate Studies and Research grades due in Records for May graduates
 School of Graduate Studies and Research Session ends for all other students
 13 School of Graduate Studies and Research Evaluation and Promotions Committee meeting for May graduates
 14-19 School of Dentistry Clinics close for Commencement
 14 School of Graduate Studies and Research grades due in Student Academic Affairs for all other graduate students
 School of Medicine last day for graduating seniors
 School of Medicine Robert A. Brown, Jr., Memorial Heritage Lecture
 School of Medicine Cleve W. Ewell, Jr., Memorial Heritage Lecture
 15 School of Graduate Studies and Research grades due in Records for all other graduate students
 16 School of Medicine graduating senior Spring Session ends
 17 Commencement
 22 School of Dentistry Session begins
 22 School of Graduate Studies and Research Evaluation Committee Meeting for all other graduate students
 23 School of Dentistry grades for Spring Session due for all other Dental students in Student Academic Affairs
 26 School of Dentistry grades due in Office of Records
 School of Medicine grades due for all other medical students
 School of Medicine Post-baccalaureate and Freshman Session ends
 26 Memorial Day – Official Holiday – College closed
 29 School of Graduate Studies and Research registration for graduate students
 29 School of Medicine grades due in Office of Records
 30 School of Dentistry Evaluation and Promotions Committee meeting

School of Medicine Evaluation and Promotions Committee meeting

JUNE 2008

- 1-3 School of Dentistry Southern Regional Licensure Examination
- 2 School of Graduate Studies and Research session begins
- 9 School of Medicine Post-baccalaureate Orientation
- 6 School of Medicine freshman registration & orientation
- 20 School of Medicine Spring Semester ends for juniors and seniors
- 22 School of Medicine sophomore Spring Semester ends
- 29 School of Dentistry Clinics closed for the summer
- 30 Grades released for all schools

Administration

Board of Trustees

Mr. Milton H. Jones, Jr., Chairman
Mr. Aubrey Harwell, Jr., Vice Chairman
Dr. A. Cherrie Epps, Interim President
Leilani Boulware, Esq., Corporate Secretary

Dr. Luther Adair, II	Dr. Martin D. Jeffries
Dr. Nelson L. Adams, III	Mr. L. T. Johnson
Dr. Brandon Barton, Jr.	Dr. Shedrick D. Jones
Dr. T.B. Boyd, III	Mr. Kevin P. Lavender
Dr. George A. Breaux	Dr. Abraham McIntosh
Dr. Mendee Bull-Ligon	The Honorable Mary Pruitt
Pastor Kirbyjon Caldwell	Dr. Edward W. Reed
Mrs. M. Inez Crutchfield	Mr. Edgar G. Rios
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Dr. Spencer Disher	Mr. James E. Williams
Mr. Eddie D. Evans	Mr. Lorenzo Williams
Dr. Randall Falk	Dr. Robert L. Williams, Jr.
Dr. Bennie Goggans	Dr. Howard C. Willis
Mr. Derric J. Gregory, Sr.	Dr. Claud R. Young
Dr. Cornelius L. Hopper	

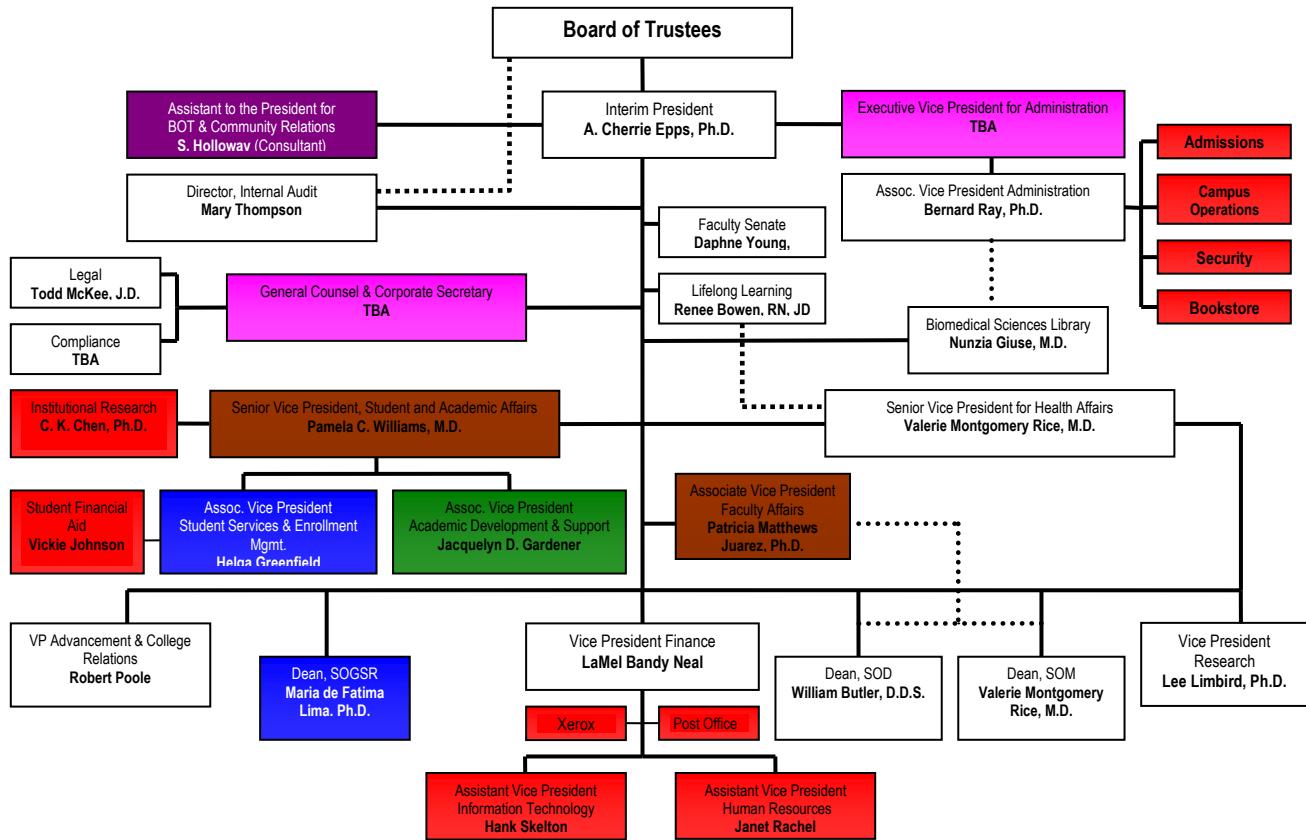
Senior Administrative Staff

A. Cherrie Epps, Ph.D.
Interim President

Valerie Montgomery Rice, M.D. Senior Vice President for Health Affairs and Dean of the School of Medicine	Maria de Fatima Lima, Ph.D. Dean of the School of Graduate Studies & Research
William B. Butler, D.D.S. Dean of the School of Dentistry	Pamela D. Williams, M.D. Sr. Vice-President of Student and Academic Affairs
Lee Limbird, Ph.D. Vice President for Research	Robert S. Poole, M.S. Vice President for Advancement and College Relations
LaMel Bandy-Neal, M.B.A. Vice President for Finance and Treasurer	Bernard T. Ray, Ph. D. Deputy to the President



Recentralization (Interim Changes)



COLLEGE COMMITTEES

Bio-Safety Committee

The Bio-Safety Committee ensures that research projects involving recombinant DNA comply with regulations of the National Institutes of Health and reviews projects that involve pathogens to ensure safe handling of potentially harmful organisms.

Building and Grounds Committee

This committee serves in an advisory capacity to the Director of Campus Operations on any matters concerning the physical plant, space allocation and renovation. Actions of the committee are reported to the President (decisions regarding Meharry space off campus are made by the Building and Grounds Committee of the Board of Trustees).

Continuing Education Advisory Committee

This committee monitors Meharry's Continuing Education programs and advises the Office of Continuing Education to ensure that both continuing education accrediting agency standards are met and College goals and objectives are achieved.

Commencement/Alumni Reunion/Convocation Committee

The planning, coordination and implementation of the College's two major annual events – Commencement/Alumni Reunion in the spring and Convocation in the fall – are overseen by this committee.

Compliance Committee

This committee is responsible for overseeing the effectiveness of the College Compliance Program and to ensure adherence to the laws and regulations that govern the College.

Council of Deans

The Council of Deans monitors academic quality and ensures that the standards of Meharry's educational programs are maintained and are in compliance with accreditation standards.

Environmental Health and Safety Committee

Following regulatory requirements and industry standards, this committee is charged with advising the College on making the campus safe, secure and accessible for students, faculty, staff, patients and visitors.

Honorary Degree Committee

The Honorary Degree Committee sets and monitors the standards and guidelines for the awarding of honorary degrees.

Institutional Animal Care and Use Committee

Meharry is committed to the safe and ethical treatment of animals that are necessary for research and teaching. Mandated by federal law, the Institutional Animal Care and Use Committee ensures compliance with regulations of the Public Health Service, the U.S. Department of Agriculture and other federal, state and local regulatory agencies. The committee reviews and approves each project that involves animals for compliance with policies governing humane care and use of laboratory animals.

Institutional Budget Committee

The Institutional Budget Committee is charged with recommending an annual College budget to the President for approval and presentation to the Board of Trustees for final approval.

Institutional Effectiveness Committee

This committee helps ensure that the quality and services of the College are continually monitored by analyzing Meharry's planning and evaluation functions as well as the educational, research and service programs.

Institutional Review Board

Meharry is committed to the protection of people who help advance health care by choosing to participate in research studies. The Institutional Review Board oversees each research and demonstration project in advance to ensure that the rights and welfare of human subjects are guaranteed. Approval of the board is required before the initiation of any research project.

Library Committee

The quality of an institution is tied directly to the quality of its library, and Meharry's Library Committee provides guidance to the Library Director in formulating strategic direction that supports the College's mission and goals.

Patent Committee

The Patent Committee resolves disputes involving intellectual property, inventions and patents and periodically reviews the College's patent policy.

Radiation Safety Subcommittee

This subcommittee oversees the College's Radiation Safety Program as administered by the Radiation Safety Office. The Radiation Safety Subcommittee reviews and approves all uses of radioactive material or other radiation sources on the Meharry campus.

Scientific Misconduct Committee

This committee helps the College maintain the highest standards of scientific inquiry and ensures compliance with the regulations of the National Institutes of Health, the National Science Foundation, and other agencies. Meharry defines "scientific misconduct" as fabrication, falsification, plagiarism or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting or reporting research.

Student Disciplinary Committee

This committee reviews charges of breaches of rules, regulations, policies and procedures by a student relating to non-academic matters and makes recommendations to the President on rulings.

Student Financial Aid Committee

The Student Financial Aid Committee is responsible for the stewardship of institutional, federal and state financial aid programs for Meharry students. The Student Financial Aid Committee acts as the College's advisory board to the Office of Student Financial Aid, Student Accounts, Student Campus Loans and Cash Management for Student Financial Services.

Student Life Committee

Meharry recognizes that life outside the classroom, laboratory and clinical setting has an enormous impact on a student's ability to succeed. The Student Life Committee provides advice and guidance in developing student activity programs, counseling services and other non-academic support services available to students. In particular, this committee helps students with housing; establishes health, disability and life insurance requirements of the College; promotes a positive spiritual, mental and emotional experience for students; and facilitates the implementation of extracurricular activities for students. It also provides a forum for students to express themselves directly to College administrators, facilitating a speedy resolution of issues.

College Overview

Meharry Medical College is the nation's largest private, independent historically black institution dedicated solely to educating health science professionals. The College has a rich and distinguished legacy of providing health professions education opportunities to minority students and individuals from disadvantaged backgrounds, regardless of race or ethnicity. Throughout its history to present-day, Meharry has been highly regarded as a respected advocate for quality, community-based health care and research in the biosciences that benefits poor medically underserved people. The College has earned national distinction for its innovative community outreach programs and community-based partnerships target to the under-and uninsured. What's more, Meharry graduates are known for their dedication to practicing in medically underserved areas and providing care to people who otherwise would not have access to patient services.

Strategic Plan

The FY2004-2008 Strategic Plan Presents a set of thoughtfully designed strategies to help position the College for a new level of national prominence. It emphasizes the importance of targeted investment of resources and successfully merges Meharry's heritage and recent renaissance into a bold plan for the future.

Moreover, the Plan provides a general framework for the creation of annual operation objectives by Meharry's various academic and administrative divisions, ensuring alignment of departmental plans with the strategic direction of the College. It sets in motion a system under which plan implementation will be reviewed and adjusted on a regular basis. Realistic yet challenging performance measures are set to monitor progress and endure objective evaluation of movement toward aims. Pragmatic financial assumptions are also established to guide fiscal planning and communication.

Mission

Meharry Medical College exists to improve the health and health care of minority and underserved communities by offering excellent education and training programs in the health science, placing special emphasis on providing opportunities to people of color and individuals from disadvantaged backgrounds, regardless of race or ethnicity; delivering high quality health services; and conducting research that fosters the elimination of health disparities.

Vision

To achieve national recognition as a community-focused, quality-driven academic health center noted for its:

- Uniquely nurturing, highly effective educational programs;
- Preeminence in health disparities research;
- Culturally appropriate, evidence-based health services; and
- Significant contribution to the diversity of the nation's health professions workforce

Core Values

We, the Board of Trustees, faculty and staff of Meharry Medical College, are committed to and governed by the following core values:

- **Excellence:** consistently achieving outstanding levels of performance while upholding the highest standards of ethical behavior, intellectual honesty, and professional conduct.

- **Service:** maintaining a nurturing and service-oriented environment that exceeds expectations and treats all people with compassion, dignity, and respect.
- **Accountability:** accepting individual and collective responsibility for preserving and effectively managing the resources of the College.
- **Teamwork:** encouraging, supporting, and valuing the collaborative efforts of faculty, staff, and students to advance the quality of education, research, and patient care.
- **Innovation:** promoting creativity and the development of ideas that stimulate improvements in our intellectual and operation endeavors.
- **Diversity:** fostering ethnic, intellectual, social, and cultural diversity.

Strategic Priorities

Strategic priorities represent those major issues that decisively affect and influence the achievement of the vision. The related statements are expressions of the fundamental aims of the institution over the next five years.

- **Education and training Excellence:** sustaining the highest standards of student and trainee professional competence.
- **Research Excellence:** elevating the competitive quality and quality of basic, translational, and clinical research.
- **Clinical Excellence and Community Value:** assuring the highest quality of patient care, and achieving community-wide recognition as a highly valued organization.
- **Financial Strength:** fostering financial growth, economic stability, and outstanding stewardship.
- **Operational Excellence:** promoting the highest standards of support services, performance, responsiveness, and accountability.
- **Enriching and Supportive Workplace:** creating an enriching and supportive work environment conducive to the highest of personal growth and professional performance.

Historical Sketch of the College

Meharry Medical College was founded in 1876 as the Meharry Medical Department of Central Tennessee College to educate freed slaves as health care professionals. Fifty years prior to its formal founding, a 16-year-old Ohio farmer, Samuel Meharry, was befriended by a family of former slaves while traveling through rural Kentucky. Meharry was touched by the kindness and generosity of the poor black family and promised to repay his debt of gratitude. In 1876, Meharry and his brothers donated cash and property valued at \$30,000 toward the establishment of the medical department. The Freedmen's Aid Society of the Methodist Episcopal Church and the John F. Slater Fund were also contributors.

A dental department within the Meharry Medical Department of Central Tennessee College was founded in 1884. This expanded the medical department's mission as the first institution in the deep South to train black dentists. It was also one of a few in that era to promote the recruitment of women into the profession.

In 1915, Meharry separated from Walden University, the successor institution to Central Tennessee College, having received a new charter from the State of Tennessee. It did, however, retain its affiliation with the Methodist Church. In 1916, bylaws were adopted providing for the governance of the College by

an 18-member Board of Trustees. At the same time, the board appointed Dr. George W. Hubbard as the institution's first president.

The School of Graduate Studies and Research at Meharry Medical College began in 1938 as a series of short courses in the basic and clinical sciences. In 1947, a Master of Science Degree program was implemented as the first graduate degree, a Ph.D. program was established in 1972, and an M.D./Ph.D. program in 1982. The Ph.D. program has graduated more than 180 PhDs in the US and currently is the top producer of African-American Ph.D.s in the Biomedical Sciences in the US. The Master of Science in Public Health Program at Meharry Medical College was established in 1974 and graduated its first class of one student in 1978. To date the program has graduated approximately 300 professionals who occupy positions of leadership in many public and private sectors of the country.

Over the years, Meharry has maintained its reputation as a leading educator of highly competent physicians, dentists, biomedical scientists, public health practitioners, and allied health professionals. Meharry Medical College today is the largest private, historically black institution in the United States dedicated exclusively to educating health care professionals and biomedical scientists. The College serves approximately 750 students each year in its Schools of Dentistry, Graduate Studies and Research, and Medicine, and in its program in Allied Health Sciences sponsored with Tennessee State University. It has remained independent and is accredited by the Southern Association of Colleges and Schools. The College continues its relationship with what is now the United Methodist Church, receiving approval by the Church's University Senate and funding from its Black College Fund.

College Motto

Worship of God Through Service to Mankind.

Facilities

The S.S. Kresge Learning Resources Center

The S.S. Kresge Learning Resources Center is named in honor of the founder of the Kresge Stores and the S.S. Kresge Foundation, which has supported educational initiatives since 1924. The "LRC," as it is known, houses the **Meharry Medical College Library** in addition to College administration offices, including the offices of the President, Vice President for Advancement and College Relations, Admissions and Records, Student Financial Aid and the Meharry National Alumni Association.

The Meharry Library

The Meharry Library is located on the second, third and fourth floors of the S.S. Kresge Learning Resource Center with over 1,500 print and electronic journal subscriptions and a book collection of over 13,000 titles. The MMC library's electronic classrooms contain 20 networked computers to promote interactive teaching and learning. In the MMCL computer laboratory, library users have access to computer work stations including scanners. Other access computers are available throughout the library in addition to circulating laptop computers for in-library use. Wireless access is enabled throughout all three floors of the library.

During the academic year, the Library is open from 8 a.m.-2 a.m., Monday-Thursday; 8 a.m.-11 p.m., Friday; 10 a.m.-7 p.m., Saturday; and 2 p.m.-12 a.m. Sunday.

The Harold D. West Basic Sciences Building

Named in honor of Meharry's first African American president, the West Basic Sciences Building houses the primary basic science classrooms and teaching laboratories for first- and second- year students. The building also houses the School of Medicine's Academic Computing Center, bench research laboratories, core facilities and the animal care facility. In addition the administrative offices of the School of Medicine and the School of Graduate Studies and Research are within this facility. The building features a four-

story Atrium, the site of many campus events as well as informal gatherings of students during breaks between classes. It also houses a two-story auditorium, known as M001, with a seating capacity of approximately 500. The Matthews Meharry Bookstore is located on the first floor. Several study rooms also are available for individual and small-group sessions.

The School of Dentistry Building

Originally constructed in 1979, the School of Dentistry (SOD) Building has seen several facility upgrades in recent years. It houses classrooms, small meeting rooms, student lounge, labs, and clinics and the administrative offices of the Dean and faculty of the School of Dentistry. In 2003, two dental technique instructional labs were outfitted with state-of-the-art multimedia technology so that students have their own computerized work station while in the lab. Dispensing and sterilization facilities are positioned for easy access by students. The highlight of the SOD Building is the Iris B. and Wendell E. Cox, D.D.S. Auditorium, named in honor of the Meharry alumnus and his wife who provided funding for its renovation and multimedia technology upgrades in the year 2000. Their gift of \$1.5 million represents the largest single amount contributed by an alumnus in the College's history.

The Daniel T. Rolfe Student Center

The Daniel T. Rolfe Student Center accommodates offices for Meharry's student governing body, the Pre-Alumni Association, and the *Meharrian* yearbook. It also houses the Offices of Student Services, Counseling and Pastoral Care Services, Academic Resource Services and a number of student organizations. The Rolfe Center also features a large recreation/gathering area, a reading and seminar room, and smaller meeting and study rooms for student use.

Clay E. Simpson Jr. Building

The Clay E. Simpson Building houses the Medical Education Department, Clinical Assessment Center and the State Farm Alliance Group and others of the Journal for the health care for the poor and underserved.

The George Hubbard Hospital (Old Hospital)

The 1931 built George Hubbard Hospital is annexed by the Dental School on the north and the Comprehensive Health building on the south. This building is now a multi-use facility housing the offices and departments of Pediatrics, Family Medicine, Internal Medicine, Obstetrics/Gynecology, Surgery, Psychiatry/Neurology, some Clinical Research including Sickle Cell Research and the Metro Hospital Clinics. The east and west wings of the 5th floor have undergone major renovations to house the new Women's Health Research Center and the Center for AIDS Health Disparities Research labs and offices.

The Meharry Clinic (Comprehensive Health)

This multi-use building completed in 1972 is an annex to both the Metro General Hospital building and the Old Hospital. This Building is shared by Family and Preventive Medicine; Ophthalmology; Dermatology; Children, Youth and Pediatrics; Orthopedics; Student Health Services; Fetal Medicine; Women's Health and Employee's Health.

Lloyd C. Elam Mental Health Center

The primary services within this building include the provision of mental health and associated services for children, adolescents, adults and some elderly care. Some clinical services for out patient and day care on the second floor of the building are available. The northeast annex of this building houses the campus basketball and racquetball courts, aerobics room and weight room.

Hulda Lytle Hall

The Lytle Hall constructed in 1934, is on the registry of the Tennessee Historical Society. This building is presently vacant, but formerly housed the Meharry School Nursing, which closed in 1962.

OIT Building

The Office of Information and Technology building is the hub of the campus computer network systems. In addition to the technical support center, there are classrooms for computer & network systems training.

Dorothy Brown Hall

This is a Residential Building for Women with amenities for 70 beds and laundry facilities.

The Royal Towers (Formerly Meharry Student Towers)

This is a ten-story residential complex containing 156 one & two bedroom apartments for students and faculty.

Henry A. Moses Building

The Meharry Human Resources Department occupies the first floor of the Henry Moses Building and the State farm Alliance Group will be housed on the 2nd floor after future renovations.

Biomedical Science Building

The Biomedical Science Building houses research facilities including classrooms, offices and laboratories for neuroscience investigators and molecular neurobiology.

Power Plant

The Power Plant Building is the operations center for the Campus Operations Department and the Campus Central Plant for major heating and air conditioning equipment.

Security Triplex

The new security offices will be opened in August 2006 in the old Triplex at 1005 N. 21st Avenue. All functions of Campus Security and Safety will be housed in this building.

Nashville General Hospital at Meharry

The principal site for clinical training is Nashville General Hospital at Meharry, representing a unique public-private alliance among Meharry, Vanderbilt University Medical Center and the Metropolitan Nashville Hospital Authority. This 150-bed facility was formerly Hubbard Hospital and was renamed in 1994 when the government of Metropolitan Nashville and Davidson County moved its public hospital to Meharry's campus. Here, under the direction of Meharry faculty, our students and residents encounter a broad range of medical-surgical experiences, including obstetrics/gynecology, neonatal intensive care, pediatrics, orthopedics, oncology, surgery, physical and occupational therapy, cardiac catheterization, ophthalmology and emergency room care, oral-maxillofacial surgery and emergency dental care.

Meharry Practice Sites

The Meharry Clinics are located on campus and attached to Nashville General Hospital and provide patient care in primary and specialty care. The Meharry Medical Arts Center is located at 1919 Charlotte Avenue in Nashville. It offers sub-specialty care through the Meharry Center for Women's Health and the Meharry Medical/Surgical Sub-Specialty Group. Meharry also provides patient care at the Meharry Family Medicine Clinic in Madison, Tenn.

Affiliated Clinical Facilities

The College also has established formal ties with other off-campus health care providers to expand the hands-on experiences available to students and residents. The professional contacts with patients at those sites enrich the quality of training while providing exemplary comprehensive health care. Among these are Vanderbilt University Medical Center; Middle Tennessee Mental Health Institute; Middle Tennessee Medical Center; Alvin C. York Veterans Administration Medical Center, Murfreesboro, Tenn.; and Blanchfield Army Community Hospital, Fort Campbell, Ky.

Life at Meharry

Located off Nashville's historic Jefferson Street, nestled between two neighboring historically black universities, and near Nashville's thriving downtown, Meharry provides students with a full-range of auxiliary services to make their experience on campus both intellectually stimulating and socially comfortable and enjoyable.

Metropolitan Nashville and Davidson County

Nashville was settled in 1779 and became the state capital in 1843. Nashville and Davidson County are governed by a combined metropolitan government that provides municipal services for the county's population of 569,891. Nashville typically enjoys a mild and pleasant climate with very hot or very cold conditions occurring only a few days of the year. The city has two nicknames – "Music City USA," for the city's musical heritage, and the "Athens of the South," for the city's dedication to fine arts and numerous institutions of higher education.

Nashville ranks high: It is among the top four best U.S. cities for African Americans by *Black Enterprise* magazine; one of the 15 best U.S. cities for work and family by *Fortune* magazine; one of the 25 cities likely to have the country's highest job growth over the coming five years by *Forbes* magazine; and the nation's friendliest city by *Travel and Leisure* magazine. Nashville consistently ranks among the lowest for cost-of-living rates in comparable cities across the nation, according to the Nashville Convention and Visitors Bureau. Costs for groceries, housing and utilities are typically below the national average.

The city's leisure and night life are remarkable, filled with great dining, sports, shopping, music and theater. Known for its country music scene worldwide, Nashville also offers, on any given night, fantastic jazz and R&B, rock, Americana, hip-hop and virtually any music fusions imaginable. The Nashville Symphony is nationally renowned, and no major entertainer misses Nashville on tour. Nashville has four professional sports teams – the NHL Nashville Predators, the NFL Tennessee Titans, the AAA baseball Nashville Sounds and the NWF Nashville Dream. It also offers Busch and Indy series car racing, collegiate team sports, and an annual marathon and half marathon. The arts scene is alive and thriving with permanent and traveling exhibitions at the Frist Center for the Visual Arts; the Aaron Douglas and Carl Van Vechten Galleries at Fisk University; Cheekwood Botanical Garden and Museum of Art; the Parthenon Museum at the world's only full-scale replica of the famed Greek temple; and more. History buffs will enjoy The Hermitage, home of the seventh U.S. president, Andrew Jackson; and scores of preserved homes open year-round for tours.

Housing Facilities

Housing

Housing at Meharry Medical College is managed by Meharry Properties. Students interested in campus housing should write to: Manager of Meharry Properties, 944 21st Ave. N., Nashville, TN 37208-3599, or call (615) 320-5791. Applications for housing will be mailed to students upon written request. Returning residents of College housing will be permitted to renew their lease. Incoming students will receive priority for the remaining available housing.

Dorothy Brown Hall on Albion Street houses 70 female students in either single rooms or double suites. Each air-conditioned room is furnished with a bed, a desk and chair, an armchair, and a bookcase. The monthly rental rate in the dormitory varies for a single room and for a two-bedroom suite. Students should bring linen, blankets, and other items they wish to add to the furnishings. A security deposit is required.

Royal Towers at Meharry Medical College, located on 21st Avenue North, is a 10-story residential complex that opened in September 1971 and was fully renovated in 2001. It contains 156 one- and two-bedroom apartments for Meharry's students, staff and faculty members and their families. Each unit is fully air-conditioned, carpeted, and furnished with a stove, refrigerator, and garbage disposal. Laundry facilities are located on select floors. Rental rates vary and a security deposit is required.

The Herman Street Apartments, located between 16th and 17th Avenues North, contains 76 one- and two-bedroom apartments approximately three blocks from the main campus. This complex provides air-conditioned, carpeted quarters. Occupants are responsible for all utility costs, except water. Rental rates vary and a security deposit is required.

Off-Campus Housing: The Office of Student Services maintains a list of available off-campus accommodations in the Nashville area that Meharry students have found acceptable. Many of the rental properties are close to the campus. Cost, furnishings and conditions vary to give students several options. For best choice, students seeking off-campus housing should visit the property or contact the Office of Student Services, Daniel T. Rolfe Student Center, Meharry Medical College, 1005 Dr. D.B.Todd Jr. Blvd., Nashville, TN 37208 or call (615) 327-6792.

Change of Address

A student with a change of mailing address after registration should report the change in writing to the Office of Records, Suite 501, Kresge Learning Resources Center, as soon as possible. Any communication from the College bearing the address on file is considered to be properly delivered.

Student Identification Badge

All students are required to wear a photo ID badge while on-campus. ID badges are issued during Student Orientation. Badges are color-coded to represent the school the student is attending. ID badges are issued yearly to returning students through the Office of Admissions. If lost during the school year, badges can be replaced; however, a fee is charged. Students must first receive a signed ID replacement form from the Office of Admissions, pay the fee in the Treasurer's Office, and pick up a reprinted badge. If a new photo needs to be taken, returning students must schedule an appointment with the office of Admissions by phoning (615) 327-6223.

Dining

The cafeteria on the Meharry Medical College campus is located on the lower level of Nashville General Hospital at Meharry. The cafeteria serves breakfast, lunch and dinner each day of the week. The menu is a la carte, with a variety of choices individually priced. A healthy, nutritious and well-balanced cuisine is presented at each meal. Meals are reasonably priced on a pay-as-you-go system; there is no meal card or credit plan. Breakfast is served from 6 to 9:30 a.m.; lunch is served from 10:30 a.m. to 2 p.m.; and dinner is served from 5:30 to 7 p.m. There also are snack and beverage vending machines in most buildings on campus.

Services to Students

Privacy and Access to Academic Records

Meharry Medical College is subject to the provisions of federal law known as the Family Educational Rights and Privacy Act (also referred to as the Buckley Amendment or FERPA). This act affords matriculated students certain rights with respect to their educational records. These rights include:

- The right to inspect and review their education records within 30 days of the day the College receives a request for access: students should submit written requests to the College Registrar and identify the record(s) they wish to inspect. The College Registrar will make arrangements for access and notify the student of the time and place where the record(s) may be inspected. If the College Registrar does not maintain the record(s), the student will be directed to the College official to whom the request should be addressed.
- The right to request amendment of any part of an education record that they believe is inaccurate or misleading: students who wish to request an amendment to their educational record should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the student will be notified of the decision and advised of his or her right to a hearing.
- The right to consent to disclosures of personally identifiable information contained in the student's education record(s) to third parties, except in situations in which FERPA allows disclosure without the student's consent: One such situation is disclosure to school officials with legitimate educational interests. A "school official" is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including College law enforcement personnel and health staff); a person or company with whom the College has contracted; a member of the Board of Trustees; or a student serving on an official College committee or assisting another College official in performing his or her tasks. A College official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

The Buckley Amendment provides the College the ability to designate certain student information as "directory information." Directory information may be made available to any person without the student's consent unless the student gives notice as provided for below. Meharry Medical College has designated the following as directory information:

- Student's Name
- E-mail Address
- Major Field of Study
- Enrollment Status (Part or Full-Time)
- Classification
- School
- Dates of Attendance
- Prior Postsecondary Institution(s) Attended
- Degrees and Awards Received

Any new entering or currently enrolled student who does not wish disclosure of directory information should notify the College Registrar in writing. No element of directory information as defined above is released to students who request nondisclosure except in situations allowed by law. The request to withhold directory information will remain in effect as long as the student continues to be enrolled or until the student files a written request with the College Registrar to discontinue the withholding. To continue

nondisclosure of directory information after a student ceases to be enrolled, a written request for continuance must be filed with the College Registrar during the student's last term of attendance.

If a student believes the College has failed to comply with the Buckley Amendment, he or she may file a written complaint with the Associate Vice President of Student Services and Enrollment Management. Questions about the application of the provision of the Family Educational Rights and Privacy Act should be directed to the College Registrar or to the Office of the General Counsel.

Meharry Student Directory Listings

A photo summary of all students is printed yearly. This directory includes the student's name, school, classification, and e-mail address.

Students are also listed in the online directory that is published in the Blackboard Learning System. Students who want their listing included in the online directory have the authority to update their personal information (including name, address, e-mail, phone, cell phone, etc.) and select how much of this information can be made available to the College. As an example, students can elect to have ONLY their name and e-mail displayed in the directory. This directory is produced by the Associate Dean for Academic Computing.

The Digital Library

The Meharry Medical College Library (MMCL) is increasingly focusing its collection on electronic resources to maximize the utility and accessibility of information across the campus and from home. The library subscribes to over 1,100 electronic journals, 450 books, 240 databases, and provides links to 650 web resources available via an integrated Digital Library. The Digital Library provides fast access and multiple routes to electronic resources including tools to support evidence-based practice including synthesized topic reviews via Up-To-Date, a suite of evidence-based medicine Cochrane databases, the differential diagnosis tool DXPlain, eMedicine, a peer-reviewed clinical content repository, InfoRetriever/InfoPOEMs and the wealth of clinical textbooks and journals available in MDConsult. The MMCL also provides access to over 70 full-text journals through the Ovid system as well as over 300 clinical and research-focused full-text journals through the ScienceDirect database. StatRef provides users with clinical textbooks including Harrison's Principles of Internal Medicine, Griffith's 5 Minute Clinical Consult, and Current Medical Diagnosis & Treatment. Derm101, a clinical diagnostic tool, provides an online atlas for management of dermatopathology issues plus board review preparation materials. Users can also access health-focused databases such as Health Reference Center and Health and Wellness Resources Center.

Library Services

The library offers a wide variety of services including access to an extensive digital library of electronic books, journals and data bases; circulation of library materials and computer laptops; assistance with informational needs; computerized literature searches; access to a networked computer laboratory; photocopy services; document delivery services; information management instruction; training in the use of biomedical databases; and a well organized college archives collection. For a full listing of library services, see <http://library.mmc.edu>.

Circulation: Books circulate for 28 days and audiovisuals circulate for five days. Journals do not circulate. Laptop computers are available for checkout within the building for a two-hour-loan period. The building is equipped with wireless network connections. To check out materials, users must register at the library with their Meharry Banner identification card. Fines are assessed for any materials not returned by the due date.

Reference: Reference librarians provide a full range of services including answering reference questions, assistance with online searches, and providing training sessions on the use of print and electronic resources (<http://library.mmc.edu/classes.html>). Librarian expert assistance is also available asynchronously through the "Ask A Librarian" (<http://library.mmc.edu/ask/>) and the "Library Information Desk" (<http://library.mmc.edu/libdesk/>) online forms.

Document Delivery: Library users may obtain desired materials not held by the library through this service. Electronic Document Delivery request forms are available through the Digital Library at <http://diglib.mmc.edu/dds.html>. Occasionally, charges may be incurred when using this service.

Computer Learning Laboratory (MLL): The computer lab is located on the first floor of the library. Its workstations operate in a Microsoft platform and provide access to the Meharry intranet and to the internet. Applications include standard office software; statistical packages (SPSS and SAS); multimedia and citation management applications (Reference Manager, Endnote).

Photocopy Service: The library has a self-service photocopy machine. The cost is 10 cents per page.

Archives: The archives section of the library collects and preserves information about the history of the College and minority health care. This collection is on the third floor of the library and it is open 8 am to 5 pm Monday through Friday.

Meharry students have access to the Eskind Biomedical Library (EBL) at the Vanderbilt University Medical Center through the auspices of the Meharry-Vanderbilt Alliance. This is collaboration between the two schools to enhance education, patient care, and research.

Library Practices and Fees

Incoming students are required to make a one-time \$20.00 deposit to cover losses, mutilation and non-receipt of borrowed materials during their course of study at Meharry. Additionally, all students are assessed a yearly library fee which helps to maintain the library. Books may be checked out for 28 days; audiovisuals for five days; and reserve materials for 24 hours. Journals and laptops are available for in-library use only. Overdue charges are assessed.

Library users are expected to maintain a courteous study environment. To avoid unnecessary distractions we ask users to answer cell phone calls from the lobby **outside** of the library. Students are allowed to bring bottled water into the library. However, snacks are **restricted** to the "Study While You Eat Area" located on the 2nd floor of the library.

Counseling Services

Meharry Medical College provides counseling services from professional providers at a conveniently located campus Counseling Center. The center is committed to a highly effective counseling support system that complements the educational and human enrichment endeavors of the institution. Counseling services include individual, family and group therapies as well as academic counseling and career development advisement.

Workshops related to stress reduction; time management and a variety of clinical presentations are regular features of the center. Moreover, psychologists and counselors at the center assist in making provisions for special academic and test accommodations for students with disability needs. This includes psychological testing, neuropsychological evaluation and psycho-educational assessment.

The services of the Counseling Center are broad-based and encompass services to students' partners and dependents, as well as to faculty and staff. Appointments may be made by visiting the Counseling Center at the Daniel T. Rolfe Student Center or by calling (615) 327-6915 or 327-6156. All counseling services are confidential as mandated by professional ethics codes and by law.

Student Health Center

The Student Health Services Center is located adjacent to the Pediatric Clinic on the second floor of the Meharry Clinics. All students enrolled at Meharry Medical College are eligible to use the Student Health Center for their health care needs. Students are seen on a walk-in or appointment basis. The Student Health Center is open Monday-Friday from 8 a.m.-5 p.m.

The Student Health Services Center is staffed full time by a certified nurse practitioner who is supported by board-certified primary care physicians. Clinicians certified in various specialties such as general surgery, orthopedics, ophthalmology, internal medicine, pediatrics and obstetrics/gynecology also are available to assist students with their health care needs. In addition, the Student Health Services Center can provide access to mental health services staffed by board-certified psychiatrists.

A certified nurse practitioner is available for telephone consultation on illnesses, injuries, lab results or other health concerns and questions. The phone information nurse is available Monday-Friday from 8 a.m.-5 p.m. at (615)327-5757.

Students needing care when the Student Health Center is closed should go to the Emergency Room at Nashville General Hospital at Meharry.

Mandatory Immunizations

All students are required to submit immunization records for the following:

- Hepatitis B Series 1, 2 & 3 or serological evidence of immunity.
- MMR –documentation of having received 2 doses or serological evidence of immunity.
- Varicella – documentation of having had the disease, signed by your healthcare provider, or documentation of having received 2 doses of the vaccine, given 4-8 weeks apart or serological evidence of immunity.
- PPD (TB Skin Test) – dated within the last 12 months or results of Chest X-ray if PPD was positive.
- Tetanus/Diphtheria – within the last 10 years.
- Polio

Student Health Insurance

Meharry Medical College sponsors a group student health insurance plan. All students are required to have health insurance. Waiver of participation may be granted if the student presents proof of coverage which is equal to or better than the Meharry Insurance Plan. The group health insurance plan is designed to defray a major portion of the cost of hospitalization and covers the student when on or off campus.

The plan covers students for one academic year at Meharry Medical College. Insurance coverage must be renewed each year. The fee for the group insurance is collected during registration each year, and the student may contract for additional coverage for a spouse and children. For information, contact the Office of College Relations at (615) 327-6084.

Foreign Student Services

The Office of Student Services and Enrollment Management coordinate and support the processing of foreign or international student Visa (F-1) for admission to Meharry Medical College. The office serves as a central resource and point of first contact for all new international students seeking approval for employment -- Curricular Practical Training (CPT) and Optional Practical Training (OPT). For additional information, contact the Office of Student Services and Enrollment Management at (615) 327-6084.

Veteran Students

Students receiving veteran's educational benefits must maintain satisfactory academic progress (SAP) as defined by their specific school. Students who fail to maintain SAP are ineligible for veteran's educational benefits. Students who are eligible to receive veteran's educational benefits must be certified by the Office of Records.

Students with Disabilities

Meharry Medical College is committed to the provisions of the Rehabilitation Act of 1973 and Americans with Disabilities Act in creating an inclusive community for students with disabilities. Students seeking accommodations for any type of disability are encouraged to contact the Office of Student Affairs in their respective school. Services include, but are not limited to, extended time for testing, assistance with locating sign language interpreters, audio-taped textbooks, physical adaptations, note-takers, and reading services. Accommodations are tailored to meet the needs of each student with a documented disability.

Specific concerns pertaining to services for people with disabilities or any disability issue should be directed to the Office of General Counsel.

Meharry Bookstore

Matthews Meharry Medical Bookstore is located in the West Basic Sciences Building. The bookstore is open Monday through Friday from 9 to 5 and is also available online through the Meharry website or at www.meharrybooks.com. In addition to required textbooks, the Bookstore carries a wide selection of reference and general reading books, Meharry clothing and gift items, as well as an extensive line of medical equipment. Bookstore staff members are available to assist with special orders as needed.

Meharry Copy Center

The Meharry Copy Center, located in the basement of the S.S. Kresge Learning Resources Center, provides full-service printing, copying and finishing services. The Copy Center is staffed and operated by Xerox and is open Monday through Friday from 7:00 am to 6:00 pm. Students may use this resource for low-cost black and white printing, full color printing, as well as for a variety of finishing and binding options. Payment for copying services may be rendered in cash, check or credit card forms. Please contact the Copy Center at (615) 327-6278 for more details.

Mail Services

Mail Services, located on the first floor of the Daniel T Rolfe Student Center, provides campus post office boxes for all students. Post office boxes are assigned during registration. Students may also receive packages shipped via United Parcel Service (UPS), FedEx and DHL through Mail Services. Mail Services personnel will receive these items and keep them secured until the student is available to claim them. Mail Services also processes outgoing United States Postal Service mail, including Priority, Express, Certified and Registered Mail items. Mail Services is open Monday through Friday from 9:00 am to 4:00 pm.

Public Safety and Security

The Department of Public Safety and Security (DPSS) is located in the rear of the Dental building, adjacent to Shipping and Receiving. The Office is committed to providing an efficient, aesthetically pleasing, safe and user-friendly environment that promotes teaching, learning, and service delivery.

The DPSS is open 24 hours a day, seven days a week, to respond to emergencies and/or reports of criminal activities and to provide security to the campus. The telephone number, 327-6666 is used to report any emergency. The staff addresses the patrolling, crime prevention, escort services, traffic/parking, investigative and administrative needs of the college community.

The DPSS reports directly to the Vice President for Administration. The Department operates three shifts. Members of the staff have prior police/security experience and/or military backgrounds. In addition, the officers annually attend in-service training to gain additional skills. Prior to employment, officers are required to complete testing for state certification as security officers.

Security officers have the authority to detain individuals until Metro Nashville Police officers arrive on the premises. The campus community is encouraged to report all campus crimes to the DPSS immediately. Security officers conduct preliminary investigations of all reported situations and refer them to the appropriate law enforcement agency when necessary or mandated by law. An excellent working relationship exists between DPSS and the local, state, and federal law enforcement agencies. The DPSS meets monthly with the security offices of other universities in the Middle Tennessee area. All violations of state and federal criminal law that come to the attention of the DPSS are reported immediately to the appropriate law enforcement agency for investigation and disposition.

Emergencies

The Meharry Medical College Department of Public Safety and Security is a professional organization dedicated to the protection and security of Meharry Medical College and its diverse community, committed to providing a safe, secure and accessible campus for students, faculty, staff, patients and

visitors. Public Safety and Security Officers are on duty 24 hours a day, seven days a week and should be contacted immediately if suspicious or potentially dangerous situations occur.

To contact a security officer, please call:

EMERGENCY: On campus, dial 6666

Non-emergency: (615) 327-6290

General Inquiries: (615) 327-6254

Metropolitan-Nashville Police

615-862-8600 for Non-Emergency

911 for Emergency

Annual Security Report ("Clery" Report)

The Director of Public Safety in cooperation with the Legal Affairs Office prepares the Meharry Medical College's annual report to comply with the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act. The full text of this report can be located on the MMC Web site at <http://www.mmc.edu>. Additionally, a copy is available for reviewing at all Security Posts on campus (the lobby of West Basic Science Building; lobby and rear exit of the Stanley S. Kresge Learning Center). The report is prepared in cooperation with the local law enforcement agencies surrounding our campus, Residential Managers, College Legal Counsel, Deans of each school and the Disciplinary Committee. Annually, the Vice President for Administration sends a letter to all non-security/police "Campus Security Authorities" informing them of their responsibility to report crimes to the DPSS and/or the local police and asking for information on any crimes not reported. Each entity provides updated information on their educational efforts and programs to comply with the Act.

Parking Services

- Any motor vehicle operated on campus by faculty, staff or students must be registered and bear a registration decal obtained from the Security Office. Visitors must also obtain a visitors permit from the Security Office or office visited.
- Student vehicle registration must be completed no later than the last day of the official academic registration period.
- Expiration date on decals for all students and tenants living in campus housing is August 31 of each year. There is no expiration date on faculty and staff decals; however, the Security Office reserves the right to cancel if deemed necessary.
- Display decal on driver's side, lower left front windshield.
- Remove expired decal each year.
- Present the following at time of registration:
 - Proof of liability insurance
 - Proof of ownership (on all cars to be registered)
 - Driver's license
 - College I.D. Card or stamped academic registration card
- No student will be allowed to register another person's vehicle.
- Report ownership changes; mutilated or defaced decals are to be turned into the Department of Public Safety and Security.
- Registration fees will be announced at the beginning of each academic year.
- There will be a charge of \$2.00 for any replacement/second decal.
- All local and state rules and regulations, directional signs and signals governing the use of motor vehicles shall be observed at all times.

- The speed limit on campus is 15 mph.
- Motorists must give pedestrians the right of way at designated crosswalks.
- Unnecessary noise from horns and mufflers is prohibited.
- Loading zones and service zones are reserved exclusively for service vehicles.
- Motor vehicles must be parked within the marked spaces where provided, not on the lines or curbs.
- Possession and display of a decal to which one is not entitled is a violation.
- Transferring a decal from one car to another is prohibited.
- Immobilized vehicles will not be left on the campus beyond seven days. Vehicles left on campus beyond the established time will be towed away at owner's expense.
- Backing into parking spaces is prohibited.
- Any vehicle in violation of the college parking regulations is subject to towing. Three or more violations in a 12-month period may result in a vehicle being towed from campus.
- Parking restrictions are in effect 24 hours per day, seven days a week.

Parking and Vehicle Registration

Parking decals are distributed through the Public Safety and Security office. Any student with an automobile on campus must obtain a valid parking sticker each academic year.

Religious Life

The Office of the College Chaplain provides effective and comprehensive pastoral care and pastoral counseling to students, faculty, staff and administration of the College, with a special emphasis on service to students. The College Chaplain serves as the spiritual leader of the institution.

Student Activities & Recreation

The academic year at Meharry usually begins with a get acquainted picnic on campus and often ends with a cookout and block party in the outdoor amphitheater. During the orientation process, students are invited to participate in an ice cream social that is often the forum for acquiring information about the campus Greek organizations. Orientation culminates with the Rite of Passage Ceremony. This ceremony formally inducts students into the Meharry family.

The Family and Friends Weekend is a time for students and their loved ones to gather on campus for three days of fun and fellowship, each year. This week includes the Pre-Alumni Ball, which is the annual formal social event for students and the Miss Meharry Coronation.

Student organizations sponsor many other social activities each year that are anticipated and appreciated by the students, and both informal and formal class celebrations are common after examinations or other academic benchmarks.

Recreation is that change of pace that helps keep the stress of professional school manageable, and so intramural sports are an important part of the social agenda at Meharry. Co-ed softball, co-ed volleyball, basketball and other recreational activities such as handball, racquetball, pool, ping-pong and more help keep life interesting and fun for Meharry students.

Recreation facilities are located in the D.T. Rolfe Student Center on campus and will soon be extended to a fitness center within the Elam Center. The Rolfe Center contains a pool table, ping-pong table, board games and a relaxing environment for TV watching or socializing. The fitness center located in the Elam Center will provide a gymnasium that will accommodate all student activities with the exception of softball. It will include aerobics, weight room, racket ball and other activities. We also use other community facilities to support recreational programs, such as softball. There are student lounges in the SOD

Building and the West Basic Sciences Building. These lounges are equipped with TV, telephone, microwave oven and tables with chairs for student use.

Information Technology Services

The Office of Information Technology, known as OIT, supports Meharry's information infrastructure and offers services for voice, data and video technologies. Data services include MMC wireless network connectivity, MMC e-mail setup and support, MMC network connectivity, and Help Desk support for students, faculty and staff. Information Technology services are provided out of the Computer Center, located between Hulda Lytle Hall and the Meharry Clinics, facing Dr. D.B. Todd Jr. Blvd.

Help Desk Services

The Help Desk provides software and hardware support for students, faculty and staff. Students may receive assistance troubleshooting hardware and software problems, loading software, network configurations, e-mail setup and support, wireless connectivity and warranty services. Help Desk hours are Monday - Friday, 8:30 a.m.-5 p.m. The Help Desk may be reached from any campus phone by dialing HELP (4357). The off-campus contact number for the Help Desk is (615) 327-6231.

Discount Purchase Program

Students may receive discounts for hardware and software purchases with the assistance of the Office of Information Technology. Discounts are limited to vendors that have a purchasing arrangement with Meharry Medical College. For additional information, contact OIT at (615) 327-6231.

Career Counseling

The Offices of Academic Affairs and Student Affairs of each school provide career counseling to students. For information, please contact these departments within your respective school.

The Meharry-Vanderbilt Alliance

Established in 1998, this collaboration between Meharry Medical College and Vanderbilt University Medical Center has been built on the vision of:

“Education and research leading to the best patient care and eliminating disparities in healthcare affecting minorities and the underserved”

The Meharry-Vanderbilt Alliance is making enormous contributions to medical education, research and training by developing new models of healthcare delivery to the underserved. As our collaboration continues to mature, healthcare will improve because medical students will be exposed to a more diverse education and training environment; research will concentrate on a broader segment of people; and proven, evidenced-based transitional methods of practice will set the strategic plans for our joint research efforts of the future. The opportunities are large, and the rewards will be great as we focus on discovering the causes of health disparities and seek ways to eliminate them. Simultaneously, we will provide a culturally diverse educational environment to produce better clinicians and medical scientists of the future.

Bonding Together- The Meharry-Vanderbilt Student Alliance

A strategic initiative of this Alliance is to engage students in a cross cultural academic environment to enhance their educational experience. Students in the Meharry-Vanderbilt Student Alliance (MVSA) play a vital role in medical education, communication and community outreach through several successful endeavors. MVSA students are responsible for directing programs and activities that promote collaboration between Meharry-Vanderbilt Alliance partners Meharry Medical College and Vanderbilt University Medical Center, as well as to promote collegiality and science among all aspects of healthcare providers.

Initiatives include “Confronting AIDS Now”, a forum to foster student interest in dealing with AIDS through basic science, clinical research and community outreach. MVSA's regular sponsorship of events for professional and graduate students means the formation of new friendships, the enhancement of sensitivities to the diverse needs of patients, and the igniting of passions to serve the needs of the

community. Simply put, the role of the Alliance in fostering these experiences for our students cannot be overstated."

Learning by Connecting

To enhance the educational experience of students and to strengthen the programs of Meharry-Vanderbilt Alliance partners, a pediatric clerkship exchange is celebrating its fifth year of success. Students at Meharry Medical College (MMC) and Vanderbilt University Medical Center (VUMC) are enthusiastic and positive about the exchange program, which is available in their third year of study. VUMC medical students elect to rotate to MMC for additional outpatient exposure on two-week intervals. Similarly, MMC medical students rotate to Vanderbilt for additional inpatient exposure on two-week intervals.

Student Organizations

Organizations are plentiful at Meharry. Students can choose from more than 30 approved student organizations, and more are being started each year. There are many professional groups such as the Student National Dental Association, American Student Dental Association, Graduate Student Association, Student National Medical Association, and American Medical Student Association.

Students interested in forming a new campus organization should contact the Student Services Office. Recognized student organizations at Meharry include:

- Afro Caribbean Student Association
- Alpha Kappa Alpha Sorority
- Alpha Phi Alpha Fraternity
- American Association of Women Dentists
- American Latino Medical Association
- American Medical Association
- American Medical Student Association
- American Student Dental Association
- Delta Sigma Theta Sorority
- Emergency Medicine Club
- Endodontics Study Club
- Ewell Neil Dental Society
- Family Medicine Club
- Geriatrics Student Forum
- Graduate Student Association
- Health Professionals for Christ
- Henry W. Foster Obstetrics and Gynecology Club
- Kappa Alpha Psi Fraternity
- Medical Genetics Club
- Meharry Muslim Student Union
- Meharry Roadrunners
- Meharry-Vanderbilt Student Alliance
- Medical Military Student Association
- Miss Meharry and Court
- Omega Psi Phi Fraternity
- Oral and Maxillofacial Surgery Club
- Orthopedics/Sports Medicine Club
- Pediatric Dentistry Club
- Physicians for Human Rights
- Pre-Alumni Association
- Psychiatry Club
- Radiology Club
- Restorative Dentistry Club

- Saburo Hara Pediatric Society
- South Asia Meharry Students Association
- Student National Dental Association
- Student National Medical Association
- Surgery Club
- Thomas Hardy Internal Medicine Society
- Zeta Phi Beta Sorority

Student Governance

The Pre-Alumni Association is the student government body at Meharry. All Meharry students are members of the Pre-Alumni Association. The student body elects a president, two vice presidents, secretary, treasurer and a member-at-large from each school. This organization provides student leadership and provides an official communication mechanism for students' ideas and opinions concerning the college. The Pre-Alumni Association sponsors many student activities and community service projects on campus.

Meharry National Alumni Association

Upon graduation, every Meharry student is invited to join the Meharry National Alumni Association, known as the MNAA. Alumni retain their ties to Meharry, their respective schools and most importantly, their treasured classmates through the MNAA. The MNAA serves as a major fund-raiser for the College, fosters collegiality among alumni, recognizes alumni for outstanding achievement, and provides support to alumni in a variety of ways as the need arises. The Association operates administratively through a central office located on the Meharry Medical College campus, with chartered chapters throughout the United States. Currently, there are 38 chartered chapters.

Academic Services

Overview

Academic services provide support to each of the three schools (Dentistry, Graduate Studies and Research and Medicine) at Meharry Medical College.

The Office of Admission and Recruitment coordinates recruitment activities for all Schools and provides information about the admission process. Representatives from the Office of Student Services and Enrollment Management serve as ex-officio members of the Admissions Committee for each School.

The Office of Records (Registrar) maintains permanent records and documents that pertain to each matriculated student's progress through each school. The office coordinates registration and enrollment.

The Offices of Admission and Recruitment and the Office of Records work closely with the Deans of the three academic Schools of Meharry Medical College, and is consistently responsive to their needs and interests.

Admissions Process

All applicants must complete the appropriate application for the respective school of interest. Application materials maybe obtained online at Meharry Medical College's web site under the Admissions section at www mmc.edu. Additional information may be obtained from the following web sites for the Schools of Dentistry and Medicine:

Dentistry – AADSAS application process at www.aadsas.ades.org/. The deadline for the AADSAS is February 1st of the year of matriculation.

Medicine – AMCAS application process at www.aamc.org/students/amcas/start.htm: The deadline for the AMCAS is December 15th of the year of matriculation.

Graduate Studies and Research– Meharry Application at www mmc.edu. The deadline is April 15th of the year of matriculation.

Each applicant must follow the following steps:

- Complete and submit an Admissions Application
 - Dental and Medical applicants send transcripts to the application service while Graduate applicants send transcripts to Meharry Medical College Office of Admissions.
- Complete and submit a Supplemental Application
 - Once the AAMCAS application is received, the Office of Admissions will forwards instructions to the applicant for completion of a Supplemental Application online through the CollegeNet Service.
 - Only Dental and Medical school applicants are required to complete a Supplemental Application.
- Submit letters of recommendation
 - Three letters of recommendation are required for applicants to Dental and Medical School
 - Two letters of recommendation are required for applicants to the Graduate School
- Admission Tests
 - All applicants are required to take the Admissions Test for the program to which they are applying.

Dental School

Dental Admissions Test (DAT): Dental applicants must take the Dental Admission Test (DAT). The test is offered monthly. For more information about the DAT, visit the web site: www.ada.org/prof/ed/testing/dat.

Graduate School: Ph.D. & M.S.P.H.

Graduate Records Examination (GRE): Graduate applicants must contact the GRE Educational Testing Service, P. O. Box 6000, Princeton, NJ 08541-6000, (609) 683-2002, to take the GRE test and have the test scores submitted to Meharry Medical College. For more information about the GRE, visit the web site: www.gre.org

Medical School

Medical College Admissions Test (MCAT): Medical applicants must take the MCAT. This test is administered three times per year throughout the United States. For more information, visit the following web site: www.aamc.org/students/mcast/start.htm

Complete applications are reviewed by a Screening Committee on Admissions of each school and selected applicants are invited for interviews. Applicants selected for interviews are notified by the Office of Admissions and arrangements are made for the candidate to come to the campus or a regional location to be interviewed. Once the interview is complete an evaluation of the interview is submitted to the Admissions Committee for action. The Admission Committees submit final recommendations to the Dean of each school. The respective Dean of each school makes the final decision on each candidate recommended. The Office of Admissions mails a letter to each candidate interviewed indicating his or her admissions status. Applicants receiving a letter of acceptance are required to reply. Dental and Medical applicants must submit a deposit of \$300 at the time of acceptance. The deposit is applied to the tuition of the matriculating student. If the student withdraws the application prior to May 15th, two thirds of the deposit (\$200) is refunded.

Inquiries regarding the status of an admission and/or supplemental application should be directed to the Office of Admission.

Additional information regarding the admissions requirements of each school is found in the respective school sections of this catalog.

General Orientation

New Student Orientation is coordinated by the Office of Student Services and Enrollment Management and is a mandatory one-day program required of all incoming freshman students. During New Student Orientation students receive pertinent information that will help them to succeed at Meharry Medical College. This general orientation is the mechanism used to introduce new students to the College. Also, new students are registered during this orientation session.

* All three schools have their respective orientation program beginning the day after general orientation concludes.

Orientation Day Schedule

The Orientation Program begins at 8:00 a.m. and ends at 5:00 p.m. and includes the following:

- Meeting with administrators and staff
- Attending workshops and presentations from key campus offices
- Registering for classes
- Getting your Meharry Medical College Banner ID Card — your all-in-one picture ID and library card

- Taking a campus tour
- Meeting other incoming students
- Learning how to navigate Blackboard with the Associate Dean of Academic Computing

Orientation Fee

This non-refundable fee includes costs associated with the preparation and implementation of orientation. All freshman students are assessed an Orientation Fee.

Registration

A student cannot register until he/she has received official notification of admission to the College. Each student is required to complete a trial schedule with the Student Academic Affairs Office in his/her respective school. The trial schedule is forwarded to the Office of Records and entered into the Banner system as the student's official registration record. Once the trial schedule is entered, tuition and fees are assessed and the academic registration process is complete. Payment of tuition and fees is handled by the Office of the Treasurer.

Cross Registration

Meharry Medical College participates with Fisk University, Tennessee State University and Vanderbilt University-Peabody College in cooperative programs among the four participating institutions. Students who desire to cross-register (take courses at a participating school) must determine if the courses are available and obtain the permission of the respective dean and advisor to enroll in such course(s). He/she must then bring a signed statement of permission (schedule) to the Office of Records to complete the registration process.

Center for Educational Development and Support

The Center for Educational Development and Support located in the Daniel T. Rolfe Student Center is a comprehensive academic support unit established to create an environment that stimulates and nurtures excellence in teaching and learning, fosters teaching effectiveness and provides students with instructional assistance/resources, including board review.

Mentoring Program

Transitioning into a professional school is critical. Meharry Medical College's strength resides in its caring nature. The mentoring program is designed to provide the essential foundations for our students as future clinicians and scientists. Students will be provided assistance with time management, fiscal management, professional development and career development. Our major goal is to demonstrate the importance of ties between basic scientists and clinical scientists. Such ties can expedite translational studies involving bench and bedside investigators. The program emphasizes to students the importance of scholarship (independent thinking and learning) and communication. It is the intent of the program to ensure that no student "falls between the cracks."

Convocation

"Convocation" means a gathering, and in the academic arena, convocations can be held for a variety of purposes.

At Meharry, Fall Convocation opens each new academic year and celebrates the scholarly success of students and faculty.

The Office of the President coordinates Convocation.

Commencement

A student is eligible for graduation if he/she has satisfactorily completed the academic requirements outlined in the Policy and Procedures Manual, including the completion of passing Step I and Step 2 Board (SOM), Part I and Part II Board (SOD) and deposited thesis/dissertation (MSPH/PhD).

A favorable vote of the faculty from each of the respective schools with concurrence of the dean is required for candidacy for the M.D., D.D.S., M.S.P.H., MSCI and PhD degree.

The degree is awarded at the commencement exercise in May. The degree may be dated for the third Saturday in May, the last Friday in October, or December 31 for persons who complete requirements of the program after the Commencement date.

Academic, Research, and Clinical (ARC) Computing

Academic Computing encompasses the use of technology in the education, research, and clinical departments of the College. In order to support the adoption of technology in these departments, services are provided for faculty, staff and students of the College in technology assessment, evaluation, acquisition, administration, maintenance, instruction, training/testing, development, customization, and support.

The services are administered from The Blackboard Technology Center (BTC); it opened in early 2004 to primarily provide technical resources to Curriculum Designers and Developers and Blackboard Users (faculty, staff, and students). It is located in room 2003, 2nd floor of the West Basic Sciences building at 327-6265.

Technology Assessment and Evaluation

- Conducts yearly survey of faculty and students on technology use and needs
- Assesses problems and deficiencies in use of technology and proposes plans for additional training and technology upgrades
- Results of yearly surveys are published

Training/Testing

- Provides scheduled classes for faculty, staff, and students in the following areas
 - E-mail and Logging on to the Meharry network
 - Microsoft Office Suite of Tools (Outlook, Word, Excel, PowerPoint, and Access)
 - Biomedical Informatics
 - Blackboard Learning System
 - Use of Instructional Technology (i.e. Smartboard, document cameras, CPS Interactive Response System)
- Tests all incoming students in Basic Computer Skills and knowledge of Microsoft Word and/or PowerPoint
 - All students must pass the Basic Computer Skills Test with 70% or better
 - All Medical Students must pass the Word and PowerPoint Test with a grade of 70% or better
 - Students not achieving a grade of 70% or better are trained until this objective is met

Development, Customization, and Support:

- Audio Visual – support for using audiovisual aids for instruction and presentation
 - Set-up
 - Photography
 - Training on use of equipment
- Customization Services – offers customized creation of material in these areas
 - PowerPoint
 - Digital Photography
 - Digital Video
 - Digital Scanning
 - Color & B/W poster-size prints
 - Conversion of slides to digital format

- Conversion of VHS tape to digital format
- Transfer of media (Zip, Floppy, etc.) to CD
- Web Development – supports the design and development of web sites
- Videoconferencing – supports the design, development, scheduling, and maintenance of videoconferencing facilities: M001, Surgery, Utmost Bound, M208
- Help Desk – on-site support for day-to-day problems such as minor computer and laptop repairs, software installations, support for problems encountered when using software applications, and more.

Office of Lifelong Learning

Within the tradition of medical education and health care delivery and consistent with the overall mission of Meharry Medical College, the mission of the Office of Lifelong Learning is to provide relevant continuing medical and dental education for physicians, dentists and other health care professionals, based on identified educational needs. This will reflect recent developments in clinical practice in all specialties, biomedical sciences, medical and dental ethics and health care delivery. Special emphasis will be offering courses on diseases and health conditions that disproportionately affect ethnic minority populations.

Meharry Medical College is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians. (AMA – Category I Physicians Recognition Award)

Meharry Medical College is an American Dental Association (ADA) Continuing Education Recognized Provider, (ADA-CERP Provider).

General Financial Information

Student Financial Services

Meharry Medical College recognizes the importance of funding a professional school education. The primary responsibility of the Student Financial Services team is to manage all federal and campus-based student loan programs, and to receipt and disburse student aid in an accurate, efficient, and timely manner while complying with regulatory requirements. We are committed to serving each student by assisting to meet his or her financial needs in any way possible.

The Office of Student Financial Services consists of three units that provide a broad range of financial and related administrative support service to students. These units are: Student Financial Aid, Student Accounts Receivable and Student Campus-Based Loans.

Student Financial Assistance

Meharry Medical College offers grants, scholarships, loans, and federal work study to eligible students. Meharry participates in the student financial aid programs funded by the U.S. Department of Education, the U.S. Department of Health and Human Services as well as state and regional funding agencies. The College selects student financial aid recipients based on established criteria and demonstrated financial need. Most of the College's institutional scholarships are awarded based on outstanding academic performance.

Degree candidates that are U.S. citizens or eligible non-citizens are eligible to qualify for most federal student aid programs. Contact the Office of Student Financial Aid (615-327-6826) for additional information regarding the financial aid programs that are available at Meharry Medical College.

More detailed information regarding student financial aid may be reviewed at the College website at <http://finance.mmc.edu/page.asp?Page=1347>.

For more information contact:

**Office of the Treasurer
Division of Finance
Meharry Medical College
Suite 505, Kresge Learning Resources Center
1005 Dr. D. B. Todd, Jr. Blvd.
Nashville, TN 37208
(615) 327-6220**

Payment of Tuition and Fees

Every student who registers at Meharry Medical College incurs a financial obligation to the College. Tuition and fees are assessed at the point of registration and are the financial responsibility of the student. Tuition and fee schedules are located in the school sections of this catalog. Students ineligible for financial assistance in the form of Federal aid, Institutional aid, or Scholarships are considered as "Self-Pay" students.

Self-Pay students are expected to pay in full at the point of registration for the Fall semester and on or before the first business day of the Spring semester. Payment may be made by cash, credit card, check, or money order payable to Meharry Medical College. Payments should be remitted to the Office of the Treasurer 1005 Dr. D. B. Todd, Jr. Blvd. Nashville, TN 37208. Monthly invoices are mailed by the 15th, to the student address provided to the Office of Records. Meharry assesses late registration fees of \$100.00 for the first late day and \$25.00 per day each day thereafter. Student accounts delinquent more

than 90 days may also be placed with an outside agency for collection and are subject to additional costs of collection expenses and reasonable attorney fees.

Meharry offers a Deferred Payment Contract plan. The contract is semester based and must be approved by the Dean of the respective school. The deferred contract requires an initial payment of one-fourth of the balance due plus a \$25.00 contract service fee. Contract participants who fail to make timely payments are assessed a \$50.00 monthly late fee.

Students whose accounts are delinquent may become ineligible to register for subsequent semesters; receive grades, transcripts, and the withholding of diploma upon completion of degree requirements.

Disbursement of Aid

Financial Aid is disbursed to the student's account ten days before the first day of classes each semester.

Disbursement of Excess Payments/ Living expense funds

Funds received in excess (living expenses) of the total tuition and fee charges for the semester will be disbursed (refunded) to the student within five (5) business days after the first day of class each semester. Disbursements may be in the form of a direct deposit or a check payable to the student. Direct deposit authorization must be submitted to the Office of Student Financial Aid.

Tuition Refund Policy

A student is entitled to a refund of tuition and fees by Meharry Medical College if he/she withdraws or changes his/her enrollment status prior to sixty percent of the semester. Information regarding the College Refund Policy is located on the website and in the student handbook.

Eligibility for Disbursement of Refunds

- Before refunding any tuition and fees, the office of the treasurer shall examine all student financial obligations to the College, i.e., tuition, fees, rent, bookstore, library, etc., as well as matured and/or past due emergency loans.
- Promised student financial aid cannot be considered in determining eligibility for refunds; therefore, requests for refunds can be approved only for the amount of cash receipts and/or other credits in excess or charges as shown in the student's account.
- Disbursement forms are prepared by the Office of the Treasurer upon official notification from the Office of Records that a student has withdrawn from the college. Ten working days after an application for refund has been made, the check should be in the Treasurer's Office for distribution.
- Lending agencies will be notified immediately of any change in student status.

Student Campus-Based Loans

The Meharry Medical College Student Loan Office is responsible for managing all federal campus-based loan programs. We are responsible for the management and collection of federal Perkins (NDSL), Health Professions Student Loans (HPSL), Loans for Disadvantaged Students (LDS), and Primary Care Loans (PCL).

The student account will not be credited with loan funds until the student has completed an entrance interview. Before leaving the College, a student is required to participate in an exit interview for these loan programs. Students who participate in any federal loan program are required to complete an exit interview.

The Student Financial Aid Office determines student eligibility for financial aid and awards all federal and campus-based student loans. Award notices are sent to the student by the Student Financial Aid Office, with instructions to go to the Office of the Treasurer to complete an entrance interview. Once the student

completes all required documentation, and signs the promissory note, the campus-based loan funds are credited directly to the students' account. If a credit balance is created, a refund is processed.

The Loan Office is also responsible for the collection of all campus-based loans. Once the borrower enters repayment, information and applications for deferment, forbearance, and cancellation can be obtained from our office. Loan Coordinators are available to provide repayment assistance including information about consolidation, and loan rehabilitation.

Scholarships

Each year a number of scholarships are awarded to incoming and continuing students. Meharry Medical College is dedicated to creating a rich and superior academic environment for each student. This environment is enhanced by the inclusion of students who are talented and represent a broad spectrum of society—cultural, social and economic. Honor Scholarships ordinarily continue through four years of study, as long as students maintain satisfactory academic performance. There is no application for Honor Scholarships. Selected students will generally be notified in late February or early March. General Scholarships are annual and may be awarded as funds are available. A list of scholarships for each school may be requested from the Office of Financial Aid. Additional scholarship information is available in the Office of Financial Aid and/or the Offices of Student/Academic Affairs in each school.

General Regulations

The faculty and administration of Meharry Medical College expect full cooperation from the student body in the maintenance of high moral and ethical standards. Meharry Medical College reserves the right to dismiss a student at any time if his/her conduct is considered unsatisfactory. On the other hand, students should expect and receive courteous and helpful assistance from staff and innovative instruction and research methods from the faculty.

Personal integrity and honesty are very important attributes of a professional; therefore, any student involved in irregularity in an examination will be referred to the College Disciplinary Committee for action.

Any student who withdraws from the College must comply with the College's official withdrawal policy. Students who drop out after the end of the refund period will be assessed full tuition and fees for the semester.

The use of the name "Meharry Medical College" is forbidden on all student orders except as it may appear in the mailing/shipping address.

Programs for public exercises of entertainment sponsored by the students or student organizations, in which the name of the College is used, must be submitted to the Office of Student Services and Enrollment Management for approval.

Meharry Medical College is not responsible for personal property that may be lost or damaged on its premises.

No student of Meharry Medical College shall treat or prescribe drugs for patients except during regular clinics or dispensaries of the hospitals connected with the College and then only under the supervision of the practitioner of medicine or dentistry who must sign the prescriptions and is licensed in the state in which the hospital or clinic is located. All students must abide by the Meharry Medical College Substance Abuse Policy. The Substance Abuse Policy is available in the Student Handbook and at www.mmc.edu.

Name Change

Name change requests must be in writing and include your student ID or social security number, your name PRIOR to the change as well as your new name, date of birth, marital status (unmarried, married, widowed, separated), your signature, and a copy of one of the following court-generated documents:

- birth certificate
- marriage certificate
- court order / divorce decree
- Original copy of Passport or visa (Required by international students.)

The College reserves the right to request multiple forms of documentation for verification.

Request for Transcripts, Medical Board Blanks, Dental Board Blanks, Examination Forms and Licensure

A student may have the first transcript issued without charge. The first official transcript for each academic year is \$5, after which there is a \$2 fee for each additional transcript. Upon graduation, one transcript is issued without charge, after which a fee of \$2 each applies.

Fees for the issuance of transcripts are payable in advance. Official transcripts bearing the seal of Meharry Medical College are released only to educational institutions and other recognized authorities. A student may receive an unofficial copy.

Students are charged a fee of \$1 for the completion of blanks and/or forms with the College seal embossed on them.

Licensures Form Fee: There is a \$2 charge for each licensure issued.

Processing Time: It takes approximately 3-5 business days to prepare and mail the requested licensure documents.

Requests may be submitted in writing to:

Meharry Medical College
Attn: Registrar's Office – Licensure Request
1005 Dr. D.B. Todd, Jr. Blvd
Nashville, TN 37208-3599

The following information should be included:

- Name of student at time of attendance
- Indicate if the person was a student, faculty, fellow or graduate and program or department to which the person is/was affiliated
- If a person had more than one affiliation with Meharry Medical College, indicate which one(s) require certification
- Years of attendance
- Social security number of the person
- Address to which the licensure letter should be mailed
- Phone number (in case any questions arise)

Please take care to ensure the accuracy of all information before submitting your application.

Please note: If money is owed to Meharry, the certification letter will not be released until the debt is cleared.

If you have any questions, contact the Registrars Office at (615) 327-6806 or by e-mail at slbrown@mmc.edu.

Request of Duplicate Diplomas

A certificate of graduation may be issued upon proof indicating that the diploma was stolen, lost or destroyed, accompanied by a notarized statement. A duplicate diploma may be given if the officials who signed the original diploma are still associated with the College; if not, a certificate verifying the date of graduation and type of diploma awarded imprinted with the official seal of the College will be issued. A fee of \$75 is charged for this service.

Academic Regulations

Grades

Grade point averages are based on the 4-point grading system. The grading symbols consist of the following system: A (Excellent), B (Above Average), C (Average), or F (Failure) which appears on both the progress report (report given to students at the end of each academic semester) and official transcript.

Note: The grade C is unacceptable in Graduate School. It is awarded but must be balanced by academic exception in other courses.

Incomplete (I) grade means that the student has completed at least 3/4's of the course, but for some reason 1/4 remains to be completed (in progress).

** All final grades will remain on a student's permanent transcript.

Symbols

WV withdrew voluntarily
WA withdrew administratively
WF withdrew failing
WP withdrew passing
NR none reported
S satisfactory
U unsatisfactory
* Repeat

Leave Of Absence

A leave of absence is an interruption of the normal course of study requested by the student and requiring prior approval by their respective dean. A student's leave of absence shall not extend beyond one calendar year. An official leave of absence form must be processed and may be picked up in the Office of Records. A leave of absence from the College is given only to students who are in good academic standing. Any other interruption in the normal course of study constitutes a withdrawal. At the discretion of the dean, a student may be required to take an administrative leave of absence. Additional information regarding leave of absence is found in the Academic Catalog section of each school.

Withdrawal from a Course

When a student withdraws from a course, he or she must get the appropriate forms from the Registrars Office. The student shall be required to get the approval of the respective department head, the Associate/Assistant Dean for Student Academic Affairs and final approval from their respective Dean and return the form to the Registrars Office. The criteria for withdrawal are outlined in each of the school's academic policies and procedures manuals and in the Academic Catalog section of this document for each school.

Withdrawal from the College

A student may withdraw from Meharry Medical College after filing the official withdrawal form properly executed with the appropriate signatures in the Registrars Office. Grades for completed courses shall be recorded on the official record, including a "WF" or "WP" for courses in which the student is enrolled at the time of withdrawal.

If the student desires to return to Meharry Medical College, the formal readmissions application process must be completed in the Admissions Office.

Additional information regarding withdrawal from the College is found in the Academic Catalog section of the document and in the Academic Policies and Procedures Manual for each school.

Advancement

Promotion to the next class or graduation requires satisfactory completion of all courses. Recommendations for promotion are made by the Faculty Evaluation Committee appointed for the respective years of instruction, except in the case of the senior class, where the general faculty of the respective schools, approve students for graduation.

Representatives from each department involved in a given year's instruction compose the various evaluation committees. The dean of the school, the vice dean, associate deans for Student and/or Academic Affairs or his/her equivalent, and the College Registrar are *ex- officio* members.

These committees serve as forums wherein instructors discuss the final estimates of the student's academic standing in all subjects. The dean makes recommendations concerning promotions and the disposition to be made of students who encounter academic difficulty. Recognition is also given to superior work. The Registrars Office is notified by the Committee Chair of the actions of the Committee.

At the end of the senior year, the dean and the general faculty of the respective schools recommend to the Board of Trustees those students who have satisfactory scholastic records for the entire course of study and who, in the judgment of the faculty, give evidence of personal fitness for the practice of their profession.

Unsatisfactory Academic Performance

Each school has an established Satisfactory Academic Progress Policy. These policies are located in the respective school sections of the Academic Catalog Section of this document.

Honor Policy

Meharry Medical College reserves the right to reprimand, require withdrawal, or to dismiss any student for unprofessional conduct or behavior. Among the behaviors which may lead to disciplinary action are: cheating, deception, sexual harassment, fraud, destruction of property, substance or alcohol abuse, and criminal activity.

SPECIFICATIONS:

Accusations involving students will be transmitted in writing to the College's Student Disciplinary Committee. Any individual may inform any committee member of alleged violations. Immediate action may be taken for emergency infractions/violations until a formal disciplinary hearing can be conducted. The Committee will review referred cases and take appropriate action. Students may appeal any discipline committee action by written communication to the President of the College. The procedures for review and appeal of disciplinary actions are published in the Policies and Procedures Manual of each school/division.

As members of the College academic community, students are subject to the obligations and responsibilities which accrue to them by virtue of this membership. The demonstration of appropriate conduct and exercise of applicable responsibilities is expected.

Students, faculty, staff and/or test administrators must report observed violations to a member of the school Honor Council, in accordance with Honor Code procedures. Any alleged violation shall be immediately reported by the President of the Honor Council, or Faculty Advisor, to the principal clinician or scientific investigator after the alleged violation is received.

Breach of rules, regulations, policies and procedures governed by the disciplinary procedure shall include, but is not limited to:

1. Furnishing False Information

It shall be a breach of conduct for any student to intentionally:

- furnish false information to the College with the intent to deceive, forge, or in any way alter or falsify documents or evidence required for admission to the College.
- give false information or testimony during the investigation or hearing of a disciplinary matter.
- forge, alter, destroy, damage or misuse College documents, records, or identification.
- present, the work of another individual or source as one's own concepts or ideas;
- submit for credit any academic work for which credit has previously been obtained or that is being submitted to another course or assignment;
- falsify or alter any institutional, research, and/or academic record or make use of such forged or altered records;
- remove or destroy information related to patient treatment or one's own academic or clinical work; and
- file false charges or accusations against another individual.

2. Theft or Misappropriation of Funds

It shall be a breach of conduct for any student to intentionally engage in the following:

- theft, destruction, or damage of intellectual or informational property of the College or an affiliate's property;
- theft or misappropriation of school funds;
- theft, destruction, or damage of College property;
- theft, destruction, or damage of the property of another person;
- theft of supplies, property, equipment or examinations.

3. Breach of Rules

Breach of recognized ethical and professional standards applicable to health professional schools include, but are not limited to the following:

- unauthorized entry to College facilities and/or possession of keys to College facilities.
- failure to comply with directives of College officials acting in the performance of their duties.
- violation of written College policies and regulations.
- violation of the terms of probation.
- attempt to commit or to be accessory to the commission of any act in violation of this or other standards of conduct.
- breach of any municipal, state, or federal laws, rules, regulations, ordinances on College property.
- breach of rules of any institution while on rotation at that institution.

4. Physical Assault

Physical assault of any person on College-owned or controlled property, or conduct which threatens or endangers the health or safety of any person will be considered a breach of conduct.

5. Examination Dishonesty

Any use of unauthorized assistance during an examination constitutes dishonesty and represents unacceptable examination behavior. Examples of examination dishonesty include: communication with another student in any manner during an examination;

copying material from another student's examination; permitting a student to copy from an examination; use of unauthorized books or notes; falsification/misrepresentation of academic or clinical performance; impersonation of another student at any examination or other form of academic work; interference with an instructor's administration of an examination, giving and/or receiving aid during an examination.

6. *Improper Patient Care*

Improper patient care includes, but not limited to, the following:

- failure to provide care for assigned patients or to carry out assigned activities.
- failure to respect patient and/or professional confidentiality.
- unsupervised patient care.
- provision of patient care or conduct of professional activities when physical, mental, or emotional factors may compromise adequate care or results.
- willful disregard of patient care/other directives from supervising faculty.
- rendering of patient care or other professional activities when under the influence of alcohol or other drugs.

7. *Sexual Harassment*

Sexual harassment is prohibited by College policy and by law. The complete policy on sexual harassment is presented in The College Policy Manual, and each year the policy is distributed to all students and employees of the College.

8. *Substance/Alcohol Abuse*

The following behaviors constitute conduct code violations:

- possession of illegal drugs/substances.
- sale of illegal drugs/substances.
- drunken or disorderly conduct on the campus or affiliate site.

Student Dismissal and Appeals

The Student Disciplinary Committee reviews charges of breaches of the rules, regulations, policies and procedures of Meharry Medical College relating to all non-academic matters. Members of the Committee shall be appointed for a two-year term except for the student member, who shall be appointed on an annual basis. The Student Disciplinary Committee and its chairperson shall be appointed by the president. Any person may inform any member of the Student Disciplinary Committee of an allegation of a breach of rules, regulations, policies and/or procedures of Meharry Medical College within the jurisdiction of the Student Disciplinary Committee. The Student Disciplinary Committee shall determine whether the allegations or charge, if proven true, are governed by the procedures for review and appeal of disciplinary action governing non-academic matters.

If the Student Disciplinary Committee determines that the allegation or charge is governed by the procedures for review and appeal of disciplinary actions, the chairperson shall send a written notice to the student stating the charge(s) and notice of a hearing before the Student Disciplinary Committee. The student shall receive notice of the scheduled hearing no later than 72 hours before the hearing. The Student Disciplinary Committee may grant additional time, at its discretion, if the student's request is reasonable.

In the event of a challenge of whether a matter should be governed by the procedure for review and appeal of academic actions the Senior Vice President for Health Affairs/Dean of the School of Medicine, Dean of the School of Dentistry and Dean of the School of Graduate Studies and Research shall have

sole responsibility for determining which procedures shall govern. Any such challenge must be submitted in writing to the Dean of the respective schools no less than 24 hours before the scheduled hearing.

The student shall have the right to be present at the hearing to present witnesses, to rebut the evidence against him/her and to have a Meharry Medical College student or faculty member accompany him/her. Legal counsel may be present but may not participate in the hearing.

The hearing will be an informal one, not governed by technical rules of evidence as employed in a court of law, but the Student Disciplinary Committee may accept any information it deems pertinent to the charges made.

The Student Disciplinary Committee shall render its decision based upon the evidence presented at the hearing. The standard for determining whether the student has breached a rule, regulation, policy or procedure, and is subject to disciplinary action, shall be whether a preponderance of the evidence supports the Committee's decision. The burden of proof shall be upon the College.

The Student Disciplinary Committee shall maintain a record of the hearing pending final determination of the charges against the student.

The Student Disciplinary Committee shall notify the student of its decision in writing by certified or registered mail at the address maintained in the Registrars Office within 15 days.

A student may appeal the decision on the grounds as set forth in the following paragraph by writing a letter of appeal to the president no later than 72 hours from the receipt of the decision of the Student Disciplinary Committee.

The President or his designee will determine whether there has been substantial compliance with the published administrative procedures and whether there is sufficient evidence to support the decision of the Student Disciplinary Committee. The President notifies the student by certified or registered mail at the student's address as recorded in the Registrars Office. The president shall also inform the dean of the student's school and the Associate Vice President for Student Services and Enrollment Management.

The President may request the student and/or the Student Disciplinary Committee to provide additional information prior to issuing a decision.

The President's decision is final. The student shall be notified of the President's decision in writing no later than 15 days from the receipt of the student's appeal.

The student shall be allowed to continue in the academic program during proceedings unless extraordinary circumstances exist such as exemplifying conduct which may endanger the welfare of others.

Breach of rules, regulations, policies and procedures governed by the disciplinary procedures shall include, but are not limited to:

- Furnishing false information to the college with the intent to deceive;
- Knowingly giving false information or testimony during the investigation or hearing of a disciplinary matter;
- Forgery, alterations, destruction, damage, or misuse of college documents; records, or identification;
- Physical abuse of any person on college-owned or controlled property; or conduct which threatens or endangers the health or safety of any person;
- Theft;
- Unauthorized use of or entry to college facilities and/or unauthorized possession of keys to college facilities;

- Failure to comply with directives of college officials acting in the performance of their duties;
- Violation of written college policies and regulations as stipulated herein or as announced by authorized personnel;
- Violation of the terms of probation;
- Attempt to commit or to be an accessory to the commission of any act in violation of other standards of conduct;
- Breach of any municipal, state, or federal laws, rules, or ordinances on college property;
- Breach of any rules of sister institutions while on rotations;
- Breach of recognized ethical and professional standards applied to student's area health professional schools.

The Student Disciplinary Committee's sanctions may include expulsion, suspension from one or more classes for a specified or an indefinite period of time, probation, reprimand and restriction of privileges. The Student Disciplinary Committee may use its discretion in requiring alternative disciplinary actions.

Sexual Harassment Policy

This policy is intended to ensure that Meharry Medical College provides and maintains an environment that is appropriate to its educational mission and free from harassment and intimidation. This policy also ensures that the College is in compliance with its legal and ethical obligations, that policies exist to respond to allegations of sexual harassment, and that all persons are provided information about this policy. Teaching and learning can best be accomplished in an environment of understanding and mutual respect for the dignity and rights of each individual. Thus, this sexual harassment policy applies to all administrative officers, faculty, staff, residents, students, persons seeking admission to or employment at Meharry Medical College, vendors, consultants, independent contractors and all others acting on the College's behalf.

Accountability

Responsibility for implementing this policy is delegated by the President to the Vice President for Administration/General Counsel and the Affirmative Action Officer for assuring implementation of this policy.

Definition

Sexual harassment – Sexual harassment is defined as any sexual solicitations, advances, remarks or actions that are demeaning or intimidating. Sexual harassment constitutes any sexual attention that is unwanted, deliberate, and/or repeated advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature when (1) submission of such conduct is made explicitly or implicitly the terms or condition of an individual's employment or academic standing; (2) submission to or rejection of such conduct by an individual is used as a basis for employment or educational decision affecting an individual; or (3) such conduct has the purpose of unreasonably interfering with an individual's work or academic performance, or of creating an intimidating, hostile or offensive environment for working or teaching and learning.

An informal complaint – is one that does not require an investigation and can be resolved between the Affirmative Action Officer and the parties involved.

A formal complaint – is one that requires a written complaint from the complainant and an actual in-depth investigation, including interviews with complainant, alleged harasser, and witnesses.

Sexual harassment is unacceptable behavior and will not be tolerated at Meharry Medical College. When the College has notice of possible sexual harassment, it will take immediate and appropriate steps to investigate and take action to resolve the matter in a serious, objective and confidential manner. Where necessary, a range of disciplinary measures may occur up to and including dismissal or expulsion.

Policy

Sexual harassment inhibits an individual's academic or work performance, or creates an intimidating, hostile, or demeaning education or working environment. Faculty member(s) or other instructional personnel shall not engage in an amorous relationship with a student who is enrolled in a course being taught by the faculty member or whose academic work is being supervised by the faculty member, even when both parties appear to have consented to the relationship. Such relationships may easily be perceived as promoting or showing inappropriate favoritism to student(s) based on non-meritorious consideration. Relationships between faculty and students outside the instructional context may also prove problematic, particularly when the faculty member participates in decisions that may reward or penalize students.

Relationships between residents/students and patients, during treatment or after termination of treatment, may lead to negative consequences: therefore, such relationships are discouraged.

Procedures

Complaints of a violation of this policy shall be brought to the attention of the Affirmative Action Officer (AAO), a member of the President's Council, or to any other appropriate member of the institutional community, including any academic or administrative officer. The person receiving the complaint shall counsel the complainant as to the options available under this Policy, including referral to the AAO or other appropriate institutional representative for help in resolving the complaint informally; or help in drafting a formal complaint.

The institution's sexual harassment policy shall be explained during new faculty and staff orientations and faculty/staff development workshops. A copy of the institution's policy shall also be submitted to the campus library for display.

Vendors, consultants, independent contractors and all others acting on behalf of the College who are not required to participate in faculty/staff orientations shall receive a copy of this policy upon commencement of their contracts. Violation of this policy may result in Meharry's termination of such contracts.

The policy is also reissued on an annual basis, through payroll distribution. The policy shall also be included in the following publications: College Policy Manual; Faculty Handbook; Personnel Policy and Procedures Manual; and Student Handbook.

All complaints, informal and formal, shall be immediately forwarded to the AAO in the Office of the Vice President for Administration/General Counsel. The AAO will consult with the appropriate academic or administrative officers of the College to determine the appropriate method for investigating the complaint.

Investigation

The purpose of the investigation is to ascertain whether an actual violation of this policy has occurred. Investigations shall include the following:

- An interview with the complainant to determine the facts upon which the complaint is based. This meeting should be used to find out the "who, what, when, and where" of the complaint. Any evidence of, or witnesses to, an alleged incident should be obtained during the interview.
- An interview with the accused to inform him/her that a complaint has been made against him/her. The complainant should not be identified, but if the alleged harasser knows the identity of the complainant, it should be made clear that no retaliatory action will be tolerated.
- In a formal complaint, interviews with any other persons believed to have pertinent/factual information or knowledge of the alleged policy violation.

- The person investigating the complaint will take steps to ensure confidentiality of all parties involved.
- The accused shall have a full opportunity to respond to all allegations.
- If it is concluded that there is a reasonable basis for believing that a policy violation has occurred and a negotiated settlement cannot be reached, formal action will be taken. The AAO will inform the complainant and the accused of the results of the investigation and actions to be taken to resolve the complaint.
- Upon completion of the investigation, a written notice of disposition shall be forwarded to the accused as well as the complainant.

Regulations

Complaints and cases of sexual harassment will be dealt with promptly. Any member of the institutional community found to have engaged in sexual harassment will be disciplined. Disciplinary action for violation of this policy shall include, and not be limited to, any of the following courses of action, as appropriate, based upon the severity of the violation: written warning and reprimand, with letter being placed in employee's, student's, or contractor's official file, and appropriate counseling; suspension; termination of employment or contractual relationship, or expulsion.

Every effort shall be made to protect the privacy of all parties involved. Such efforts are intended to protect the complainant and any witnesses from retaliation and to assure that the rights of the accused are protected. All parties involved in sexual harassment complaints should be cautioned about discussing the case outside of the resolution process.

Examples of Sexual Harassment

Examples of sexual harassment include, but are not limited to:

- Direct or implied threats that submission to sexual advances will be a condition of employment, work status, promotion, grades or letters of recommendation.
- Direct proposition of a sexual nature and/or sexually suggestive or obscene gestures.
- Subtle pressure for sexual activity, such as repeated or unwanted stares.
- Conduct intended to discomfort or humiliate, that includes comments of a sexual nature or sexually explicit statements, questions, innuendoes or jokes.
- Suggestive or inappropriate communications, notes, letters or other written materials displaying objects or pictures those that are sexual in nature that would create a hostile or offensive work or learning environment.
- Physical assault, or attempted or actual kissing, fondling, pinching, or other inappropriate touching, such as brushing against the body.
- Remarks of a sexual nature about a person's clothing or body or remarks about sexual activity or speculations about previous sexual experience.

Substance Abuse

Any student or employee found to be in violation of the following drug and alcohol policy may be subject to one or more of the disciplinary sanctions described. Meharry Medical College reserves the right to exercise discretion in the imposition of disciplinary sanctions.

The use or possession of alcoholic beverages on campus or at any college-sponsored activity may result in required participation in a drug or alcohol treatment or rehabilitation program and placed on probation, suspension, expulsion or termination.

The distribution of illicit drugs on campus or at any college-sponsored activity may result in required participation in a treatment program, suspension, expulsion, termination and/or referral of the matter for criminal prosecution.

Much has been written in the press about the prevalence and effects of substance abuse in our society. While we are not aware of widespread alcohol or drug abuse at Meharry Medical College, it would be naïve to assume that no problems exist. Each student has a responsibility to pursue his/her academic endeavors in a safe and conscientious manner. In order to ensure that this responsibility is met, students must be free from the effects of alcohol and other performance impairing substances. Meharry has instituted this policy to address the risk of substance abuse at the college and to make certain that a high quality of academic achievement and integrity is maintained.

Purpose

Meharry Medical College regards substance abuse (alcohol and chemical dependencies) as an illness which may respond to medical treatment. This policy seeks to allow any student suffering from this illness the opportunity to receive the same careful consideration and referral for treatment as those having other illnesses. Student status will not be jeopardized by a voluntary request or referral for diagnosis and treatment of alcoholism or chemical dependency.

Definition

Alcohol and chemical dependencies are defined as illnesses in which a student's use of alcohol or other chemicals interferes with his/her academic and/or clinical performance, interpersonal skills and relationships.

Policy

- When a student is suspected to have an alcohol or chemical dependency problem, it should be discussed with the Student Affairs office in the respective school and/or the Counseling Center. As with any apparent medical problem the student should be referred to a physician. A professional evaluation will determine whether or not the student has an abuse problem and requires treatment.
- When a student's performance is unsatisfactory and it has been medically determined that alcohol or chemical dependency is at least partly the cause, the student must accept referral and agree to a program of treatment. Continued unsatisfactory performance may result in the student being relegated to administrative leave of absence with reevaluation prior to reinstatement.
- Failure to follow through with referral for medical evaluation and/or treatment shall be cause for appropriate disciplinary sanctions including dismissal. This information will be treated as confidential.
- It shall be the responsibility of each student who observes or has knowledge of another student in condition which impairs the ability to perform academically, or who poses a hazard to the safety and welfare of others or is otherwise in violation of this policy, to promptly report that fact to the Student Affairs Office in the respective school and/or Counseling Center.
- Any student who is present on campus or at an affiliated institution in an intoxicated condition as a result of the illegal use of drugs or due to alcohol consumption shall be subject to disciplinary sanctions including possible dismissal.
- The off-campus use of alcohol or illegal drugs which results in impaired academic performance, or interpersonal relationships, may be grounds for disciplinary sanction including possible dismissal.

- The illegal use, sale or possession of narcotics, drugs or controlled substances while on college and/or hospital premises are grounds for disciplinary sanction including possible dismissal. The criminal conviction for the illegal sale of narcotics, drugs or controlled substances while off campus is also grounds for disciplinary sanction including possible dismissal.
- Where there is reasonable suspicion of a violation of this policy, and at the discretion of the institution, vehicles, lockers, pocketbooks and/or related personal items may be searched without prior notice to ensure an environment free of illegal drugs or alcohol. Any student found to have illegal drugs and/or drug paraphernalia in their possession or control, vehicle and/or personal area will be subject to immediate disciplinary sanctions including dismissal.

The institution earnestly solicits the understanding and cooperation of all students in implementing the policies set forth herein. Questions regarding this policy and its application should be directed to the Student Affairs Office in the respective schools and/or the Counseling Center, with assurance that inquiries will be kept confidential.

Copies of the full policy, which includes criminal sanctions and counseling services, can be found in the policies manual of the respective schools.

Drug-Free Campus

Code of Conduct

Drunkenness, distribution or possession of alcoholic beverages and/or the unlawful use, possession or distribution of illicit drugs on campus is prohibited.

It shall be a violation of the Code of Conduct to possess, distribute or consume alcohol beverages and/or any illegal drug on campus. Violation of these provisions of the Code of Conduct shall result in the imposition of one or more of the disciplinary actions set forth in the Substance Abuse Policy and Drug-Free Workplace Statement. Violation of these standards of conduct may result in severe criminal penalties under local, state and federal law. Federal legislation requires that these penalties be set forth in writing.

Student Immunization Policy

Meharry Medical College is committed to providing a safe environment for the education of its students in the health professions and sciences, particularly those students who work in the hospital or with patients. Students, faculty and staff in the health sciences setting are vulnerable to communicable diseases such as tuberculosis, measles, mumps, rubella, diphtheria and polio. Those students who may come in contact with blood or blood products also have the potential of being infected with hepatitis, HIV or other viruses. These diseases are susceptible to control by appropriate immunizations.

Required Immunizations

Meharry Medical College requires that all students entering the schools of Medicine, and Dentistry and the Program in Allied Health Professions undergo tuberculosis skin testing during registration and document prior immunity to tuberculosis, hepatitis B, measles, varicella, mumps, rubella, diphtheria, polio, and tetanus either by serological evidence, previous physician-diagnosed disease, or validated immunization. Students known to have the Hepatitis B antigen or an antibody-positive (or already immune) or for whom contraindications are established by Student Health Services may be exempted from immunization. Student Health Services will determine whether immunization documentation is adequate. Students, who cannot provide adequate documentation of prior immunization or physician-diagnosed diseases, (as indicated by serological evidence) must receive immunization to these diseases prior to the beginning of the fall semester of the said academic year.

School of Medicine

Administration

Valerie Montgomery Rice, M.D., Dean/Sr. Vice President for Health Affairs
Pamela C. Williams, M.D., Vice Dean/Sr. Associate Dean for Student and Academic Affairs
Billy R. Ballard, D.D.S., M.D., Associate Dean, Graduate Medical Education
Chike M. Nzerue, M.D., Associate Dean, Clinical Affairs
Etheleen McGinnis-Hill, Ph.D., Associate Dean, Curriculum Support and Evaluation
Susanne Tropez-Sims, M.D., Associate Dean, Clinical Affiliations
Patricia Matthews-Juarez, Ph.D., Associate Dean, Faculty Affairs and Development
Vicky V. Mosley, M.S., Associate Dean, Academic Computing
Brenda R. Merritt, M.P.A., Assistant Dean, Student and Academic Affairs
Edna W. Lockert, Ph.D., Assistant Dean, Counseling
Dennis W. Saucerman, C.P.A., Assistant Dean, Business and Finance
Sharon D. Turner-Friley, M.S.W., Assistant Dean, Special Programs
Cassandra S. Ward, Ed.D., Chief of Staff

Department Chairpersons

Lee E. Limbird, Ph.D., Biomedical Sciences
Samuel E. Adunyah, Ph.D., Cancer Biology
Lee E. Limbird, PhD., Cardiovascular Biology (Interim)
Fernando Villalta, Ph.D., Microbial Pathogenesis & Immune Response
Clivel G. Charlton, Ph.D., Neurobiology & Neurotoxicology
George A. Breaux, M.D., Professional Education
Roger J. Zoorob, M.D., M.P.H., Family and Community Medicine
Steven N. Wolff, M.D., Internal Medicine
Pamela C. Williams, M.D., Medical Education
Patrick A. Griffith, M.D., Neurology
Gloria Richard-Davis, M.D., Obstetrics and Gynecology
Billy R. Ballard, D.D.S., M.D., Pathology
Xylina D. Bean, M.D., Pediatrics
Samuel O. Okpaku, M.D., Psychiatry and Behavioral Sciences
Anthony C. Disher, M.D., Radiology
Derrick J. Beech, M.D., Surgery

Medical Education at Meharry Medical College

The School of Medicine is the oldest and largest of the three schools at Meharry, and admits 96 students per year. The Graduate Medical Education Program has 96 approved positions in the specialties of Internal Medicine, Family & Community Medicine, Preventive and Occupational Medicine, Obstetrics & Gynecology and Psychiatry. In addition, students from the School of Dentistry and the School of Graduate Studies and Research receive training from School of Medicine faculty.

The School has eleven (11) departments: Biomedical Sciences, Family and Community Medicine, Internal Medicine, Medical Education, Neurology, Obstetrics and Gynecology, Pathology, Pediatrics, Psychiatry and Behavioral Sciences, Radiology and Surgery. The School also is home to nationally recognized centers that provide research, training and patient care in women's health, HIV/AIDS, neuroscience, mental health and community health. The faculty and students actively serve the community through many programs involving mentoring, counseling and volunteer work to inspire and direct elementary, high school and college students to careers in the health professions.

The index teaching facility for the School of Medicine is the Nashville General Hospital at Meharry. Major affiliate training sites include the Veterans Administration Medical Center and Middle Tennessee Medical Center in Murfreesboro, Tennessee; Blanchfield Army Community Hospital at Fort Campbell, Kentucky; and Matthew Walker Comprehensive Health Center in Nashville. Additional clinical affiliates include Centennial Medical Center, Baptist Medical Center, several community health clinics, and numerous private practice sites in rural and urban underserved areas in the surrounding middle Tennessee area.

Although a historically black medical college, Meharry's student body reflects the diversity of the nation with representation from the Caucasian, Hispanic, Asian and Native American communities. The majority of Meharry's graduates keep the commitment of the principles upon which the College was founded by overwhelmingly choosing to practice in underserved urban and rural communities. More than 50 percent of the medical graduates select primary care specialties each year. Meharry continues to be proud of its leadership role in helping to ensure diversity in the nation's health professions work force.

Mission of the School

The School of Medicine of Meharry Medical College pledges to offer a unique, quality health science education to students of diverse origins, especially African Americans, with emphasis on addressing underserved populations. In addition, the School of Medicine will teach and monitor excellence in the delivery of primary or holistic care, provide a foundation for life-long learning, and conduct research relevant to the health of the disadvantaged.

Goals and Objectives of the Program

The educational outcomes/objectives of the program of medical education leading to the M.D. degree emphasizes educational excellence, patient care, communication, professionalism, primary care, technology, and life-long learning. The candidate for the M.D. degree will be required to show competence in each of these areas, as follows:

Educational Excellence

1. Demonstrate the acquisition and a thorough understanding of basic and clinical science knowledge in relationship to the normal and abnormal biological and physiological processes as applied to the practice of medicine.
2. Demonstrate an understanding of the impact of ethical, social, cultural, psychological, and economic factors that affect the management, prognosis, and prevention of disease as applied to clinical care.

Patient Care

3. Demonstrate clinical proficiency in obtaining a comprehensive medical history and performing a thorough physical examination.
4. Demonstrate through the utilization of diagnostic technologies the ability to formulate a differential diagnosis, appropriate therapeutic course, and management plan.

Professionalism

5. Demonstrate the ability to acquire and apply new knowledge, through the evaluation of medical literature in relationship to the practice of medicine and medical research.
6. Demonstrate knowledge of issues utilizing standard (universal) precautions in patient care when promoting health and disease prevention.
7. Demonstrate the ability to apply appropriate ethical and legal principles and professional conduct as they relate to patient care.

Primary Care

8. Demonstrate the knowledge, skills, attitudes, and behaviors necessary to perform as generalist clinician.

Technology

9. Demonstrate computer literacy as applied to and utilized in internal and external outcome assessments, certification/licensure examinations, and patient care.

Life-long Learning

10. Demonstrate continuing clinical proficiency and competency in medical practice through the utilization of acquired knowledge, and skills resulting from the process of life-long learning.

Education

The School of Medicine's strategic goals which specifically address educational excellence include:

1. To provide a comprehensive medical educational program that meets the accreditation standards of the Liaison Committee on Medical Education.
2. To graduate students who are professionally competent, prepared to enter and complete graduate medical education qualified for licensure.
3. To provide a program in medical education rooted in the realities of emerging health care reform and the ethics of health care.
4. To enhance the quality of all accredited residency training programs and improve the educational experiences of our undergraduate matriculants, as well as the quality of resident participation in each of the required undergraduate clerkships.
5. To strengthen the existing biomedical sciences program leading to the Ph.D. degree and the combined M.D./Ph.D. degrees.
6. To sustain and enhance programs in continuing medical education.
7. To establish and maintain a caring, nurturing, and compassionate environment conducive to the successful personal and professional development of students.
8. To develop and implement model recruitment programs and academic enrichment services aimed at improving the quality of the accepted applicant pool and rates of retention and progression.

Patient Care

Candidates for the M.D. degree are required to demonstrate proficiency in obtaining a comprehensive medical history, performing a thorough physical examination and through the utilization of diagnostic technologies, the ability to formulate a differential diagnosis, appropriate therapeutic course, and management plan.

Academic Program

The School of Medicine is organized into 11 departments that administer the instructional, research and clinical activities of the School. The clinical departments include Internal Medicine, Neurology, Pediatrics, Obstetrics and Gynecology, Surgery, Family and Community Medicine, Radiology, Psychiatry, Medical Education and Pathology. The basic sciences are organized under one Department of Biomedical Sciences with five divisions: Professional Education, Cancer Biology, Microbial Pathogenesis and Immune Response, Neurobiology and Neurotoxicology and Cardiovascular Biology.

The School of Medicine offers two different curricula - a four-year and a five-year medical education program. Each curriculum promotes a high degree of personal contact between faculty and students.

The Four-Year Curriculum

The four-year curriculum of the School of Medicine is divided into two phases. Phase I consists of the first two years generally referred to as the basic sciences years. The sequencing of course content provides students with a basic, systematic pre-clinical curriculum. Daily class schedules are arranged to foster effective teaching and learning. Phase II consists of the last two years, generally referred to as the clinical years. The clinical clerkships begin in the junior year which is 48 weeks in length. Students are randomly assigned to the six clinical rotations: internal medicine, obstetrics and gynecology, pediatrics, surgery, psychiatry and family medicine.

The senior clinical rotations are divided into required clerkships and electives. Thirty six weeks, divided into eight clinical rotations and the USMLE Step 2 Review (four weeks each) are required to complete the senior year. The four required senior clerkships are internal medicine, radiology, senior family medicine, and senior psychiatry/neurology; additional electives include four units (16 weeks).

Junior and senior clinical clerkships are taken at the Alvin C. York VA Medical Center in Murfreesboro, Nashville VA Medical Center, Nashville General Hospital at Meharry, Vanderbilt Children's Hospital, Blanchfield Army Community Hospital (BACH), Middle Tennessee Medical Center, Southern Hills Medical Center, Middle Tennessee Mental Health Center, Elam Mental Health Center, Parthenon Pavilion, Centennial Medical Center, Middle Tennessee Children's Clinic, Health Clinic East (Mt. Juliet), Centennial Pediatrics (Murfreesboro) and/or other affiliated sites approved by the department.

The Five-Year Curriculum

The five-year curriculum of the School of Medicine is divided into three phases. Phase I consists of an eight-week summer program, offered prior to the fall enrollment of the first-year class. Phase II, generally referred to as the basic sciences years, consists of the first two years of the curriculum. The first-year curriculum is divided into a two-year period of matriculation offering students reduced study loads. However, the sophomore year is consistent with that of the four-year curriculum. Phase III, generally referred to as the clinical years, is comprised of the third and fourth years and is consistent with that found in the four-year program.

The Comprehensive Medical Review Program (CMRP)

The CMRP is an extensive review of the basic sciences to prepare students to take the United States Medical Licensure Examination (USMLE) Step 1 and Step 2 Clinical Knowledge (CK). The course provides participants with concentrated reinforcement and review, as well as access to several question banks with items similar to those seen on USMLE Steps 1 and 2. Students are encouraged to utilize these items on a daily basis following pre-assessment. A battery of discipline-specific comprehensive exams and practice tests are also used to profile each participant's performance. Individual counseling is affected by utilizing the performance profiles (measured outcomes), enabling feedback and direction for self-study and by providing information to the skills specialist for test-taking mechanics. This customized approach assures the individual adequate time for preparation to eliminate cognitive weaknesses while providing a mechanism to measure proficiency in each area to guide certification progression, graduation and ultimately licensure.

Departments and Course Descriptions

Department of Biomedical Sciences

Chair: Lee E. Limbird, Ph.D., Professor

Division of Cancer Biology, Chair: Samuel E. Adunyah, PhD

Professors: Salil K. Das, DSC; Josiah Ochieng, PhD; Manuel Valenzuela, PhD

Associate Professors: Sakina E. Eltom, PhD

Assistant Professors: Shawn J. Goodwin, PhD; Armandla Ramesh, PhD; LaMonica Stewart, PhD; Marilyn Thompson, PhD; Olugbemiga Ogunkua, MD, PhD

Division of Cardiovascular Biology, Interim Chair: Lee E. Limbird, PhD

Professor: Ifeanyi J. Arinze, PhD

Associate Professors: Zhongmao Guo, MD, PhD; Evangeline D. Motley-Johnson, PhD

Assistant Professors: Hong Yang, MD

Division of Microbial Pathogenesis & Immune Response, Chair: Fernando Villalta, PhD **Professors:**

Gautam Chaudhuri, PhD; Robert G. Holt, PhD; Raju Ramasamy, PhD

Assistant Professors: Donald Alcendor, PhD; Minu Chaudhuri, PhD; Xinhong Dong, PhD

Division of Neurobiology and Neurotoxicology, Chair: Clivel Charlton, PhD

Professors: Sukhbir S. Mokha, PhD

Associate Professors: Darryl Hood, PhD; Sanika S. Chirwa, PhD

Assistant Professors: Twum-Ampofo Ansah, PhD; Guong Fan, PhD; Habibeh Khoshbouei, PhD; Wan-Qian Zhao, PhD; Eun-Sook Lee, PhD; Yelun Wang, PhD

Division of Professional Education, Chair, George A. Breaux, MD

Professors: Mohit L. Bhattacharyya, PhD; John T. Clark, PhD; Maria de Fatima Lima, PhD; Mohammed A. Maleque, PhD; Etheleen McGinnis Hill, PhD; Hubert K. Rucker, PhD

Associate Professors: Emmanuel Atta-Asafo-Adeji, PhD; Susan DeRiemer, PhD; Arthur Jackson, PhD; Alfred A. Nyanda, PhD

Assistant Professors: Carol Freund, PhD; Shaymali Mukherjee, PhD; Olugbemiga Ogunkua, MD, PhD; John S. Thomas, PhD

Instructors: Kaneatra Simmons, PhD; Eloise Cunningham, MS

Emeritus/a Professors: Mukul Banerjee, PhD; Michael D. Davis, MD, PhD; Fred Jones, PhD; Mark E. Levitch, PhD; Henry A. Moses, PhD; James J. Mrotek, PhD; Dolores Shockley, PhD; James Story, PhD; James Townsel, PhD

Faculty with Adjunct Appointments:

Professors: Richard W. Hanson, PhD, Case Western Reserve University; George C. Hill, PhD, John A. Phillips, III, MD, C. Rollo Park, MD, and James L. Sherley, MD, Vanderbilt University SOM

Associate Professors: Terence S. Dermody, PhD, Vanderbilt University SOM and Scott M. Williams, PhD, Vanderbilt University

Assistant Professors: Robert F. Clark, PhD, Department of Psychiatry, University of Tennessee HSC; Hua Xie, DDS, Ph.D., Department of Stomatology, School of Dentistry, MMC

COURSE DESCRIPTIONS

ANAT 320 - Gross Anatomy and Embryology – Gross anatomy and embryology is offered in the Fall semester of the first year of the curriculum and is a course that teaches the gross structure and developmental sequences of the human body. Students working in small groups dissect a human cadaver. Didactic and clinically oriented lectures are supplemented by prosections, radiological presentations and surface anatomy. Clinical correlations are made through periodic demonstrations and/or didactic lectures by clinicians. **(10 credit hours)**

BICH 320, 330 - Molecular Cell Biology & Genetics (MCBG) – I and II – This course covers fundamental cellular, biochemical, genetic and molecular concepts that are foundational to the practice of medicine. **(12 credit hours)**

MCBG I is offered during the Fall semester to freshman medical students and covers eukaryotic cell structure and function, cell cycle events and control and macromolecular synthesis including protein, RNA and DNA. Other aspects of DNA metabolism are also covered including genetic exchange and DNA repair. Important mechanisms that mediate the regulation of gene expression are also discussed including topics related to the extra cellular matrix, epithelial and connective tissues. Basic biochemical concepts are also presented and include lectures in intermediary metabolism, amino acid synthesis and metabolism, enzyme kinetics, mechanisms of transport and fatty acid synthesis and oxidation. Students are also introduced to current molecular biology techniques including polymerase chain reaction (PCR), enzyme-linked immunosorbent assay (ELISA), Northern, Southern and Western blot analysis and the use of other molecular techniques in disease diagnosis. **(9 credit hours)**

MCBG II is offered during the Spring semester to freshman medical students and includes topics in nutrition, nutrition in hypertension and immunity, wasting disorders, blood clotting disorders, apoptosis, biochemical mechanisms of leukemias, hematopoiesis and cell signaling. Emphasis is also placed on a study of the biochemical, genetic and molecular basis for disease including blood clotting disorders, lipid storage disease, phenylketonuria and tyrosemia. **(3 credit hours)** **Prerequisite:** **BICH 320 - Molecular Cell Biology & Genetics (MCBG I)**

ASMD 330 - Principles of Immunology and Host Defense - This course is offered in the Spring semester of the first year of the curriculum. The goal of this course is to help students achieve an integrated and correlated understanding of the immune system and its role in host response and human disease. The course encompasses a presentation of the basic immune response and the principal mechanisms involved in disease with an in-depth presentation of the pathology associated with immunologic diseases. The course has two components. The basic immunology component focuses on the processes in the innate humoral and cellular immune systems and the lymphoid tissues involved in those responses. The clinical immunology component focuses on how the immune system is involved in many areas of clinical medicine including allergy and hypersensitivity, tumor resistance, transplantation, autoimmune diseases, primary and secondary immunodeficiencies, blood transfusions, infectious diseases and immune modulation. The information is presented in a combination of didactic lectures, laboratory exercises, small-group sessions, patient-oriented problem solving exercises, on-line clinical case evaluations and clinical correlations. **(4 credit hours)** **BICH 320 - Molecular Cell Biology & Genetics (MCBG I)**

ASMD 345 - Foundations in Human Disease and Treatment - This course is offered to freshman medical students during the Spring semester and includes modules in neuroscience pathology and pharmacology. The goal of this course is to provide students with a foundation for understanding the cellular basis of the physiologic and biologic manifestations of disease. A focus on fundamental principles related to disease mechanisms and treatment sets the stage for coverage of specific disease processes presented in the organ system modules. Moreover, the neuroscience component of the course provides students with the fundamental principles of excitable cells, synapses, as well as the structure, function and contractile properties of muscle. **(3 credit hours)** **Prerequisite:** **BICH 320 - Molecular Cell Biology and Genetics I**

ASMD 350 - Principles of Infectious Diseases - This course is offered in the Spring semester of the first year of the medical school curriculum. The goal of this course is to help students achieve an integrated and correlated understanding of the principles of infectious diseases involving bacterial, fungal, parasitic and viral pathogens including current knowledge regarding the epidemiology, virulence mechanisms, clinical symptoms and pathology, diagnosis, treatment and prevention of specific infectious agents. This course is divided into three sections: (1) microbial structure, function, physiology, genetics and molecular biology; (2) bacterial and fungal pathogens; and (3) parasitic and viral agents of human disease. The approach is to present the pathogens as a survey of infectious agents but within the context of the major organ systems/tissues affected. This approach should facilitate the student's study in the organ-based courses. Information in the course is presented in a combination of didactic lectures, laboratories, small-group sessions, patient-oriented problem solving exercises and clinical correlations. **Prerequisite:** (5 credit hours) BICH 320 - *Molecular Cell Biology and Genetics I*; ASMD 330 - *Principles of Immunology and Host Defense*

PHYS 320 - Integrated Neuroscience - The Integrated Neuroscience course will help students achieve an integrated and correlated understanding of nervous system structure, function, dysfunction and therapeutics. The course will be taught in the following blocks: (1) anatomy of the nervous system, meninges and vasculature; (2) sensory systems; (3) motor system; and (4) higher function. Each block will be composed of instruction in biochemistry, neurology, pathology, anatomy and cell biology, pharmacology, physiology, psychiatry and behavioral sciences. **(8 credit hours)** **Pre-requisite:** ASMD 345, *Foundations in Human Disease and Treatment*

ASMD 430 - Hematopoietic and Lymphoreticular Systems- This course is offered to sophomore medical students during the Fall semester and builds on the knowledge obtained from the freshman year in understanding the normal immune system, structures and response to infectious diseases of the hematopoietic and lymphoreticular systems. This course is designed to assist students in gaining an understanding of the physiologic processes, pathologic changes, as well as the effects of both pharmacological and other clinical interventions utilized to restore tissues and the organ at the molecular, cellular and macroscopic levels, to their optimal functional conditions. In addition, upon completion of this module students will gain an understanding of the associated behavioral changes in normal and disease states as it affects the hematopoietic and lymphoreticular systems and the body as a whole. The course presents detailed microscopic and macroscopic structures of the hematopoietic and lymphoreticular systems in health, disease, and the result of pharmacological and other clinical interventions. **(3 credit hours)** **Prerequisites:** ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320

ASMD 435 – Musculoskeletal, Skin & Related Connective Tissues - This course is offered in the Fall semester of the second year and builds on the knowledge obtained from the freshman year in understanding the normal musculoskeletal, skin and related structures in health and in disease states. This course will assist students in understanding the physiological processes, the pathological changes and effects of both pharmacological and other clinical interventions to restore tissues and the organ at the molecular, cellular and macroscopic levels to their optimum functional conditions. In addition, students will gain an understanding of the associated behavioral changes in normal and disease states as it affects musculoskeletal, skin and related connective tissues, as well as the body as a whole. The course presents detailed microscopic and macroscopic structures of the musculoskeletal, skin and related connective tissue in health, disease, and the result of pharmacological and other clinical interventions as they relate to musculoskeletal, skin and related connective tissues. **(3 credit hours)** **Prerequisites:** ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320

ASMD 440 - Cardiovascular System - This course is offered to sophomore medical students during the Fall semester and begins to explore how alterations in structure (anatomy) and function (physiology) of the cardiovascular system disrupt the functions of the human body. It provides the foundation by which students begin to understand the cellular basis for the physiologic and biologic manifestations of diseases of the cardiovascular system and the adaptations that the body makes to the changes produced by disease processes. Integral in this course is the understanding of how the basic anatomy and physiology of the cardiovascular system relates to the adaptation and the pathogenesis of cardiovascular diseases.

Topics related to blood vessels, pericardium, myocardium and endocardium serve as the basis for the course. A variety of instructional modalities including laboratory exercises, small group discussions, team learning exercises and individual assignments using clinical cases and problem sets are utilized to emphasize and integrate conceptual information. **(4 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 445 - Pulmonary System - This course is offered to sophomore medical students during the Fall semester and is designed to assist students in building on the foundation of knowledge of the structure and function of organs and tissues of the human body learned during the freshman year. This course will focus on detailed microscopic and macroscopic structures of the pulmonary system in health, disease, and as a result of pharmacological and other clinical interventions. Comprehensive and coherent didactic information presented in lecture format, small group discussions, case presentations and self-directed learning assignments on the pulmonary system will be utilized to emphasize and integrate conceptual information. **(4 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 450 - Gastrointestinal and Hepatobiliary Function - This course is offered in the Fall semester of the second year and examines the physiology, pathology and pharmacological treatment of gastrointestinal and hepatobiliary function. Clinical presentations and small group discussions of patient-based cases assist the student in the correlation of basic and clinical information. The goal of this course is to assist students in understanding the structure and function of the gastrointestinal and hepatobiliary systems in health and disease. The course covers normal and abnormal processes of the gastrointestinal system, the principles of therapeutics in the gastrointestinal system, and the gender, ethnic, and behavioral considerations affecting disease treatment and prevention, including psychosocial, cultural, occupational, and environmental factors. **(4 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 455 – The Endocrine System - This course is offered to sophomore medical students during the Spring semester and examines the physiology, microanatomy, pathology, microbiology, and pharmacology of endocrine function and dysfunction. Clinical team learning presentations and small group discussions of patient-based cases assist the students in correlating basic and clinical information. The goal of this course is to assist students in understanding the structure and function of the various components of the endocrine system in health and disease. The course covers the normal and abnormal processes associated with the endocrine system, the principles of therapeutics associated with endocrine function and dysfunction and the gender, ethnic, and behavioral considerations affecting disease treatment and prevention, including psychosocial, cultural, occupational, and environmental factors associated with endocrine function and dysfunction. **(5 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 460 – The Reproductive System - This course is offered in the Spring semester of the second year and examines the physiology, microanatomy, pathology, microbiology, and pharmacology of reproductive function and dysfunction. Clinical team learning presentations and small group discussions of patient-based cases assist students in correlating basic and clinical information. The goal of this course is to assist students in understanding the structure and function of the various components of the reproductive system in health and disease. The course covers normal and abnormal processes in relationship to reproductive function, the principles of therapeutics associated with reproductive function and dysfunction, as well as gender, ethnic, and behavioral considerations affecting disease treatment and prevention, including psychosocial, cultural, occupational, and environmental factors associated with reproductive function and dysfunction (e.g., STDs). **(4 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 335, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 465 - Growth, Development and Aging - This course is taken in the second semester of the sophomore year after students have been exposed to all organ systems from primarily an adult perspective and provides the foundation for competent and compassionate care of patients of all ages.

The goal of this course is to integrate biological, social and psychological aspects of progression through the lifespan with particular emphasis on pediatric and geriatric populations. The course utilizes multiple formats including lectures, panels, small group activities, semi-structured interviews in community settings, independent readings, and a group research project which will be presented orally, as well as in writing. The course covers the physiological changes and pharmacodynamics associated with each stage of life; the diseases and pathological states more common in children, adolescents and the elderly; the gender, ethnic, cultural and behavioral considerations affecting disease treatment and prevention across the lifespan; and addresses ethical issues such as interactions with caregivers, loss, grief, death and dying, research on children and the elderly and interactions with the health care system. **(3 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 320, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 470 - Renal/Urinary System – This course is offered in the Fall semester of the second year and is designed to assist students in understanding the physiological processes, pathological changes and the effects of both pharmacological and other clinical interventions to restore tissues and organs at the molecular, cellular and macroscopic levels, to their optimum functional conditions. The course will allow students to build on knowledge obtained from the freshman year in understanding the normal immune system, its structures and response to infectious diseases of the renal/urinary system. Behavioral changes in normal and disease states as it affects the renal/urinary system and the body as a whole are an integral component of this course. **(4 credit hours)** **Prerequisites:** **ANAT 320, ASMD 230, 320, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ASMD 480 – Psychiatry/Behavioral Sciences - This course is taken in the Spring semester of the sophomore year and is designed to enhance students' understanding of the bio-psychosocial correlates of illnesses and to assist them in implementing intervention strategies directed toward improved outcomes in holistic patient management. Case studies and case presentations are introduced for the purpose of clinical correlations and problem-solving approaches. Specific topics covered in this course include adult transitions, adjustment disorders, human sexuality, the study of symptoms differentiation and classification, psychoactive substance use disorders, factitious disorders and malingering. Ethical issues related to the patient's care and forensic psychiatry is also given coverage. **(3 credit hours)** **Prerequisites:** **ANAT 320, ASMD 330, 320, 330, 340, 345, 350, BICH 320, 330, PHYS 320**

ELECTIVE COURSES

ANAT 602 – Gross Anatomy Elective- Specialized sessions arranged for advanced study or research in specific anatomical areas utilizing small group activities which facilitate teacher-student interaction. **(9 credit hours)**

BICH 601 – Biochemistry Research – This rotation may be four to eight weeks in duration depending on the research project selected and is open to junior and senior medical students. During the course of this elective, each student will receive appropriate training in the basic skills needed to conduct research including the development of hypotheses, experimental design and data analysis. **(9 credit hours)**

BICH 651 – Nutrition Research – This four-week course is open to third and fourth year medical students, interested in the various aspects of nutrition research. Students will receive training in the basic skills needed to conduct projects including the development of hypotheses, experimental design and data analysis. **(9 credit hours)**

PHAR 602 – Pharmacology Research - This four-week course is open to third and fourth year medical students, interested in the various aspects of research in pharmacology. Activities in this program include research for medical students on drug action at the cellular and molecular levels; factors affecting variation in drug response; and interaction between different diseases, such as hypertension, sickle cell disease, kidney and liver disorders. **(9 credit hours)**

PHYS 602 – Research in Physiology - This rotation may be four to eight weeks in duration depending on the research project selected and is open to junior and senior medical students. During the course of this elective students will receive appropriate training in the basic skills needed to conduct research including the development of hypotheses, experimental design and data analysis in their area of interest. **(9 credit hours)**

Clinical Sciences

Department of Medical Education

Chair: Pamela C. Williams, MD, Professor

Professors: Annie W. Neal, PhD; Linda D. Sander, PhD

Assistant Professors: Renee E. Bowen, RN, JD; Juanita F. Buford, EdD; Jane Fort, PhD; Ethel Robertson, EdD, FNP-C; Leonard G. Webster, MD; Shari Wherry, MSN, FNP-C; Stephanie Sweet, MD; Carolyn T. Szetela, PhD

Instructors: Josie Hasle, BS

OBJECTIVES

Established in 1995, the Department of Medical education provides a locus for the integration and coordination of curriculum development, clinical skills instruction, and assessment for the program leading to the M.D. degree. The objective is to develop, enhance, and evaluate educational programs for students and faculty across basic science departments, clinical departments, divisions and schools. Through the pursuit of excellence in teaching and learning, the department aims to expand and enrich the Meharry community of scholars, devoted to the educational enterprise of the School of Medicine. The department is responsible for coordinating the Principles and Practice of Medicine courses, Comprehensive Medical Review Programs, Standardized Patient Program, clinical skills assessment program and promoting innovative ideas for teaching and learning in medical education.

COURSE DESCRIPTIONS

ASMD 230 – Mini Academic Program for Success (MAPS) is an intensive six-week academic program, required for all incoming first year medical students. MAPS is designed to provide freshman medical students with a head start on first year basic science core courses of the medical school curriculum. The main goals of the MAPS Program are to: (1) introduce incoming medical students to the rigors of professional school in a supportive but realistic environment; (2) identify potential academic challenges, strengths and weaknesses of students prior to the beginning of the Fall semester and (3) design individualized intervention strategies based on student performance on examinations, with the aim of maximizing student retention and progression in medical school.

The courses offered during the MAPS Program include:

Biochemistry/Cell Biology (BCB/MCBG): The BCB mini course continues into the Fall semester as the Molecular Cell Biology and Genetics (MCBG) course. The main objective of the mini course is to introduce students to basic concepts in medical biochemistry, human genetics, molecular cell biology and basic histology, relevant to human life processes. The medical biochemistry and genetics topics will be presented with clinical correlations, and they will provide students with excellent integrative tools to comprehend the inheritance patterns, and the molecular and biochemical basis of human diseases. The basic histology and cell biology component of BCB, will focus not only on microscopic structure but also on structure-function relationships at the cell and tissue levels, and it will incorporate many important fundamental concepts in anatomy, embryology, neurobiology, pathology, and biochemistry.

Introduction to Clinical Anatomy (ICA/GAE): The ICA mini course is intended to provide students with a fundamental knowledge and understanding of the basic concepts of human anatomical sciences and radiology, in preparation for the more advanced Gross Anatomy and Embryology (GAE) course offered in the Fall semester.

Foundations in Clinical Medicine (FICM/PPM): The FICM mini course, which continues into the Fall semester as Principles and Practice of Medicine (PPM), is designed to introduce students to the profession of medicine and it will focus on areas of the profession including (1) the responsibilities

and competencies required of a medical student and a physician, (2) the skills necessary to succeed in the practice of clinical medicine, and (3) the ethical and legal considerations relating to medical student/physician interactions with patients.

(4 credit hours)

ASMD 335 – Principles and Practice of Medicine (PPM) – IA - This course, offered in the fall of the freshman year, concentrates on appreciation of the patient-physician encounter (styles of communication, cultural competency, patient confidentiality); development of scientific reasoning and critical thinking skills including the interpretation of biostatistics and epidemiological findings, understanding of health policy and the organization of health care systems and clinical research in the United States; and an introduction to clinical ethics and end-of-life issues. A particular highlight of the course is opportunities for all students to shadow physicians in clinical settings. Approximately half of all scheduled sessions utilize a small group format. Additional interactive sessions address medicine and societal issues relating to basic science coursework occurring parallel to the PPM course. Students are required to submit journals describing their clinical experiences and to prepare a number of papers and reports demonstrating the development of their scientific reasoning skills. **(7 credit hours)** **Prerequisite:** ASMD 230 - *Foundations in Clinical Medicine*

ASMD 340 - Principles and Practices of Medicine IB - This course is offered during the Spring semester of the freshman year and builds on the clinical observations made by the students during their earlier clinical shadowing experiences. Having observed physicians taking histories and performing physical examinations, the students now begin to develop their own skills in these two key areas. Peer partners, standardized patients and videotaping sessions are used to help the students perfect their interviewing and examination skills. The physical examination skills learned during this semester will parallel the Integrated Neuroscience curriculum being offered simultaneously. Additionally, interactive sessions addressing medicine and societal issues relating to basic science coursework will continue to be offered in the spring as in the fall. **(5 credit hours)** **ASMD 335 – Principles and Practice of Medicine (PPM) – IA**

ASMD 415 and 416 – Principles and Practice of Medicine IIA and IIB - This course is presented in an interdisciplinary format correlated with the organ system presentations of each of the second-year disciplines. The purpose of this course is to assist students in integrating the basic and clinical sciences and to provide a framework for students to learn the interviewing and physical examination skills necessary for competent patient care. This two-semester course also serves as an introduction to the concepts involved in clinical problem solving and consists of physical diagnosis, case-based teaching and clinical correlations. **(415 – 7 credit hours)** **(416 – 7 credit hours)** **Prerequisites:** ASMD 335 and 340 - *Principles and Practice of Medicine - IA and IB*

ASMD 402 - Comprehensive Medical Review Program (CMRP) - The Comprehensive Medical Review Program (CMRP) is an extended review of the basic sciences to prepare students to take the USMLE Step 1 examination. After administration of a comprehensive pre-assessment examination, students receive access to daily quizzes via an electronic question bank that simulates USMLE Step 1 questions. This battery of discipline-specific comprehensive examinations and practice tests is used to create measured outcomes that profile each participant's performance. Individual counseling, using performance profiles, is conducted and students receive feedback and direction for self-study. These performance profiles are also used by skills specialists to help students with the mechanics of taking standardized tests. This customized approach assures that students have adequate time to address cognitive weaknesses, while providing a mechanism to measure proficiency in each area. **(2 credit hours)**

ELECTIVES

ASMD 605 - Computers in Clinical Medicine - This elective is a four-week course for third- and fourth-year medical students. It provides instruction on the use of computers and the Internet in the study and practice of medicine. During this rotation, students are introduced to various Internet sites of medical significance. Students are initially shown how to use the content of Internet sites and then given assignments on various medical and laboratory disorders using the Internet as their only resource. Upon

completion of this course, students will possess the knowledge, computer skills and attitudes necessary to utilize the computer as a tool for the lifelong study and practice of medicine. **(9 credit hours)**

ASMD 636 - Clinical Management Elective - Students who participate in this four-week elective gain experience as a medical educator. This elective assists the senior student in developing teaching skills in the clinical and basic science setting. Principles of adult learning theory, effective teaching techniques and evaluation of clinical performance, including effective methods of giving feedback to trainees, are presented and emphasis is placed on how to efficiently track physical diagnosis/clinical skills performance. Each participant in the elective puts theory into practice by serving as an instructor for freshman and/or sophomore students in physical diagnosis and clinical interviewing. Participants also serve as evaluators of student performance during standardized patient examinations. By serving as teachers and evaluators, students enhance their own clinical skills. **(9 credit hours)**

Department of Family and Community Medicine

Chair: Roger J. Zoorob, MD, MPH, FAAFP, Professor

Professors: Paul Juarez, PhD; Patricia Matthews-Juarez, PhD

Associate Professors: Marino Bruce, PhD,

Assistant Professors: Nathaniel C. Briggs, MD; Michelle T. Bruce, MD; Sangita Chakrabarty, MD; Millard Collins, MD; Kevin O. Dennis, MD; Green A. Ekadi, PhD, Vanessa Elliott, PhD, Irwin Goldzweig, MS; Claudia Mays, MSW; Cynthia Moriarty, MD; Ilaben B. Patel, MD, Victoria Smith, MD

Instructors: Xu Wang, MD

Adjunct Faculty: Harry Bonnaire, MD, Instructor; Lee Berkenstock, MD, Assistant Professor; Dennis Carter, MD, Instructor; Arikana Chihombori, MD, Assistant Professor; Rao Chunduru, MD, Assistant Professor; Clifford Concepcion, MD, Assistant Professor; Conchita Clifford, MD, Professor; David Horowitz, MD, Assistant Professor; S. L. Lampkin, MD, Assistant Professor; Robert Levine, MD, Professor; Carolyn Lightford, MD, Assistant Professor; Melvin Lightford, MD, Assistant Professor; Gita Mishra, MD, Assistant Professor; Venkatt Reddy, MD, Instructor; Robert A Richter, MD, Instructor; Wm. MacMillan Rodney, MD, Professor; David Schlundt, PhD, Associate Professor; David Sellers, MD, Assistant Professor; George W. Smith, Assistant Professor; Daniel Sumrok, MD, Assistant Professor; Frank D. Wade, MD, Assistant Professor

OBJECTIVES

The department's goal is to educate and train physicians in the clinical specialty of family medicine and to encourage all physicians to provide high quality, continuous, comprehensive primary care to poor, underserved and ethnically diverse peoples who make up this nation and world. The Department provides training with family physicians teaching the basic clinical, academic and psychomotor skills necessary to provide continuing, comprehensive health care unrestricted by age, gender, organ system and location of service.

Family Practice students are encouraged to evaluate existing business and office management practices in various ambulatory settings in anticipation of assuming a managerial responsibility in their own practice. Students are instructed in the appropriate use of the problem oriented medical record system and work with office personnel to handle both predictable and unpredictable clerical, managerial and personnel problems. Students are encouraged to develop life-long learning habits and to learn research methods in approaching and solving problems related to health care delivery, as well as the basic process of health and disease in relationship to the family unit in the community. The Department allows for on-going re-evaluation of goals and objectives in light of changing trends in medical education and health care delivery. The department also emphasizes medical ethics as it relates to patient-physician and peer relations.

COURSE DESCRIPTIONS

FAMD 502 - *Family Medicine Clerkship* - A one-on-one preceptor experience at one of the many approved affiliated community hospitals, office practices and health centers located in Tennessee. This clerkship focuses on ambulatory services in a comprehensive, continuing health care program, preferably utilizing a family health care team. Students are under the supervision of a physician preceptor as part of a family health care team. They are expected to share in decision-making and in planning for patients, their families and communities. **(9 credit hours)**

FAMD 603 - *Senior Family Medicine Clerkship* - This rotation is a four-week, community-based clinical experience designed to expose senior medical students to community-based experiences in underserved communities across the state of Tennessee, with a focus on the primary care specialties. This clinical experience occurs under the tutelage of primary care physicians who have well rounded clinical practices. In addition to theoretical and clinical community-based exposure, this rotation is designed to positively influence medical students to consider locating their own clinical practice in a rural or urban underserved area. **(9 credit hours)**

ELECTIVE COURSES

FAMD 604 - *Family Medicine Senior Elective* – This elective experience fully utilizes the abundance of ambulatory family and community health care settings available throughout Tennessee. The objective is to progressively and systematically build upon the skills and knowledge previously gained during the first and second years and the clinical clerkship in Family Medicine. Preventive medicine, psychology and social disciplines are structured into the family health team focus. In addition to clinical experiences, students are provided with the opportunity for community involvement so that they gain more insight into the characteristics of the community and the impact environment has on the health of the population served. Our numerous preceptors permit exposure to the broad spectrum of diverse health care practice models that exist in rural and urban areas, in an effort to inculcate an adequate operational concept of health and illness management. **(9 credit hours)**

Department of Internal Medicine

Chair: Steven N. Wolff, MD, Professor

Professors: A. Cherrie Epps, PhD; Marquette Faulkner, MD; Margaret Hargreaves, PhD; James E. Hildreth, MD, PhD; Jon H. Levine, MD; John J. Murray, MD, PhD; James Potts, MD; Pamela C. Williams, MD

Associate Professors: Erlete Ascencao, PhD; Vladimir Berthaud, MD, MPH; Clinton Cummings, MD; Michael Floyd, MD; Chukwuemeka Ikpeazu, MD, PhD; Chike M. Nzerue, MD; Waldemar Popik, PhD; James Sullivan, MD; David S. Trochtenberg, MD

Assistant Professors: Richmond Akatue, M.D.; Sharon E. Albers, MD; Yong Cui, MD, MSPH; Andrew J. Desrusseau, M.D.; Monique Forskin-Bennerman, MD; Poonam Gutt, MD; Darryl Jordan, M.D.; Bindong Liu, PhD; Henry Okafor, MD; Ayodeji Oso, M.D.; Nuri Ozden, MD; Paul Talley, M.D.

Instructor: Richard O. White, MD

COURSE DESCRIPTIONS

MEDI 501 – *Internal Medicine Clerkship* – This is a 12-week core clerkship during which third-year medical students spend four weeks at various clinical sites affiliated with the Department of Internal Medicine. The students spend four weeks on each of the following services: general internal medicine service of the Nashville General Hospital, in-patient service at the Murfreesboro VA Medical Center and at one of numerous rural or urban ambulatory sites. A balanced program of clinical work is designed for students, with emphasis placed upon perfecting the techniques of history taking, physical examination, case presentation and the functional utilization and correlation of basic laboratory and clinical findings.

Students participate in rounds regularly with residents and attending physicians. In these settings the student assumes a role as an accepted and valuable member of the health team and thus plays a major role in the daily evaluation and treatment of patients. Students take night call with their team and attend weekly medical grand rounds, journal club and morbidity/mortality conferences. Daily lectures and conferences in selected subspecialty areas are given to supplement the educational program. **(27 credit hours)**

MEDI 603 - Senior Internal Medicine - This is a four-week clerkship for senior medical student, which may be served at either Nashville General Hospital at Meharry or the Alvin C. York VA Medical Center in Murfreesboro, Tennessee. Students are expected to take call and are taught by both medical faculty and residents of internal medicine. The purpose of this clerkship is to acquaint senior medical students with the increased level of patient care responsibility required during the first year of graduate training in internal medicine, especially those of day-to-day care and acquisition of the skills for coordinating the ancillary services each patient requires. Strong emphasis is placed on further development of bedside clinical skills, i.e., history taking, physical examination and communication skills. This course fulfills the senior internal medicine requirement. **(9 credit hours)** **Prerequisite:** *MEDI 501 – Internal Medicine Clerkship*

MEDI 617 - Intensive Care Unit Clerkship - This is a four-week clerkship for senior medical students, which may be served at either Nashville General Hospital at Meharry or at Alvin C. York VA Medical Center. The primary goal for this clerkship is to enable fourth-year medical students to participate in all aspects of the care and management of critically ill patients. Students will become familiar with detailed aspects of respiratory failure and hemodynamic compromise, as well as the integrated management of these patients. Students may be assigned call duty and will be taught by medical faculty and residents. This course fulfills the senior internal medicine requirement. **(9 credit hours)** **Prerequisite:** *MEDI 501 – Internal Medicine Clerkship*.

ELECTIVE COURSES

MEDI 620 – Cardiology Elective – This course is designed to familiarize senior medical students with current trends in cardiac physiology and pathophysiology that are utilized in the diagnosis, treatment and management of patients with a wide range of cardiac diseases. Students are taught to integrate basic science knowledge in the clinical management and problem solving process. Seminars and small group sessions are used to teach students how to interpret electrocardiograms (EKGs) and use other diagnostic modalities to evaluate and treat patients with cardiac diseases. Students must attend the Cardiology Clinic twice weekly and participate in consult service activities. **(9 credit hours)** **Prerequisite:** *MEDI 501 – Internal Medicine Clerkship*

MEDI 621 – Internal Medicine Elective – This elective (sub-internship) is designed to prepare students to assume the responsibilities of the first year of graduate training in internal medicine, especially those of day-to-day care on the general internal medicine in-patient service. The course also provides opportunities for students to acquire the skills needed to coordinate the ancillary services each patient requires. Strong emphasis is placed on further development of bedside clinical skills, i.e., history taking, physical examination and oral and written communication skills. Sub-interns will be responsible for a small number of patients ranging from three to six as assigned by senior residents. **(9 credit hours)** **Prerequisite:** *MEDI 501 – Internal Medicine Clerkship*

MEDI 623 – Dermatology Elective – The elective in dermatology is designed to familiarize senior students with a variety of epidermal and dermal responses, as well as the characteristics of basic dermatologic disorders, thereby becoming knowledgeable about how to make decisions concerning diagnosis and management of most common skin problems. Students may be assigned to a Nashville General Hospital clinic or to an affiliated private practice. **(9 credit hours)**

MEDI 624 – Gastroenterology Elective – A major goal for this elective is to teach both the clinical and academic content of gastroenterology (GI). Students may be assigned to a clinic or at a private practice office. They are expected to become familiar with the scope of gastroenterology and its application to the

general care of patients. Students are expected to read assigned topics on gastroenterology and then discuss those topics with the attending physician. They must attend all GI procedures, consultative rounds, informal discussions, conferences and visit other hospitals with their attending physician. **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship.**

MEDI 625 – Nephrology – This elective introduces students to clinical problems in nephrology. Included in this elective is the evaluation of patients with glomerular and interstitial renal failure and end-stage renal disease (ESRD). Students are expected to participate in daily rounds and must attend the weekly outpatient clinic in the hospital and at the Dialysis Clinic located on campus. They are assigned readings on topics for nephrology. All teaching conferences involving nephrology must be attended by students for this elective. **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 626 - Pulmonary Diseases - This is an introductory course to acquaint students with the important principles and practices of pulmonary medicine. It is structured to develop competency in making initial evaluations of patients with pulmonary disease; and how to use chest x-rays in evaluating pulmonary problems. In this course students should become competent in making initial evaluations of patients with pulmonary disease. They will also become familiar with using chest x-rays as an evaluative tool for pulmonary problems and the appropriate treatment of major respiratory diseases. They must also participate in all relevant activities, including daily rounds and clinical conferences. They will also learn the basic principles for treating major respiratory diseases. Students will also learn how to manage patients with acute medical illnesses in the Intensive Care Unit ("ICU"). **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship.**

MEDI 627 - Infectious Diseases – Senior-level students are introduced to the most common problems of infectious diseases in adolescents and adults and how to manage these problems. The environment for this course includes the emergency room, private practice and the hospital. Students are expected to perform workups on selected patients and then make presentations to the Infectious Disease faculty. They are expected to read cases and/or other assigned literature on infectious diseases and make reports on their findings. **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship.**

MEDI 628 - Hematology/Oncology - This elective provides exposure to community hematology/oncology problems in an inpatient and outpatient setting. This course is designed to develop skills for evaluating, diagnosing and treating patients with anemia, solid tumors, common hematologic problems and other oncologic emergencies. Students are assigned various readings to develop an understanding of the natural history of the different kinds of malignancies. They are expected to learn how to interpret peripheral smears as well as bone marrow aspirations through review sessions with the attending physicians. **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship.**

MEDI 629 - Endocrinology/Metabolism - This elective will help the student to develop an understanding of basic pathophysiology of endocrine diseases with emphasis on clinical endocrinology, including diabetes mellitus (I & II) and inpatient/outpatient management. It also acquaints the student with home glucose monitoring, insulin therapy and acute/chronic complications of the disease. Students will become familiar with thyroid disorders, pituitary disorders, calcium metabolism, electrolyte disorders and adrenal disease. This elective may be served in the clinic, the hospital or in a physician's private office or a combination of sites. **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 630 - Medical Oncology - During this elective, students will learn how to manage common oncology problems such as pain, infection/sepsis/opportunistic disease and emergencies associated with cancer. They will be exposed to the interdisciplinary aspect of oncology and the cooperation necessary between the chemotherapist, radiation therapist and the surgical oncologist. Students will observe and participate in treating cancer patients as it evolves through interactive discussions between patient/family and oncologist and through the use of case studies. Students are expected to attend and participate in weekly tumor boards and breast cancer seminars. Special reading assignments may be made by the attending physician. **(9 credit hours)** **Prerequisite: MEDI 501 – Internal Medicine Clerkship**

MEDI 631 - Emergency Medicine - This course is structured to develop an appreciation of the role of emergency physicians and the emergency department in a medical system and to develop clinical skills appropriate to this type of setting. It provides training in how to quickly develop good rapport with patients to elicit information needed for history-taking. This course is intended to help the student to quickly assess the situation and respond rapidly to diagnose, treat and manage the patient. Students are expected to develop broad-based general medical and surgical skills as well. (9 credit hours)
Prerequisite: MEDI 501 – Internal Medicine Clerkship or SURG 501- Surgery Clerkship.

MEDI 635 - General Medicine - This elective provides an overview of what to expect for the practice of general internal medicine. Students are expected to develop an appreciation of what is required of an attending physician when caring for inpatients as a member of an intern/resident team. Students are expected to perform essentially the same duties of an intern but with half the workload. They will participate in the management of assigned patients under the supervision of a resident. The sub-intern must attend conferences and attend rounds with the team as well as take call. A faculty preceptor is assigned to the student for regular supervision. (9 credit hours) **Prerequisite:** MEDI 501 – Internal Medicine Clerkship

MEDI 636 - Clinical Management Elective - Students who participate in this four-week clerkship gain experience as a medical educator. The clerkship assists the senior student in developing teaching skills in the clinical and basic science setting. Principles of adult learning theory, effective teaching techniques and evaluation of clinical performance, including effective methods of giving feedback to trainees, are presented. There is emphasis on how to efficiently track physical diagnosis and clinical skills. The participant in the elective puts theory into practice by serving as an instructor for freshman and/or sophomore students in physical diagnosis and clinical interviewing. Participants also serve as evaluators of student performance during standardized patient examinations. By serving as teachers and evaluators, students enhance their own clinical skills. (9 credit hours) **Prerequisites:** MEDI 501, SURG –501, PEDI – 501 and OBGY – 501 Clerkships. RADI - 601 is highly recommended but not required

MEDI 638 - Physical Medicine and Rehabilitation - Students who elect to take this course will work with York VA Medical Center in Murfreesboro, TN. They will become familiar with the physiatry consultation services, including trauma (brain injury, spinal cord injury and multiple fractures), neurology, orthopedics and other diagnostic categories. They will have the opportunity to observe physical and occupational therapists, speech pathologists and audiologists individually or in a team approach regarding patient care. Students will also learn how to perform a functional examination and participate on the consult, outpatient clinic and electromyogram (EMG) services. (9 credit hours) **Prerequisites:** MEDI 501- Internal Medicine and SURG –501 – Surgery Clerkships

MEDI 640 – Geriatrics - This course provides the student with the didactic and clinical care experiences associated with the aging patient. It focuses on the interdisciplinary approach for assessment and management of elderly patients from those who are still active, functional and ambulatory, as well as those who are considered frail. Students are introduced to settings that include multiple components of the healthcare continuum such as ambulatory clinics, day hospitals, acute inpatient hospitalization, long-term care facilities and rehabilitation. Students work with health professionals from a variety of disciplines to develop skills in evaluating and treating medical problems unique to the elderly. (9 credit hours)
Prerequisites: MEDI 501- Internal Medicine

MEDI 643 - Medical Research - This elective in clinical research guides the student in activities which may ultimately produce a manuscript that is suitable for submission to a peer review journal. Students participate in chart and/or literature reviews and assist in designing and conducting clinical research studies. If the manuscript is suitable, it may be submitted in abstract form to a scientific meeting for possible presentation. This elective may take longer than the normal 4-week period based on the project selected, and is prearranged between a clinical researcher in the Department of Internal Medicine and the student. (9 credit hours)

Department of Neurology

Chair: Patrick A. Griffith, MD, Professor

Associate Professors: Kenneth Gaines, MD, Ruth Garrett, PhD

Assistant Professors: Pradumna Singh, MD

Adjunct Assistant Professor: Amir Arain, MD, Vanderbilt School of Medicine

COURSE DESCRIPTION

PSYC 601 – Psychiatry/Neurology Clerkship - This required senior clerkship is a shared four-week rotation with the Department of Psychiatry and Behavioral Sciences allowing the student neurology and psychiatry clinical experiences throughout the Nashville community. The goal of the neurology component is to teach the principles and skills underlying the recognition and management of the neurological diseases a general medical practitioner is most likely to encounter in practice. Additional neurology exposure will occur on the consultative neurology service and diagnostic testing at Nashville General Hospital and surrounding hospitals in the Nashville/Murfreesboro region. **(9 credit hours)** **Prerequisites:** *MEDI 501- Internal Medicine; PSYC 501 - Psychiatry Clerkship*

ELECTIVE COURSE

MEDI – 622 – Neurology Elective - The general neurology rotation gives the student an opportunity to experience the full breadth of general neurology not seen during the Internal Medicine core clerkship. Student will participate on the inpatient neurology consultation service and in neurology clinics at Nashville General Hospital. In addition students will participate in neurophysiologic diagnostic services (EEG and EMG) and will attend the Memory Disorders Clinic. Specialized instruction will be provided for epilepsy, stroke, migraine treatment and peripheral nerve disorders. This course can not be substituted for PSYC 601. **(9 credit hours)**

Department of Obstetrics and Gynecology

Chair: Gloria Richard-Davis, MD, Professor

Professors: Marie del Pilar Aguinaga, PhD, Valerie Montgomery-Rice, MD; Bogdan Nowicki, MD, PhD; Stella Nowicki, DDS; Janice Whitty, MD; PonJola Coney, MD

Associate Professors: Harold Bernard, MD; Edward Hills, MD; Gwinnett Ladson, MD; Anthony Archibong, PhD; Ada P Knight, MD; Deok-Soo Son, DVM, PhD

Assistant Professors: Phillip Bourne, MD; Ahsen Chaudhry, MD; Dineo Khabele, MD; Naomi Sudeen-Paschall, MD; Rudiane Toussaint, MD; Vernita A. Tucker, MD

Instructors: Donald Bruce, MD, Sandra Torrente, MD

Professor Emeritus: Henry W. Foster, MD

OBJECTIVES

The Department of Obstetrics and Gynecology provides an academic and clinical environment conducive to the education and support of students, residents, faculty and staff, wherein the highest standards of obstetrics and gynecology are taught and practiced. The curriculum is designed to provide a thorough knowledge of obstetrics and gynecology, to encourage each student to consider advanced training in obstetrics and gynecology or another primary care field and to encourage faculty and student development through clinical and basic research.

The objective in the third and fourth years is to increase the academic and clinical awareness of students by providing them with greater exposure to a variety of obstetrical, gynecological and neonatal problems to enhance clinical correlation skills. Students actively participate in supervised patient examination and management. They are expected to take an active part in the seminars, grand rounds and demonstrations. Students are specifically assigned to attend and participate in the activities of the labor,

delivery and operating rooms. They perform uncomplicated deliveries and minor surgery under supervision of the clinical staff.

COURSE DESCRIPTIONS

OB/GYN 501 - *Obstetrics and Gynecology Clerkship* - This course is designed to help medical students become familiar with many of the usual and unusual gynecological and obstetrical problems that will confront them, especially during their postgraduate training periods and to encourage them to cultivate the initiative and sober judgment necessary in the mastery of these problems. To achieve this objective, students are assigned to smaller groups, which rotate alternately on the obstetrical or gynecological service while gaining specific exposure to various aspects of the field. Students are required to attend weekly grand rounds, daily bedside rounds, weekly clinical pathology conferences and perinatal mortality conferences. Emphasis is placed on history-taking, physical examination, case presentation, diagnosis, clinical management, testing and laboratory. Audiovisuals, student-controlled seminars, lectures and clinical demonstrations are used liberally. **(18 credit hours)**

ELECTIVE COURSES

OBGY 602 - *Obstetrics and Gynecology Electives* - Four-week elective courses in obstetrics and gynecology are offered each rotation during the academic year. The course is open to students in the fourth year. The primary objective of the elective is to stimulate interested students, at an early stage of their career, in the field of obstetrics and gynecology. Each student is responsible for reviewing the anatomy and physiology of the female reproductive system. The senior student choosing an elective in OB/GYN is expected to gain advanced experience closely akin to an internship (sub-internship). External electives require approval by the departmental chairperson or clerkship director. **(9 credit hours)**

Prerequisite: OB/GYN 501 - *Obstetrics and Gynecology Clerkship*

OBGY 603 - *Reproductive Endocrinology and Infertility Elective* - Over a four week period, students engaged in this elective will be expected to gain a thorough fundamental knowledge of reproductive endocrinology, infertility and related topics as outlined in the Education Objectives of the Association of Professors of Gynecology and Obstetrics (APGO). These objectives include an understanding of normal and abnormal puberty, amenorrhea, hirsutism and virilization, normal and abnormal uterine bleeding, dysmenorrhea, climacteric, infertility and premenstrual syndrome. **(9 credit hours)** **Prerequisite: OB/GYN 501 - *Obstetrics and Gynecology Clerkship***

OBGY 604 – *Research Elective* – This is an eight to 12 week elective, depending on the area of interest and allows the student to implement a research project with a faculty member from the Department of OB/GYN. Students will be trained in the basic skills necessary to do research, including observation, development of hypotheses, experimental design, statistical analysis, interpretation of results, drawing of conclusions and writing of a research report. The student is required to present data at student research day or a national meeting. **(9 credit hours)**

OBGY 605 - *Maternal and Fetal Medicine* - This four-week maternal and fetal medicine (MFM) elective will consist of the following: office ultrasound, dating and fetal anatomy survey, exposure to fetal malformations, biophysical profile, prenatal care, amniocentesis, perinatal consultation, genetic consultation and periconceptual counseling. Students will participate in night calls and obstetrical procedures, including episiotomy, instrumental delivery, caesarean sections and cerclage procedures. Students will learn when to refer high-risk obstetrical patients to MFM, to perform obstetrical pelvic exams and to offer prenatal care. Additionally, students will analyze and interpret fetal surveillance, such as monitoring ante partum and intrapartum. Students will participate in all didactic sessions for obstetrics, as well as participate in high risk obstetrical conferences, perinatal/neonatal conferences, weekly case presentations and other departmental continuing medical education programs related to obstetrics. Students will choose a clinical topic for research, conduct a literature review and submit a paper suitable for publication. **(9 credit hours)** **Prerequisite: OB/GYN 501 - *Obstetrics and Gynecology Clerkship***

Department of Pathology

Chair: Billy Ray Ballard, MD, DDS, Professor

Professor: Robert E. Burnette, MD

Associate Professor: Awadh Binhazim, DVM, PhD, Cecil W. Cone, MD

Assistant Professor: Digna Forbes, MD

OBJECTIVES

The department's objective is to imbue students with the desire to maintain a state-of-the-art proficiency in pathology, professional responsibility, and a life-long commitment to the expanding reservoir of scientific ideas. Objectives are designed to further enhance the collective ability to deliver superior undergraduate and graduate medical education, and to effectuate the best possible patient care and other service-related responsibilities.

COURSE DESCRIPTIONS

Elective Courses

Electives are designed and offered with the aim of broadening the pathobiological and pathophysiological knowledge sphere of both undergraduate and postgraduate students in the health sciences. Courses are offered by prearrangement, with full participation of all members of the faculty.

ASMD 475 - Great Syndromes - This course is taken in the Spring semester of the sophomore year after students have been exposed to all organ systems. The student learns the complex dimensions of clinical judgment, including: complexities of interactions, involvement of multiple organ systems, examples of major syndromes and diseases, life stages, patient's perspective, and incorporation of basic science knowledge. Predicated on students' knowledge of the basic science organ systems, this course acquaints students with the complexities and integrative dimensions of clinical judgment. Via clinical cases involving selected syndromes, this course will explore content topics including aging, critical thinking, ethics, professionalism, treatment principles and situational awareness. **(2 Credit hours)**
Prerequisites: ANAT 320, ASMD 230, 330, 340, 345, 350, BICH 320, 330, PHYS 320

PATH 602 - Surgical Pathology Elective - This course is specifically designed for third- and fourth-year medical students and focuses on introducing students to a hands-on approach to histopathology. Students participate in the daily review of gross specimens and in the diagnostic process of microscopic descriptions and pathologic diagnoses. **(9 credit hours)**

PATH 902 - Forensic Pathology Elective - This course is specifically designed for fourth-year medical students with an expressed interest in pursuing a career in one of the disciplines of pathology. Its major focus is to introduce students to the investigative approaches of unexplained and unnatural deaths. Prior participation in PATH 602 (Surgical Pathology Elective) is highly recommended but not required. Students rotate through the Forensic Sciences Center on Ben Allen Road, Madison, Tennessee. **(9 credit hours)**

Department of Pediatrics

Interim Chair: Xylina D. Bean, MD, Professor

Professor: Susanne Tropez-Sims, MD, MPH

Associate Professors: Olayinka O. Onadeko, MD, Brahn S. Parsh, MD; Shanana Choudhury, MD

Assistant Professors: Jennifer Ess, MD, FAAP

Instructors: Lateesa Posey, RN, MSN

Adjunct Assistant Professor: Bernard Williams, MD, Ida Michelle Williams, MD

Emeritus Professors: E. Perry Crump, Sr., MD, Saburo Hara, MD

Volunteer Faculty: Margareet Johnston, MD, Deidra Lanier, MD, Harshila Patel, MD

OBJECTIVES

The general objective of the Department of Pediatrics is to equip students with a broad insight into the principles and problems of pediatrics. The aim is also to imbue students with a propensity and readiness for the application of basic science principles in the analysis and study of the clinical problems of pediatric patients.

COURSE DESCRIPTION

PEDI 501 - Pediatric Clerkship - During a period of eight weeks, students are assigned to clinical duties in the inpatient and outpatient settings. Students obtain patients on rotation as they are admitted to the Nashville General Hospital or Vanderbilt Children's Hospital. They also see patients in the Meharry Pediatric Clinic, Matthew Walker Comprehensive Health Center and private office settings. Students have the opportunity to perform Clinical Laboratory Improvement Amendments (CLIA) wavered laboratory tests in the work-up of their cases. To ensure greater depth and more insight into the clinical problems presented by their cases, students are required to engage in certain unique supplementary diagnosis and therapeutic exercises in completing the study of the problems that the patient presents. Apart from formal lectures by the faculty on common pediatric problems, small group conferences, preferably at the bedside, are held and at that time the student's work and understanding of the patient's disease processes are discussed and evaluated. Demonstrations of the techniques of examining infants and children are given and supervised practice opportunities are provided so that each student achieves some degree of proficiency. In addition, students are given computerized cases to complete weekly. A simulated skills lab is available and allows for procedural techniques to be perfected. Attendance is required at ward rounds, ambulatory clinics and the weekly pediatric grand rounds, pediatric x-ray conference, case (morbidity and mortality) conferences and Clinical Pathology Conference (CPC). **(18 credit hours)**

ELECTIVE COURSES

Electives in pediatrics are available to fourth year medical students. These electives can be tailor-made to suit students desiring to increase expertise in ambulatory, primary care, endocrine, newborn intensive care unit (NICU) or research. The student is expected to participate in all didactic lectures and conferences as available.

Department of Psychiatry and Behavioral Sciences

Chair: Samuel Okpaku, MD, Professor

Assistant Professors: Gladys A. Bush, MD; Shagufta Jabeen, MD; Heidi Kilimanjaro-Davis, MD; Sreenivasa R. Mogali, MD; Mitchell H. Parks, MD; Alexander Prikhojan, MD

Adjunct Associate Professor: Judy Regan, MD, Vanderbilt University, School of Medicine Department of Psychiatry

Adjunct Assistant Professors: Susie Adams, MSN, APRN-BC, Vanderbilt University, School of Nursing, Psychiatry Section; Mohammad Jahan, MD, Middle Tennessee Mental Health Institute

Professor Emeritus: Lloyd C. Elam, MD; Harold Jordan, MD; Edna Lockert, PhD

VA Murfreesboro Volunteer Faculty: Sreenivasa R. Mogali, MD, Assistant Professor and Education Coordinator; David Busby, MD, Instructor; Indira Challa, MD, Instructor; Beverly M. Go, MD, Assistant Professor; Gladys Gregory, MD, Instructor; Ranjit Mallick, MD, Instructor; Raleigh Marlin, MD, Assistant Professor Family Medicine; Madhusuellman Mudium, MD, Associate Professor; Syed Rashid, MD, Instructor; Mohammed Saadatnejadi, MD, Instructor; Rao U. Tammareddi, MD, Instructor; Joan Woods, MD, Associate Professor

Volunteers: Karen Briggs, MD, Suzanne Butler, MD, Joseph E. Hazelton, EdD

OBJECTIVES

The teaching of clinical psychiatry has two major goals: 1) imparting knowledge about psychiatric conditions and 2) cultivating sensitivity to the patient as an individual whose unique attitude toward self and the physician often play an important part in the physician's ability to diagnose and treat the patient. This sensitivity characterizes the good physician in every specialty of medicine.

COURSE DESCRIPTIONS

PSYC 501 - Psychiatry Clerkship – The junior clerkship period is four weeks during which students spend ten weekdays at one of several different inpatient psychiatric facilities learning about acute psychiatric patients and their management. The facilities include the VA Medical Center - Murfreesboro, Middle Tennessee Mental Health Institute, Tennessee Christian Medical Center and Parthenon Pavilion. **(9 credit hours)**

PSYC 601 - Psychiatry Clerkship - This senior clerkship period is a shared four-week rotation with the Department of Neurology allowing the student two weeks of outpatient psychiatry and neurology clinic experiences throughout the Nashville community. Didactic classroom activities are held in the Elam Mental Health Center. The facilities include the VA Medical Center - Murfreesboro, Middle Tennessee Mental Health Institute, Tennessee Christian Medical Center and Parthenon Pavilion. **(9 credit hours)**

Prerequisite: PSYC 501 - Psychiatry Clerkship

ELECTIVE COURSES

PSYC 602 - Forensic Psychiatry - The forensics unit at Middle Tennessee Mental Health Institute incarcerates individuals who have been convicted of murder and have chronic psychiatric diseases. A second unit is an observation unit for individuals who have murder charges pending and the court system has ordered observation for the individual suspected of having a psychiatric illness. Activities include new patient assessment, follow-up and active participation in team meetings. Students may assist preceptors in the preparation of expert testimony in criminal cases. **(9 credit hours)** **Prerequisite: PSYC 501 - Psychiatry Clerkship**

PSYC 603 – Addiction - Students will be exposed to a wide variety of clientele to receive detoxification treatment for various substances as well as suffering from a variety of mental illnesses. The center offers inpatient and outpatient adult drug and alcohol detoxification programs, including the Rainbow Unit (a residential detoxification program for addicted and pregnant women and their new babies). Students actively participate in treatment team meetings, group therapy, new patient assessments and work with physicians in several ongoing substance abuse research assessment projects in data collection and analysis. **(9 credit hours)** **Prerequisite: PSYC 501 - Psychiatry Clerkship**

PSYC 604 – Psychiatry Research – This is a four- to twelve-week elective depending on the project selected. Students will have opportunities to assist in research in the following areas: psychometrics, college-age binge drinking, substance abuse, psychopharmacology and the elderly, forensic psychiatry and forms of abuse leading to subsequent mood disorders. **(9 credit hours)**

PSYC 901 - Visiting Psychiatry - All visiting Psychiatry electives must receive prior approval by the Chairman. Interested students must provide an information sheet describing the elective from the outside institution along with contact person information. This course cannot be used in place of the required Senior Psychiatry (PSYC 601). **(9 credit hours)**

Department of Radiology

Chair: Anthony C. Dishner, MD, Associate Professor

Associate Professors: Glenfield S. Knight, MD, Michael Marks, MD

Adjunct Professor: Harold Thompson, MD, Vanderbilt University, Department of Radiology

OBJECTIVES

The objective of the Department of Radiology is to provide a basic understanding of imaging methods used to diagnose and treat disease. Radiographs of normal and pathological findings of the chest, gastrointestinal tract, bone, genitourinary, vascular and the neurological systems are discussed. Integration of imaging studies with knowledge of the basic and clinical sciences is stressed in evaluating diagnostic radiographic examinations. Also included are formal lectures covering radiation therapy, radiation biology, interventional radiology, nuclear medicine, ultrasonography, computed tomography, magnetic resonance imaging and current radiation safety during the rotation. In addition, the risks and cost benefits of the various imaging techniques are reviewed and analyzed in light of health care reform and cost containment.

COURSE DESCRIPTION

RADI 601 - Senior Radiology Clerkship - This is a four-week required clerkship that is offered four times a year. The format includes lectures and presentations that are held in the Learning Resources Center four hours each morning. An organ system approach is utilized and incorporates all imaging modalities. Students are also encouraged to attend interdisciplinary conferences that are held jointly with other clinical departments. Emphasis is given to the evaluation of the various imaging modalities and the formulation of a differential diagnosis by the clinic delivering primary or specialty care to the patient. The emphasis of the course is the development of a series of basic concepts on how to use imaging studies for the improvement of patient care, particularly in the managed care environment. **(9 credit hours)**

Prerequisite: *MEDI 501- Internal Medicine*

ELECTIVE COURSE

RADI 602 - Radiology Elective - Electives in radiology are offered to students in their senior year. The students are introduced to the various subspecialty areas of radiology, including diagnostic, ultrasound, CT, MRI and nuclear medicine in actual clinical settings. The opportunity to evaluate imaging studies as they are being performed and interpreted is the focus of this elective. Emphasis is placed on proper selection and sequencing of studies as well as the differential diagnostic approach to interpretation. Students are assigned topics to research from the literature based upon clinical discussions. **(9 credit hours)**

Prerequisite: *RADI 601 - Senior Radiology Clerkship*

Department of Surgery

Chair: Derrick J. Beech, MD, Professor

Professor: Thomas Limbird, MD

Associate Professors: Antoinne Able, MD, Carlton Z. Adams, MD, Mack W. Griffith, MD, Flora Ukoli, DPH; Alphonse Pasipanodya, MD, Dana Marshall, MD

Assistant Professors: Sabina Francis, M.D., Alecia Malin, Ph.D., Stephanie Miller, Ph.D., Regina Offodile, MD; Myron C. Stokes, MD; James Ladson, MD

Instructors: Robert Johnston, MD

Adjunct Faculty: Muyiwa Adedokun, MD; Edward Browne, MD; James Carter, MD; James Collier, MD; Reginald Coopwood, MD; Andrew Hazley, MD; Wayne Moore, MD; John Nixon, MD; Chasidy Singleton, MD

COURSE DESCRIPTION

SURG 501 – Surgery Clerkship - The junior surgical clerkship is served in a twelve-week block in the third year of medical school. During this time students are exposed to general surgery, the surgical subspecialties and the emergency medicine division at Nashville General Hospital, the Alvin C. York Veterans Administration Medical Center and the Blanchfield Community Army Hospital. Principles of acute trauma life support are incorporated into the rotation. Students are exposed on a rotating basis to evening call and the emergency room. In this role, they serve as a part of the health care team with active participation in the patient's care, under adequate supervision of staff and full and part-time surgical specialists. **(27 credit hours)**

ELECTIVE COURSES

SURG 615 – Anesthesiology - The goal of this course is to train students in the skill of basic airway management. This includes supplemental oxygen support, bag-mask ventilation and tracheal intubation. Intravenous catheter placement is taught, and the student is expected to develop an understanding of inhalation, intravenous and local anesthetics. The student also is expected to actively participate in the perioperative evaluation and management of patients undergoing general and regional anesthesia. Prerequisite: **(9 credit hours)** Prerequisite: **SURG – 501 Surgery Clerkship**

SURG 619 - Emergency Surgery - The basic purpose of this clerkship is to familiarize the student with the diagnostic and therapeutic skills for managing medical emergencies. The student is expected to learn the basic principles of emergency medical care. The student is required to research and present a topic in emergency medicine. **(9 credit hours)** Prerequisite: **SURG – 501 – Surgery Clerkship**

SURG 616 - General Surgery - This senior elective rotation is four weeks in duration and can be taken upon successful completion of the junior clerkship. The experience is designed to approximate that of an intern and consists of assignments to the operating room, outpatient clinics and inpatient service. Evaluation is made by direct observation of the attending staff. Students are required to keep a log of their surgical cases and clinical experiences. **(9 credit hours)** Prerequisite: **SURG – 501 – Surgery Clerkship**

SURG 602 – Ophthalmology - The student is required to review the ocular/orbital anatomy and learn the differential diagnosis of red eye, acute visual loss and chronic visual loss. The student will be taught to recognize the ocular manifestations of systemic disease, especially diabetes mellitus. Also the student will be an active participant in the OR and observe ophthalmic and laser surgeries performed in the clinic. **(9 credit hours)** Prerequisites: **MEDI 501- Internal Medicine and SURG – 501 – Surgery Clerkship**

SURG 611 – Orthopedics - The student will gain a basic knowledge of the anatomy, physiology and pathology of the musculoskeletal system and a basic understanding of diagnostic imaging studies that are useful in the evaluation of musculoskeletal problems. The student will be instructed in foundational information about the etiology, clinical presentation and treatment regarding diseases and disorders (trauma or non-trauma) encountered in an orthopedic practice. **(9 credit hours)** Prerequisite: **SURG – 501 – Surgery Clerkship**

SURG 612 – Otolaryngology - The student should be able to perform a thorough head and neck exam and understand the pathophysiology of common head and neck diseases and disorders in both adults and children. The student will be taught to describe common medical and surgical treatment of these problems, indications for surgical procedures and have a basic understanding of audiology. **(9 credit hours)** Prerequisite: **SURG – 501 – Surgery Clerkship**

SURG 614 – Urology - The student is expected to acquire a basic fundamental knowledge regarding the etiology, presentation and management of common urologic conditions. Materials for reading and review will be provided to the student at the outset of the rotation. The student will be expected to participate on hospital rounds and assist in the operating room. **(9 credit hours)** Prerequisite: **SURG – 501 – Surgery Clerkship**

SURG 620 – Rehabilitation Medicine - The student should have a basic knowledge of the anatomy, physiology and pathology of the musculoskeletal system. Students will participate in the outpatient evaluation and management of patients, hospital rounds and will assist in the clinic with spinal cord injury patients. **(9 credit hours)** **Prerequisites:** **MEDI 501- Internal Medicine and SURG – 501 – Surgery Clerkship**

Academic Regulations

Requirements for M.D. Degree

A student is deemed eligible for the M.D. degree after satisfactorily completing all graduation requirements outlined in the Student Academic Policies and Procedures Manual, School of Medicine, including the successful completion of the prescribed course work and attainment of passing scores on the USMLE Step 1, Step 2 – Clinical Knowledge and Step 2 Clinical Skills.

An affirmative vote of the executive faculty of the School of Medicine with concurrence of the dean and confirmation by the Board of Trustees is required for candidacy for the M.D. degree. Students who do not complete graduation requirements prior to commencement will receive diplomas when all requirements are completed, at alternative dates approved by the Board of Trustees.

Examination and Grades

Examinations will be scheduled by each Department and coordinated centrally by the Office of Curriculum Evaluation and Support.

The definitive evaluation of the student's work is expressed by A, B+, B, C+, C or F which appears on his/her official transcript and on the report form given to each student at the end of each semester. All clinical departments are required to provide a departmental narrative evaluation (electronic and hard copy) along with a letter grade for all clinical students. All grades are to be submitted to the OSAA within five (5) working days following receipt of subject board scores by the department.

The grade of incomplete "I" indicates: (1) that the student has satisfactorily completed at least three-fourths of the course, but, for legitimate reasons, a small fraction of work remains to complete; or (2) that the student's records indicate that he/she can obtain a passing grade, but that he/she lacks a specific requirement, such as the final or subject board examination, because of illness or some other unique or extraordinary circumstances beyond the student's control.

A student receiving an "I" grade must complete all requirements prior to the end of the next semester so that a change of grade form can be submitted to the Registrar by the due date for grades. If the requirements are not completed within the specific time, no credit will be given and the "I" grade will be reverted to an F.

For pre-clinical courses, the student is required to remove the incomplete grade within a length of time equal to the length of the course or the beginning of the next academic year. All incomplete grades received in clinical courses must be removed before the beginning of the next semester. Students will not be allowed to progress to the next scheduled clerkship without remediation of the "I" grade.

Any department submitting a failing or incomplete grade must submit a written description as to the nature of the deficiency. The faculty member/department awarding the "I" grade must complete the Agreement for Awarding/Removing "I" Grades form. The form will specify what the student is to do to remove the "I" grade, as well as the dates for removal. The department chairman may elect, however, to submit a letter to the student in lieu of completing the form.

The faculty member and the student must sign the form or a copy of the letter. Both parties should retain a copy of the form with other copies transmitted to the department chairman, Vice Dean and Registrar. A copy of this form should also accompany the submission of grades.

Failure to remove the "I" grade within the prescribed time frame, or failure to comply with the conditions for removal will result in an automatic conversion to an "F" grade.

Change of Grade

A change of grade can be made only upon recommendation of the departmental chairperson with approval of the Vice Dean/Senior Associate Dean for Student/Academic Affairs. A recommendation for change of grade must include appropriate reasons for the change request.

Grades for Off Campus Courses

Students taking courses away from Meharry for remediation or for selective/electives will be governed by the grading system (scale) of that institution or course. Meharry will accept the grade as submitted by the away institution. No more than two (2) preclinical courses can be remediated during the summer at an away institution. In the case of preclinical courses, students who pass a course taken away must also pass the respective subject board of that discipline at the level required by the Meharry Department. Thus, if the student passes the away course and the NBME subject board at Meharry, the grade received will be that awarded by the away institution.

Subject Boards

All students must score ≥ 60 (or the passing level determined by the Department) on each NBME Subject Board offered in both the preclinical and clinical years. Students who do not pass the subject board on first take will receive an incomplete "I" grade. Students failing to obtain a passing score will be given one (1) additional opportunity to take the examination after remediation. The type of remediation that is to occur is left to the discretion of the individual department. All incomplete grades must be removed prior to sitting for any of the USMLE Step examinations. Student eligibility to sit for a subject board is determined by the individual department. Students must pass both the internal component of a course and the subject board to obtain a passing grade.

Leave of Absence

A leave of absence is an interruption of the normal course of study requested by a student, requiring prior written approval by the dean or his/her designee. A student's leave of absence shall not extend beyond one calendar year. The official date of leave shall not antedate the date of the student's request. An official leave of absence form must be processed and can be obtained from the Office of Student/Academic Affairs.

A leave of absence may be granted upon receipt of a written request for reasons of illness, personal and/or family exigencies, financial straits, emotional states and other similar types of situations. The vice dean for student/academic affairs may require documentation to accompany a request. If the situation is appropriate, the vice dean for student/academic affairs may place a student on an Administrative Leave of Absence. A student must request in writing termination of Leave of Absence for reinstatement to active status. Extensions may be requested not to exceed one additional year. Failure of such requests will result in automatic dismissal or administrative withdrawal.

Academic Standards and Policies

All students are required to meet the current academic standards found in the Student Academic Policies and Procedures Manual, School of Medicine. The manual is provided to all matriculating students. Additional copies can be obtained in the Office of Student/Academic Affairs located in the Harold D. West Basic Sciences Center or viewed on Blackboard.

Student Evaluation and Promotion

The Student Evaluation and Promotion Committee reviews student progress and makes recommendations regarding student advancement.

If at the completion of one year's curriculum, a student has received a passing grade in all courses, the student will be promoted to the next academic level. If a student receives a grade of F in one or more courses which have a total number of credit hours less than or equal to 11 credit hours within a given academic year, the student will be required to repeat the course(s) failed in either summer or the academic year immediately following receipt of failure.

Any student receiving a grade of F in courses totaling greater than or equal to 12 credit hours within the academic year will be required to repeat the courses failed in the academic year following receipt of the failures, or will be required to repeat the entire academic year based upon the assessment of the student's academic record and the recommendation of the Committee. During the academic year following, the student will be put on academic probation; he or she will be counseled and reevaluated at the end of that academic year.

Students receiving a grade of F in courses totaling greater than or equal to 12 credit hours in the same semester; a grade of F in courses totaling greater than or equal to 22 credit hours in a single academic year; or a grade of F in a course taken a second time will be dismissed from the School of Medicine for poor academic performance.

No student will be allowed to repeat an entire academic year more than one time, throughout matriculation. No student will be promoted to the next academic level until completing requirements for the year in which he/she was enrolled.

Academic Standing

A student at Meharry Medical College is in good academic standing if he/she is properly registered with the Office of Admissions and Records and is unencumbered by pending action of the Office of Dean Pursuant to recommendations from the Student Evaluation and Promotion Committee arising from academic or other difficulties.

Satisfactory Academic Progress

In order to remain in good standing, a student enrolled in the School of Medicine must maintain a cumulative grade point average of a minimum of 2.0 (C average). Any student who fails to maintain a cumulative academic average established by the School to be considered in good academic standing will automatically be placed on probation.

No student may remain on probationary academic status any longer than one (1) semester and must be counseled when any probation status is established by the vice dean for student/academic affairs. No student will be allowed to remain on probation for more than two (2) semesters throughout his or her entire matriculation without being considered for dismissal by the Student Evaluation and Promotion Committee.

Depending on whether or not the student is permitted to enroll in the next regular semester or a subsequent semester, the time permitted for achieving the minimal cumulative grade point average or good academic standing will be limited to one academic year. Any exception to this policy must be justifiable and approved by the Student Evaluation and Promotion Committee and dean of the School of Medicine with stated reasons for such exception. The academic policies established by the School of Medicine for evaluation of a student's academic progress and standing, along with the judgment of the dean as to the student's aptitude and suitability for continued enrollment, will be weighed in arriving at a policy exception decision.

Dean's List

This list is compiled by the Student Evaluation and Promotion Committee for approval by the dean. A student shall be eligible for the Dean's List at the end of each academic year if he/she uniformly does outstanding work. Students achieving a weighted grade point average between 3.50 and 4.00 for a given year's curriculum shall be eligible for the Dean's List for that year. Freshman students in the five year program are not eligible for the Dean's List until they have completed the Freshman 2 year.

Honors

The Student Evaluation and Promotions Committee will choose students to be recommended for graduation with honors based on their entire scholastic record. A minimum cumulative GPA of 3.5 is required for consideration for graduation with honors. The dean reviews the recommendations and determines the recipients of honors, prizes and awards. The Committee's action shall be based upon (a)

the rules of the College, (b) the regulations of the School of Medicine, and (c) the conditions set forth by the donors of prizes.

The criteria for graduation with Honors is as follows:

Highest Honors	3.945-4.00
High Honors	3.745-3.944
Honors	3.445-3.744

Withdrawals and Transfers

Withdrawal From a Course

When a student wishes to withdraw from a course, he/she shall obtain the appropriate form from the Assistant Dean in the Office of Student/Academic Affairs.

A student will not be permitted to withdraw from a course except for unusual or extenuating circumstances beyond the student's control which make it impractical or impossible to complete the course. The vice dean for student/academic affairs may require documentation to accompany a request for withdrawal. Poor academic performance alone does not constitute sufficient basis for withdrawal from a course.

Students permitted to withdraw from a course for medical reasons or other extenuating circumstances before sixty percent (60%) of the course is complete will have a "W/V" (Withdrawal/Voluntary) entered on their transcript. If a student withdraws after sixty percent (60%) of the course content is completed, the student will receive a "W/P" (Withdrawal/Passing) or "W/F" (Withdrawal/Failing), whichever indicates the student's performance at the time of withdrawal. The student must obtain the approval of the appropriate department head, the vice dean for student/academic affairs and file the approved form in the Office of Records.

Withdrawal from College

A student may withdraw from Meharry Medical College after filing an official Withdrawal Form with the Office of Student/Academic Affairs, and then having the form properly executed, by the Office of Records. The student's total performance in all courses will be evaluated at the time of the requested withdrawal in accordance with the policies of the School. Based on the review of the student's performance, he/she may be dropped from the College for poor academic performance. Grades for completed courses shall be recorded on the official transcript. If, at the time of withdrawal from the College, sixty percent or more of a course in which the student is enrolled is completed, the student will receive a "W/F" or "W/P" whichever indicates the student's performance at the time of withdrawal. Should the student seek to return to Meharry Medical College following withdrawal, a formal application must be filed with the Office of Records and the regular application process followed.

Student Dismissal

The School of Medicine reserves the right to dismiss a student at any time for violation of the student conduct policy, inadequate academic performance and upon determination that a student is, for any reason, unfit to continue as a student or as a potential practicing physician. When a student is recommended for dismissal by action of the Student Evaluation and Promotion Committee, the dean will inform the student in writing seven (7) working days of receipt of the Student Evaluation and Promotion Committee's decision.

Request for Transfer from the School of Medicine, Meharry Medical College

All activities regarding transfers must occur through the Office of Student/Academic Affairs. Requests for letters of recommendation required for a transfer must be made in writing with a clear statement of the reasons for considering the transfer. Students must have a conference with the senior associate dean for student/academic affairs. Students must present written certification by the Treasurer's Office that no outstanding indebtedness to the College exists, before any letters of recommendation will be forwarded. Letters of recommendation will reflect the academic standing of the student only. Failure to comply with the requirements for transfer will result in non-concurrence with the transfer.

Admission

The School of Medicine at Meharry Medical College participates in the American Medical College Application Service (AMCAS). Applicants to Meharry Medical College must instruct AMCAS, Association of American Medical Colleges (AAMC), Section for Student Services, 2450 N. Street, N.W., Suite 201, Washington, D.C. 20037-1131, to forward their files to the Office of Admissions and Recruitment, Meharry Medical College, 1005 Dr. D.B. Todd, Jr. Blvd., Nashville, TN 37208-3599.

Upon receipt of the AMCAS application, persons who pass the preliminary screening are sent supplemental applications so that the evaluation process may continue. Applicants are strongly encouraged to return the completed supplemental application form to the Office of Admissions and Recruitment by February 15 of the year in which admission is sought. All supplemental applications must be accompanied by a processing fee of \$60, payable by money order or certified check. Personal checks are not accepted. This fee is not refundable, nor can it be credited toward tuition, if applicant is accepted.

The Admissions Committee reviews all applications. Candidates presenting credentials which do not meet the minimum requirements are so advised by the director of Admissions and Recruitment at the direction of the committee. Each candidate who presents the minimum requirements is evaluated competitively and is either accepted, placed on the alternate list, or rejected. The director of Admissions and Recruitment notifies the applicant of the committee's action.

Applicants accepted for matriculation are allowed three weeks to accept the invitation to attend Meharry Medical College and to submit a \$300 deposit. This deposit is applied to the tuition of the matriculating student. If the student withdraws the application prior to May 15, two-thirds of the deposit (\$200) is refunded.

The Admissions Committee will consider candidates with the following qualifications:

1. Graduation from an approved postsecondary school, or its equivalent.
2. At least three full academic years of acceptable college credit earned in a college or institute of technology currently approved by an agency recognized by the Association of American Medical Colleges and by the Council on Medical Education of the American Medical Association. These agencies are:
 - North Central Association of Colleges and Secondary Schools
 - Middle States Association of Colleges and Secondary Schools
 - New England States Association of Colleges and Secondary Schools
 - Northwest Association of Colleges and Secondary Schools
 - Western Association of Colleges and Secondary Schools
 - Southern Association of Colleges and Secondary Schools
3. The satisfactory completion of three years of pre-medical education by the end of June of the year the applicant desires to be admitted. Courses and credits include:

General Biology or Zoology with laboratory	8 semester hrs. 12 quarter hrs.
Inorganic chemistry with qualitative analysis and laboratory	8 semester hrs. 12 quarter hrs.
Organic Chemistry with laboratory	8 semester hrs. 12 quarter hrs.
General Physics with laboratory	8 semester hrs. 12 quarter hrs.
English Composition	6 semester hrs. 9 quarter hrs.

Students who do not satisfactorily complete required college courses are not accepted.

"Satisfactory Completion" of required courses is interpreted by the Admissions Committee as an average grade of at least "C" in each subject field. "Satisfactory Completion" of three years of pre-medical education is interpreted as an average grade of at least "C" for the entire work of the three years. No student who has attained a general college average falling below "C" will be eligible for consideration.

It is recommended that the applicant supplement the basic requirements with courses in the humanities and the natural and social sciences designed to promote broad cultural development. It is recommended that elective courses be selected from such subjects as general botany, comparative anatomy, quantitative analysis, physical chemistry, mathematics, economics, history, psychology, sociology, foreign languages, philosophy, fine arts and logic. Highly specialized courses that occur in the undergraduate curriculum such as neuroanatomy, histology, human anatomy, bacteriology and physiology may not be substituted for courses generally required for entry to medical school.

Students are considered on a competitive basis in terms of scholarship and academic record, character, MCAT scores, general fitness to be a physician, and overall potential to serve the stated mission of the college. Additional materials necessary to activate the application process include favorable recommendations from pre-medical advisers or from two instructors in the natural sciences and one other faculty member.

Reapplications

Applicants who are not accepted in a given year, or any matriculated student who has officially withdrawn or been dismissed and not readmitted through the appeals process, must reapply if they wish to enter in a subsequent year. Such applicants must meet all requirements in force at the time of reapplication.

Applicants Requesting Transfer with Advanced Standing

Open slots in the School of Medicine for transfer into the second or third year classes are rare. To be eligible to apply for transfer into the second and/or third year, a student must be enrolled and in good academic standing, in a Liaison Committee on Medical Education (LCME) accredited medical school. Transfers are considered on a case-by-case basis and normally granted only in cases of severe/personal hardship. Students who have been dismissed from another medical school for academic or disciplinary reasons, or who have withdrawn voluntarily are not encouraged to apply. The deadline for application for transfer is May 15 of the calendar year in which the student hopes to enter medical school. For additional information contact the Office of Admissions.

Interviews

No applicant is accepted until interviewed by members of the Admissions Committee or its designees. Applicants should not present themselves for interviews until requested to do so by the Committee.

Early Decision Program

Meharry strongly sanctions participation in the Early Decision Program. Under this program, an applicant files an application only to Meharry and is guaranteed prompt notification by October 1 of either acceptance or rejection. All required application materials and official transcripts must be received by AMCAS by August 1. If not accepted under the Early Decision Program, the applicant may be considered as a regular candidate and may then apply to other schools.

It is the applicant's responsibility to have a report of his/her performance on the MCAT submitted to the Office of Admissions and Recruitment. The test should be taken in the spring of the junior year. Arrangements should be made by the applicant at the institution where he/she is presently enrolled, or by writing directly to The American College Testing Program, P.O. Box 414, Iowa City, IA 52243, for information regarding registration dates and centers for the examination. The MCAT must have been taken within the past three years. All credentials received in fulfillment of admission requirements become the property of Meharry Medical College and are kept in the permanent files of the Office of Admissions and Recruitment.

The Medical Scholars Program

The Medical Scholars Program is offered jointly by the School of Medicine and School of Graduate Studies and Research. Participants have the option of pursuing a combined course of study leading to a

dual M.D./Ph.D. degree. It is expected that all pre-medical education courses will be taken at an approved college in the United States.

Highly qualified applicants to the School of Medicine identified on the basis of MCAT scores, grade-point averages, personal interviews, letters of recommendation and research experiences, are recruited as participants in the Medical Scholars Program.

The Medical Scholars Program begins in the summer before the freshman year of medicine, at which time the students receive special instruction in biomedical sciences, laboratory technology and library orientation. During the first regular year of medical study – usually the most arduous because of the heavy didactic course load and the difficult transition from undergraduate to medical school – Medical Scholars follow the standard medical curriculum, with special but limited additional assignments, whereby they are able to participate in special activities that do not require out-of-class preparation, such as clinical grand rounds and graduate seminars in biomedical sciences. Beginning with the second summer and during the two full years thereafter, students work closely with faculty research preceptors – either clinical or basic scientists – on special projects and assignments. Subsequently, the program may include scientific trips for faculty and students, as well as a Visiting Scientist Program, which brings distinguished guest lecturers to the Meharry campus.

Dual Degree Programs

Meharry's first dual degree program, the Fisk-Meharry Joint Program in Biomedical Sciences (JPBS), was established in 1992. Participation in the (JPBS) means joint admission to the undergraduate school and Meharry Medical College. This program is designed for talented young men and women who desire to become physicians, dentists, or researchers in the biomedical sciences. JPBS scholars follow a prescribed program of study and are expected to maintain high academic standards throughout their tenure in the program. The program involves three years of study at the undergraduate school, successful completion of the fourth year (first year at Meharry) and satisfactory completion of the requirements for the baccalaureate degree from the undergraduate school, in either biology or chemistry. Normal progress dictates that M.D. or D.D.S. degree requirements will be completed at Meharry during the next three years. Thus, both the bachelor's degree and the professional degree requirements can be completed in seven years. The time to complete the Ph.D. or M.D./Ph.D. will vary.

Dual Degree Programs have been established at Albany State College, Tennessee State University and the following Historically Black United Methodist Schools: Bennett College, Clark Atlanta University, Claflin College, Dillard University, Hutson-Tillston University, Paine College, Philander Smith College, Rust College, and Wiley College. The colleges and universities operate their programs similar to the Fisk-Meharry Joint Program in Biomedical Sciences. Students interested in the opportunity to participate in this kind of program should contact one of the undergraduate institutions listed for information.

Technical Standards for Admission

Medical education requires that the accumulation of scientific knowledge be accompanied by the simultaneous acquisition of skills and professional attitudes and behavior. Medical school faculties have a responsibility to society to matriculate and graduate the best possible physicians. Thus, admission to medical school is offered to those who present the highest qualifications for the study and practice of medicine. Technical standards presented in this document are prerequisite for admission to and graduation from the School of Medicine at Meharry Medical College. All courses in the curriculum are required in order to develop the essential skills required to become a competent physician.

Graduates of medical schools must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. The School of Medicine at Meharry Medical College acknowledges Section 504 of the 1973 Vocational Rehabilitation Act and PL 11-336, the Americans with Disabilities Act (ADA) 1993, but ascertains that certain minimum technical standards must be present in prospective candidates.

A candidate for the M.D. degree must have aptitude, abilities and skills in five areas: observation, communication, motor, conceptual, integrative and quantitative, and behavioral and social. Technological

compensation can be made for some handicaps in these areas, but a candidate should be able to perform in a reasonably independent manner, without assistance. The use of a trained intermediary means that a candidate's judgment must be mediated by someone else's power of selection and observation. Therefore, third parties cannot be used to assist students in accomplishing curricular requirements in the five skill areas specified.

Observation

The candidate must be able to observe demonstrations and participate in experiments in the basic sciences including, but not limited to, physiologic and pharmacologic demonstrations in animals, microbiologic cultures and microscopic studies of micro-organisms and tissues in normal and pathologic states. A candidate must be able to observe a patient accurately at a distance and close at hand. Observation requires not only the use of the sense of vision, but other sensory modalities as well. It is enhanced, for example by the sense of smell.

Communication

A candidate should be able to speak, to hear and observe patients in order to elicit information; describe changes in mood, activity and posture; and perceive nonverbal communications. A candidate must be able to communicate effectively and with sensitivity toward patients. Communication includes not only speech, but also reading and writing. The candidate must be able to communicate effectively and efficiently in oral and written form with all members of the health care team.

Motor Coordination and Function

Candidates should have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic maneuvers. A candidate should be able to perform basic laboratory tests (urinalysis, CBC, etc.), carry out diagnostic procedures (uroscopy, paracentesis, etc.) and read EKGs and X-rays. A candidate should be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required of physicians are cardiopulmonary resuscitation, the administration of intravenous medication, application of pressure to stop bleeding, opening of obstructed airways, suturing of simple wounds and performance of simple obstetrical maneuvers. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

Intellectual/Conceptual, Integrative and Quantitative Abilities

These abilities include measurement, calculation, problem reasoning, analysis and synthesis. Problem solving and the critical skill demanded of physicians require all of these intellectual abilities. In addition, the candidate should be able to comprehend three-dimensional relationships and to understand the spatial relations of structures.

Behavioral and Social Attributes

Candidates must possess the emotional health required for full use of their intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients and the development of mature, sensitive and effective relationships with patients. Candidates must be able to tolerate physically taxing workloads and to function effectively when stressed. They must be able to adapt to changing environments, to display flexibility and to learn to function in the face of uncertainties inherent in the clinical problems of many patients. Empathy, integrity, concern for others, interpersonal skills, interest and motivation are all personal qualities that should be assessed during the admission and education processes.

Candidates for the M.D. degree must have somatic sensation and the functional use of the senses of vision and hearing. Candidate's diagnostic skills will also be lessened without the functional use of the senses of equilibrium, smell or taste. Additionally, they must have sufficient exteroceptive sense (touch, pain and temperature), sufficient proprioceptive sense (position, pressure, movement, stereognosis and vibratory) and sufficient motor function to permit them to carry out the activities described in the section above. They must be able to consistently, quickly and accurately integrate all information received by whatever sense(s) employed and they must have the intellectual ability to learn, integrate, analyze and synthesize data.

The Meharry Medical College School of Medicine will consider for admission any applicant who demonstrates the ability to perform or to learn to perform the skills listed in this document. Students will be judged not only on their scholastic accomplishments, but also on their physical and emotional capacities to meet the full requirements of the school's curriculum and to graduate as skilled and effective practitioners of medicine. The following technical requirements apply:

1. The candidate is able to observe demonstrations and participate in experiments in the basic sciences.
2. The candidate is able to analyze, synthesize, extrapolate, solve problems and reach diagnostic and therapeutic judgments.
3. The candidate has sufficient use of the senses of vision and hearing and the somatic sensation necessary to perform a physical examination and perform palpation, auscultation and percussion.
4. The candidate can reasonably relate to patients and establish sensitive, professional relationships with them.
5. The candidate can communicate the results of an examination to the patient and to colleagues with accuracy, clarity and efficiency.
6. The candidate can learn and perform routine laboratory tests and diagnostic procedures.
7. The candidate can perform with precise, quick and appropriate actions in emergency situations.
8. The candidate displays good judgment in the assessment and treatment of patients.
9. The candidate possesses the perseverance, diligence and consistency to complete the medical school curriculum and to enter the independent practice of medicine.
10. The candidate is able to accept criticism and respond with the appropriate modification of behavior.

Financial Information

Tuition for the academic year 2006/2007 is \$27,956.84.

Tuition and fees are set annually by the Board of Trustees and are subject to review and change without notice.

The Tuition and Fees Chart is as indicated below:

	Fresh	Fresh 1	Fresh 2	Soph 1	Soph 2	Sophomore	Junior	Senior
Tuition	27,956.84	13,978.42	13,978.42	13,978.42	13,978.42	27,956.84	27,956.84	27,956.84
Total fees	3,686.31	3,686.31	3,544.12	3,544.12	3,544.12	3,544.12	3,535.83	3,598.61
Total Tuition and Fees	31,643.15	17,664.73	17,522.54	17,522.54	17,522.54	31,500.96	31,492.67	31,555.45

*Fees are subject to change.

Post-Baccalaureate Fees	
Post-Bac Tuition	7,000.00
Fees	2,845.06
Total Post-Bac Student Tuition & Fees	9,845.06

This Chart does not include expenses for room and board, books & supplies, transportation, and miscellaneous. For additional information regarding tuition and fees please contact the Student Affairs Department in your respective school. Feel free to contact the Office of Financial Aid regarding allowances for living expenses and miscellaneous cost (room and board, etc.)

Payment of Tuition and Fees

Please see information in the General Information Section entitled Financial Information of this catalog.

School of Dentistry

Administration

William B. Butler, D.D.S., M.S., Dean
Maria de Fatima Lima, Ph.D., Associate Dean, Research
William D. Scales, D.D.S., Associate Dean, Clinical Affairs and
Interim Associate Dean, Academic Affairs
Charles W. Williams, D.D.S., Associate Dean, Graduate Programs
Cherae Farmer-Dixon, D.D.S., M.S.P.H., Associate Dean, Student Affairs
Department Chairpersons
Angel Rivera Torres, D.D.S., M.P.H., M.S.P.H., Ph.D., Dental Public Health
Augustyne V. Hill, D.D.S., M.S., Endodontics and Oral Diagnostic Sciences
Charles W. Williams, D.D.S., Oral and Maxillofacial Surgery
Melvin S. Polk Jr., D.D.S., M.S., Orthodontics
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Charles T. Smith, D.D.S., Restorative Dentistry

Dental Education at Meharry Medical College

The School of Dentistry (SOD) offers a high quality and exceptionally nurturing educational environment to its students and has an impressive track record of graduating students from a variety of socio-economic backgrounds. The School's practice of blending academically gifted students with those who demonstrate great promise but who require academic enrichment is a proven formula for success.

Students undergo a rigorous academic program that links oral health to overall health. The core curriculum of the dental program is four academic years. The first and second years of the four-year curriculum are devoted primarily to classroom and laboratory instruction in the basic and pre-clinical dental sciences. The third and fourth years focus on further development of clinical science skills under supervision of the faculty in all areas of dental practice (ADD). The clinical curriculum includes on-campus clinics, hospital experiences and rotations at nearby community health centers and private offices. There are also opportunities to engage in clinical practice and research in locations outside of Nashville.

The dental school curriculum is dynamic and is regularly monitored and modified in response to contemporary trends in dental education, research, and oral health and dental practice. This strategy ensures that the educational experience more closely mirrors the actual practice of general dentistry and fully prepares the student with the competencies required for delivery of high quality care.

In addition to its regular dental program, the SOD has developed a Dental Post-Baccalaureate Program, supported in part with federal funds, which serves as an alternative for admission. Admitted to this program are students who show great promise and who have graduated from an accredited college or university, but who lack competitive science grade point averages or Dental Admissions Test scores to be accepted in the dental education program. The program consists of a structured academic enhancement curriculum for one year to increase the students' level of knowledge in the areas required for admission and successful matriculation and two summer sessions of science and test taking reinforcement.

The School also sponsors two post-doctoral programs: One is in oral and maxillofacial surgery and the other is a 12-month general practice residency. Both programs are affiliated with Metropolitan Nashville General Hospital at Meharry and the local Veterans Affairs Medical Centers.

The School of Dentistry is a member of the American Dental Education Association. The undergraduate dental education program, general practice residency program, and the oral and maxillofacial surgery program are accredited by the American Dental Association's Commission on Dental Accreditation.

Mission of the School

The School of Dentistry, Meharry Medical College, founded in 1886 is committed to its heritage of providing health education, research and health service opportunities for African Americans, underrepresented ethnic minority and other promising students; accomplished in a nurturing environment through a recognized Center of Excellence for the delivery of community health care service, health promotion and disease prevention, extensive primary care training and the conduct of research and other scholarly activity with special attention to disease and conditions that disproportionately affect ethnic and other minority population.

Patient Care

In the dental clinics, *Comprehensive Dental Care* is defined as a *system of clinical instruction and operations which permit the student to provide*, or be responsible for, all aspects of a given patient's dental treatment needs in a manner that closely resembles the way the student will provide care in a private practice subsequent to graduation. The concept of comprehensive care forms the foundation for all clinical treatment within the School of Dentistry. This concept is facilitated by two basic approaches including *comprehensive patient care and specialty rotations*. This broad-based approach enhances the environment in which high quality dental health care can be delivered in a more humanistic manner by students. It is expected that in using this dual approach to care, the barriers, which delay high quality care, will be removed. Systematic treatment planning and a patient referral system permit the student to become aware of the needs of the patient and the skills required to satisfy these needs.

The School of Dentistry retains the sole authority and responsibility for its operations. Patient care rendered by student practitioners is provided under the direct supervision of licensed faculty members.

All dental procedures rendered by student providers must be performed in the presence of a licensed supervisor and must be evaluated and approved prior to and during service provision. Periodic and final evaluations are required prior to reappointment and patient dismissal. The supervising faculty must ensure that each treatment encounter is appropriately entered in the patient's record and signed by the student and the faculty person evaluating the procedure(s).

This includes proper filling out of the encounter form (E-ticket).

Research

The Research mission of the School of Dentistry at Meharry Medical College is to bridge Basic Sciences and the Dental clinical practice through research excellence and to educate dental scientists for academic and research leadership positions. Recent advances in basic sciences, the completion of the human genome project, the advancement of genomics and proteomics as well as the interdisciplinary nature of research in oral health and disease processes and treatment, are key to position the School of Dentistry as a leader in the national effort to relate these findings to systemic health, and to translate these advances into improved dental care and oral health especially as they relate to the health of underserved populations and the elimination of oral health disparities.

History of the School

The School of Dentistry was founded in 1886. Throughout its illustrious history, it has been known as a national resource for providing a strong curriculum in community-oriented clinical dentistry and basic principals of research. Meharry graduates enter private practice or specialty or post-graduate programs, and are well represented in academics in dental schools throughout the nation.

Approximately 60 students are accepted yearly to the four-year curriculum and well-equipped and modern facilities, including state-of-the-art multi-media instruction laboratory skill and personal sensitivity necessary to meet the needs of today's patient. The dental education program is accredited by the Commission on Dental Accreditation.

Additionally, the School sponsors two postdoctoral programs. The postdoctoral program in Oral and Maxillofacial Surgery consists of a four-year residency affiliated with Metropolitan Nashville General Hospital at Meharry and the Veterans Administration Medical Center in Nashville, Tennessee. This program provides ample education and training opportunities to meet the requirements for certification by the American Board of Oral Maxillofacial Surgery. The 12-month postdoctoral General Practice residency program offers an opportunity for matriculants to broaden their experiences in all aspects of clinical dentistry with heightened emphasis on public health service and care for the physically or mentally

compromised patient and the geriatric patient. The resident learns to work effectively with other health professionals in the hospital setting at Metropolitan Nashville General Hospital.

Objectives of the Program

The School of Dentistry is committed to providing a high-quality education in an environment conducive to teaching, learning, and research that will lead to the Doctor of Dental Surgery Degree.

The following objectives guide the academic program:

- Provide high quality and contemporary classroom instruction
- Provide high quality clinical instruction producing a competent dental practitioner
- Provide a state-of-the-art physical facility for instruction
- Foster an interest in research development
- Provide mentorship to support students
- Provide academic support services as needed on an individual basis
- Prepare the student to successfully challenge the National Board Dental Examination Part I and Part II
- Prepare the graduate to successfully challenge state and regional licensure examinations

Academic Program

The School of Dentistry offers a four-year pre-doctoral program in general dentistry that is designed to prepare the student to provide competent oral health services to the population at large. This is accomplished through an interdisciplinary curriculum of didactic and clinical experiences that provide a diverse knowledge base and the clinical skills and competencies necessary in the practice of modern general dentistry. The program is also geared to provide a solid base for scientific inquiry and the lifelong pursuit of education.

The first and second years of the four-year curriculum are devoted primarily to classroom and laboratory instruction in the basic and pre-clinical dental sciences. The third and fourth years focus on further development of clinical science skills under supervision of the faculty in all areas of dental practice. The emphasis in all years is placed on the concept of comprehensive patient care. Students gain clinical experiences in other settings as well as hospitals, public health facilities, and other extramural environments as a part of the overall pre-doctoral program. The successful completion of the prescribed academic program and National Board Dental Examinations (Parts I and II), along with evidence of high ethical and moral standards, leads to the degree of Doctor of Dental Surgery (D.D.S.).

The School of Dentistry offers graduate programs in General Dentistry Practice and Oral and Maxillofacial Surgery. These programs accept Meharry graduates as well as those from other dental schools.

The curriculum in the School of Dentistry is dynamic. It undergoes constant improvement in response to contemporary trends in dental education, research and dental practice. The School of Dentistry modifies the curriculum as needed to maintain an overall academic program that meets the highest standards. The study of dentistry is rigorous and demands considerable time, energy and effort. It requires a partnership between faculty and students toward the common goal of the student's attainment of the cognitive, psychomotor, professional and ethical acumen necessary to practice dentistry.

Course Descriptions

MICR-302-01 - *Dental Microbiology* - This course is required for students enrolled in the School of Dentistry. It is presented with special emphasis on its relation to dental pathology and dental practice. Laboratory exercises are designed to supplement the didactic aspects of the course and to acquaint the student with the basic techniques involved in the isolation and identification of pathogenic organisms. Principles of sterilization, disinfection, immunity, antibiosis and transmission of disease are stressed both as separate entities and in their applied aspects throughout the course. The course is offered during the second (fall) semester of the freshman year. **(6 Credit hours)**

ANAT-326 – *Dental Neuroscience* - The goal of the course is to provide the freshman dental students with fundamental knowledge regarding the structure and function of the nervous system. The major areas are Neuroanatomy and Neurophysiology of the sensory systems including special senses, motor systems, autonomic nervous system and higher brain functions. The course is designed to enhance student performance on internal and external National Board Dental examinations and to provide a platform for life-long learning. The course is offered during the second (spring) semester of the freshman year. **(3 Credit Hours)**

PHYS-321 – *Physiology* - The course provides the first-year dental students with a fundamental knowledge of the structure and function of the human body. The major areas involve physiology of cells, muscle, cardiovascular, respiratory, renal, gastrointestinal, endocrine and reproductive systems. It is designed to provide adequate instruction, which enhances student performances on both internal and external National Dental Board examinations while providing a platform for life-long learning as a competent dentist. The course is offered during the second (spring) semester of the freshman year. **(4 credit hours)**

PATH 321 – *Biology of Diseases* - The aim of this course is to provide dental students with an understanding of the structural and physiological changes underlying disease processes. The major components of this course are microscopic anatomy, dental histology and general pathology. The initial component of the course deals with basic cellular histology and pathological processes. The major part of the course is presented in an organ-system-approach. For each system, the normal histology followed by the major pathological processes is presented. The aim is to introduce dental students to diseases as manifestations of disordered function and to begin thinking in terms of the pathophysiological basis of disease. In relevant areas, the impact of disease processes on the management of a dental patient is presented. The course provides the necessary instructions that enhance students' performances on examinations and the platform for life-long learning. The course is offered during the second (spring) semester of the freshman year. **(9 credit hours)**

BICH-321 – *Dental Biochemistry* - This is a basic course in cellular and functional aspects of biochemistry offered to students enrolled in the School of Dentistry. This course covers aspects of the biology of gene expression, chemistry and metabolism of carbohydrates, lipids, proteins, nucleic acids, as well as the roles of enzymes, vitamins, hormones and other factors involved in control of cellular function. Special efforts are made to provide clinical correlation for the materials presented as well as to provide discussions in conference and small group sessions. The major goal is to foster the understanding of the impact of biochemical principles on disease processes and the clinical management of dental patients. The course is offered during the first (fall) semester of the freshman year. **(4 credit hours)**

ANAT-322 – *Gross Anatomy & Embryology* - This is a basic course in the gross structure of the human body. Students working in small groups dissect a human cadaver. Didactic and clinically oriented lectures are supplemented by prosections of a cadaver, audiovisual teaching programs, radiologic presentations and surface anatomy orientation. Clinical correlations are made through periodic patient-oriented presentations. Concepts of structure, functional correlations and mechanisms of development are presented through didactic and clinically oriented lectures, audiovisual aids and periodic clinical correlations. These activities enhance the students' endeavors to reach an understanding of human micro- and ultra structure that is requisites for correlating structure and function. While special attention is given to the head and neck, this is a comprehensive anatomical course. The course is offered during the first (fall) semester of the freshman year. **(8 credit hours)**

PHAR-411 – *Pharmacology* - The pharmacological basis of therapeutics is presented by means of lectures, clinical conferences, problem-solving exercises and demonstrations. Emphasis is placed on factors governing the absorption, distribution, metabolism and the mechanism of action of drugs. Attention is paid to therapeutics, toxicology, and prescription writing. The course is offered during the first (fall) semester of the sophomore year. **(8 credit hours)**

PHAR-620 – *Clinical Pharmacology Seminar* - The goal of the course is to aid the development of practitioners who are knowledgeable about the mechanisms, risks and therapeutic applications of drugs. The course provides a review of clinical pharmacology to the senior dental students who have successfully completed the basic course in pharmacology. The application of drugs to therapeutics (including adverse reactions, contraindications and drug interactions) is presented. These objectives are accomplished with lectures, clinical conferences and small group demonstrations. The course is designed to develop awareness on the part of the students of what drugs can and cannot do and provides a basis for practical drug therapy. Knowledge of pharmacodynamics and pharmacokinetics are gained in this course. This course will develop within students the ability to think and correlate clearly about therapeutic agents and to dissect unsubstantiated claims from useful knowledge. The course is offered in the first (fall) semester of the senior year. **(1 Credit hour)**

The following course is offered by the Department of Family and Preventive Medicine:

PDNT-322 – *Applied Nutrition* - The primary focus of this first year course is on the concepts of human nutrition, their relevance and application to clinical dentistry. The nutritional complications of major chronic diseases are presented. Students participate in classroom exercises designed to provide familiarity with dietary and nutritional assessment methodologies. **(1 credit hour)**

Clinical Sciences

Department of Endodontics and Oral Diagnostic Sciences

OBJECTIVES (ENDODONTICS)

Endodontics is the branch of dentistry concerned with the morphology, physiology, and pathology of the human dental pulp and periradicular tissues. Its study and practice encompass the basic and clinical sciences, including biology of the normal pulp, the etiology, diagnosis, prevention, and treatment of diseases, and injuries of the pulp and associated periradicular tissues.

The teaching of Endodontics interrelates with the biomedical sciences. Delivery of Endodontics treatment in a clinical environment is closely integrated with all other health disciplines.

OBJECTIVES (ORAL DIAGNOSTIC SCIENCES)

Oral Diagnostic Sciences provides instruction in oral medicine, oral and maxillofacial pathology, and radiology. Third and fourth-year dental students rotate through an Oral Diagnosis and Radiology Clinic where they learn to apply skills in diagnosis, treatment planning, and radiographic techniques.

COURSE DESCRIPTIONS

EDPR 431-01 - *Endodontics* - This second year Endodontics core course is designed to introduce the student to Endodontics techniques under simulated conditions on a number of extracted teeth and plastic blocks. The goal of the pre-clinical course is to train the student to perform the mechanical aspects of Endodontics therapy. This course will provide the student with a functional exposure of basic information relative to the practice of clinical Endodontics. During all phases of the course, emphasis will be placed on correlating the basic and clinical sciences. While the majority of the course covers clinical skills, biology of the normal and irreversibly injured pulp will be taught.-Included in this course will be preclinical knowledge and skill in the differential diagnosis of pain of pulpal and/or periapical origin, as well as referred pain; the control of pain emanating from the pulp or periapical region; and treatment by pulp capping, or pulpotomy as well as by pulpectomy. The student will also be introduced and trained to use electronic apex locators and rotary instrumentation. **(3 Credit hours)**

EDPR 591-01 - Advanced Concepts in Endodontics - This third year course has been designed to expand on concepts introduced in the prerequisite EDPR-431-01 and to transfer those concepts to patient care. The course prepares the junior student to diagnose, assess and treat Endodontics cases in the clinic. This is accomplished by expanding diagnostic concepts introduced in the core Endodontics course and basic Endodontics knowledge in the following areas: (1) diagnostic instruments and their use; (2) Endodontics surgery; (3) Endodontics pharmacology; (4) microbiology and immunology; (5) Endodontics emergencies, including traumatic dental injuries; (6) periodontal/Endodontics lesions; (7) prognosis and evaluation of success. **(1 Credit hour)**

EDPR 601-01 Endodontics Seminar - This fourth year course is designed to further assist and reemphasize preparation for senior students for Part II of the National Board Dental Examination. Several Endodontics topics will be assigned to groups of students for oral presentation. Each topic contains four to five reading assignments that coincide with the topic subject. Class participation and successful completion of problem-based exercises coinciding with each topic is expected. Also included will be a group of case presentations of student cases, where the presenting student will discuss and defend his/her treatment, diagnosis, and prognosis etc. Additionally, the senior seminar will serve to reinforce and examine in more detail biological principles and concepts to aid the student to diagnose and treat more complicated cases in the Endodontics clinic. **(1 Credit hour)**

EDPR 591-01 and EDPR 641-01 - Endodontics Clinic - Successful completion of the sophomore Endodontics core course and the junior clinical entrance examination is needed to establish the student's clinical eligibility to treat patients in the Endodontics clinic. The clinical entrance examination is comprised of two parts: (a) clinical activity and (b) diagnostic competency. The clinical activity is measured by completion of the "manikin exercise," which is intended to closely simulate the treatment of an actual patient without the need for anesthesia. The diagnostic competency section consists of performing a series of diagnostic tests and procedures on a classmate. **591-01 (1 Credit hour), 641-01 (1 Credit hour)**

The student will be exposed to some of the new technology of Endodontics, such as rotary instrumentation, digital radiography, electronic apex locators to name a few. Each student will participate in case presentations, which entails a formal presentation of an Endodontics case completed in the clinic. The student will self-evaluate his or her treatment and defend all modalities of treatment in the Endodontics case presentation. In addition, student will recall previously treated cases in order to determine prognosis and success of treatment rendered.

ORDG 421-01 - Oral and Maxillofacial Radiology - This second year course presents radiobiologic theory and physical properties of ionizing radiation and describes the application of radiographic methods in dental practice, radiation safety, and normal radiographic anatomy. Advanced oral and maxillofacial imaging techniques and interpretation, emphasizing deviation from normal, are also introduced. **(2 credit hours)**

ORDG 422-01 - Oral and Maxillofacial Pathology - This second year course correlates clinical, oral, and maxillofacial pathology with histologic changes, with emphasis on microscopic and laboratory interpretation of cellular, tissue, and chemical alterations. Students perform library research or conduct laboratory research projects under supervision of a faculty, with the approval of the chair. **(2 credit hours)**

ORDG 430-01 - Introduction to Clinical Dentistry - This course is designed to allow a smooth transition from didactic courses to clinical experience. The student will be exposed to proper history taking, extraoral, intraoral, radiographic and periodontal examinations. He/She will further be able to select the proper instruments for survey and evaluation of the patient. The student will be familiar with clinical protocol as indicated in the Student Clinical Handbook. He/She will be introduced to all materials necessary for evaluation and interpretation of a patient's condition and situations as well as develop skills to be comfortable with patient interaction. **(2 credit hours)**

ORDG 501-01 - *Comprehensive Oral Diagnostic Sciences* - This third year course provides an introduction to recognition, diagnosis, and treatment of oral manifestations of systemic diseases and principles of clinical medicine through presentation of mechanism, diagnosis, and treatment of common organ system diseases. Modifications necessary for dental treatment of patients with these diseases are discussed. This course also offers an overview of the signs, symptoms, diagnosis, and treatment of oral mucosal diseases, with emphasis on oncology. Topics discussed include history taking, clinical examination, differential diagnosis, therapeutics, and management problems (including psychological) and solutions. Systemic manifestations of oral disease are also discussed. **(4 credit hours)**

ORDG 571-01 & 671-01 - *Oral Diagnosis and Radiology Clinic* - Through participation in this third and fourth year clinic, students learn to apply skills in history taking, clinical examination and radiographic evaluation. Students independently compose an appropriate treatment plan, which is presented in both written and verbal form. Students are questioned concerning material presented and are required to write a work authorization for a removable prosthesis. **571-01 (1 credit hour) 671-01 (2 credit hours)**

ORDG 691-01 - *Treatment Planning Council* - This third and fourth year course provides a forum whereby students, after applying skills of history taking, clinical examination, and radiographic evaluation, independently compose an appropriate treatment plan, which is presented in both written and verbal form. Students are questioned concerning material presented and required to write a work authorization for a removable prosthesis. **(1 credit hour)**

ORDG 650-01 - *Oral Cancer Seminar* - This fourth year course provides a discussion of the epidemiology, etiology, diagnosis, invasion, treatment, radiation effects, prognosis and rehabilitation as they relate to oral cancer. **(1 credit hour)**

Department of Oral and Maxillofacial Surgery

OBJECTIVES

The Department of Oral and Maxillofacial Surgery, School of Dentistry, Meharry Medical College, is committed to the mission of the SOD. In addition, the department is committed to continuously providing quality controlled didactic and clinical instruction in oral and maxillofacial surgery to all enrolled undergraduate students. This instruction will produce a graduate capable of providing competent, routine independent oral and maxillofacial surgical care; recognition of challenges beyond their skill levels; performing competently on national, state and regional board examinations; and ultimately excelling in the private practice of general dentistry.

COURSE DESCRIPTIONS

ORSG 403-01 - *Principles of Oral and Maxillofacial Surgery I* - This second year, two semester hour course is designed to give the student an in-depth study of the biochemistry, pharmacology, and physiological aspects of local anesthetic agents. A review of regional anatomy will be taught to enhance techniques of injection. Local anesthetic complications and emergencies will also be taught. Students are required to demonstrate competence in the administration of a local anesthetic prior to completion of this course. Lectures, slides, videotapes and demonstrations on patients will be used. The students will be introduced to principles of exodontia and physical evaluations. **(2 credit hours)**

ORSG 502-01 - *Principles of Oral and Maxillofacial Surgery II* - This third year, four semester hour course is designed to teach the student the basic principles of oral and maxillofacial surgery, including surgical technique, pre-operative physical evaluation of the patient, surgical complications, and emergencies management. Students will be reacquainted with the anatomy of the head and neck, microbiology, and other basic science subjects that will enhance their clinical capabilities. Slides, videotapes, and demonstrations will supplement lectures. The students will also be introduced to the didactic training in inhalation sedation, nitrous oxide-oxygen sedation techniques. **(4 credit hours)**

ORSG 503-01 - *Principles of Oral and Maxillofacial Surgery III* - This third year, two semester hour course is designed to introduce the student to the fundamental principles of general anesthesia, methods of evaluation of patients, selection of agents, and the indication for techniques. The related principles of conscious-sedation techniques will be stressed, with specific emphasis on the use of nitrous oxide and oxygen. Lectures, slides, videotapes and clinical demonstrations will be used. **(4 credit hours)**

ORSG 531-01 - *Oral Surgery Clinic (Junior)* - This fourth year clinical course is designed to permit students to demonstrate proficiency in performing uncomplicated extractions of erupted teeth and minor oral surgery procedures, competence in performing uncomplicated biopsy of hard and soft tissue lesions and surgical extraction of impacted and un-erupted teeth. The student is expected to apply the principles taught in the didactic courses: Principles of Surgery, Pain Control I and II, Cardiopulmonary Resuscitation, to meet the patient's needs at chair-side. This is a two semester hour course. **(1 credit hour)**

ORSG 621-01 - *Oral Surgery Clinic (Senior)* - This fourth year, two semester hour clinical course is designed to permit students to demonstrate competency in performing uncomplicated extractions of erupted teeth and minor oral surgery procedures. The student will gain competence in performing uncomplicated biopsy of hard and soft tissue lesions and surgical extraction of impacted and unerupted teeth. The student is expected to apply to the patient's needs at the chair-side the principles taught in the didactic courses: Principles of Surgery, Pain Control I and II, and Cardiopulmonary Resuscitation. The students will also become competent in administration of nitrous-oxide inhalation sedation. **(1 credit hour)**

ORSG 492-01 AND ORSG 692 - *Cardiopulmonary Resuscitation (CPR)* - This second and fourth year, one semester hour course is designed for certification and re-certification of students in cardiopulmonary resuscitation. The course consists of lectures and demonstrations in the techniques of cardiopulmonary resuscitation. Experience in monitoring vital signs will be gained as part of the exercises by the students. Each student must demonstrate competency in the performance tests for airway obstruction in infants and adult victims and resuscitation of infant and adult victims of cardiac arrest. This course is in compliance with standards of the American Heart Association and the American Red Cross. **492-01 (2 credit hours) 692 (1 credit hour)**

ORSG 504-01 - *Introduction to Dental Implantology* - This third year, one semester hour course is designed to acquaint dental students with the basic concepts of dental implantology. Topics will consider the cellular aspects (biologic, physiologic and histologic) phenomena of osseointegrated dental implants. Concepts will include the surgical and restorative aspects of implantology. Students will be taught the basic concepts to restore a dental implant with a single unit fixed restoration and how to stabilize a mandibular overdenture using two dental implants. **(1 credit hour)**

ORSG 620-01 - *Oral Surgery/ Pain Control Seminar* - This fourth year, one semester hour course combine brief lectures, formal oral case reports, literature review, and directed discussion on clinical techniques and problems in oral and maxillofacial surgery in order to gain additional experience in some of the most advanced areas of oral and maxillofacial surgery; organize and present a case for a patient in need of comprehensive oral and maxillofacial surgery care; and to familiarize students with the scientific literature in the field of oral and maxillofacial surgery. **(1 credit hour)**

Department of Orthodontics

OBJECTIVES

This division is actively involved in introducing and teaching basic orthodontic theory and principles. The students are introduced to basic philosophy and current concepts in the field of orthodontics. A great emphasis is placed on differential diagnosis, case selection, treatment planning, and patient management. Each student is required to participate in patient treatment and gain clinical experiences in limited orthodontic tooth movement by developing treatment strategies for preventive, interceptive and limited orthodontic problems.

COURSE DESCRIPTIONS

ORTH 422-01 - *Orthodontics Lecture Laboratory* - This second year course is designed to introduce the student to the history, concept, and rationale of orthodontic therapy. The student is familiarized with human growth and development, with emphasis placed on the craniofacial complex. The etiologic factors of malocclusion are characterized and elucidated. The student is introduced to orthodontic diagnostic aids and their interpretation in preparation for clinical orthodontic diagnosis and treatment planning. The laboratory phase of this course includes impression making, fabrication of orthodontic models, and exercises in the design and construction of appliances commonly used in interceptive and limited corrective orthodontics. **(2 credit hours)**

ORTH 521-01 – *Orthodontics* - This third year course is designed to advance the students' knowledge of orthodontics and further prepare them for clinical activity. The physical and psychological effects of malocclusion are described and delineated. This course covers biomechanical principles of tooth movement, as well as preventive, interceptive, limited corrective, and surgical orthodontics. The students gain clinical experience in patient management related to preventive, interceptive, and limited corrective orthodontics. **(2 credit hours)**

ORTH 620-01 – *Orthodontics* - This fourth year course provides a review of topics covered in the two previous orthodontic courses in preparation for Part II of the National Board Dental Examination. This review covers diagnosis and treatment planning, cephalometrics, biomechanics, preventive and interceptive orthodontics, etc. The students are also introduced to the latest concepts, especially those commonly employed by general practitioners. **(2 credit hours)**

ORTH 531-01 - *Orthodontic Clinic* - This third year course provides instruction and clinical experience in treating limited orthodontic problems. Emphasis is placed on diagnosis, treatment planning, and treatment strategies for preventive, interceptive and limited orthodontic cases. **(1 credit hour)**

ORTH 561-01 - *Orthodontic Clinic* - This fourth year course is an extension of the third year clinical course. This course permits the student to demonstrate competency in rendering preventive, interceptive, and limited orthodontic treatments to patients. The student doctors are required to apply principles taught in all previous didactic and clinical orthodontic courses. **(1 credit hour)**

Department of Pediatric Dentistry

OBJECTIVES

The educational goals of the Department of Pediatric Dentistry are to enable the dental student, at the undergraduate level, to develop a strong competency in pediatric dentistry and to increase the theoretical and clinical judgment, technical skills, and case organizational abilities. The course of study in pediatric dentistry is designed to establish a high standard of oral care based on an appreciation of the intricacies and demands of comprehensive health. The division stresses a strong scientific and behavioral science foundation, strong patient assessment skills, disease control and rehabilitation effectiveness, and a strong appreciation for health promotion. Minimal expectations of students to assure demonstrated competencies are emphasized in:

- Preventive services and treatment of conditions to include plaque control, patient education, and emergency treatment of pain and infection.
- Restoration of the primary and permanent teeth to proper form and function, with careful consideration for the health of the pulp and the supporting structures.
- Maintenance and/or restoration of space in the dental arch to achieve or retain adequate esthetics and function.
- Recognition of malocclusion, with priority provided for interceptive services as well as recognition of disfiguring and/or handicapping malocclusions.

COURSE DESCRIPTIONS

PEDN 412-01 - *Pediatric Dentistry* - Lecture/Laboratory. This second-year introductory course is designed to introduce the basic principles of clinical pediatric dentistry, including growth and development, restorative dentistry, space maintenance, and some general considerations necessary when treating the pediatric dentistry patient. Laboratory exercises will be used to familiarize the student with actual pediatric dentistry techniques. **(4 credit hours)**

PEDN 511-01 - *Pediatric Dentistry* - This third year major didactic course offered in pediatric dentistry offers extended didactic exposure to patient management, caries management, preventive measures, oral surgery, pulp therapy, trauma management, space maintenance, radiographic techniques, medicine, care of the handicapped, nutrition and orthodontics. **(2 credit hours)**

PEDN 620-01 - *Pediatric Dentistry Seminar* - This is a fourth year course, presented in seminar format, emphasizes topics taught during the second and third year courses and presents newer issues in clinical pediatric dentistry. Participation is required of each student to ensure a more complete understanding of relevant subject matter, including issues of clinical practice, research, and preparation for the National Board Dental Examination. **(1 credit hour)**

PEDN 541-01 - *Pediatric Dentistry Clinic* - This third year course is designed to provide instruction and experience in clinical pediatric dentistry. Emphasis is placed on diagnosis, treatment planning, and the comprehensive management of common pediatric dentistry situations. Community dentistry and health promotion exercises also are included in this course. **(1 credit hour)**

PEDN 641-01- *Pediatric Dentistry Clinic* - This fourth year course is an extension of the third year clinical course. Additional emphasis is placed on emergency management, medical complications, care for the handicapped, and treatment in the hospital. **(1 credit hour)**

Department of Dental Public Health

OBJECTIVES

For dental health professionals to effectively anticipate, assess, initiate, or respond to change they require skills in population-based analysis and knowledge about health service delivery systems, the financing of health services, basic health, and research design.

The pre-doctoral curriculum includes:

- The sociology and psychology of dentistry
- The epidemiology of oral conditions
- Health policy and the planning of oral health services
- The organization and delivery of care to patient populations with special needs
- Knowledge and Skills in Interpersonal Communication
- Needs Assessment and Treatment Planning
- Consultative and Inter-professional Relations
- Quality Assurance
- Coordination of Dental Team Responsibilities
- Principles of Proactive Management
- Cultural Competency

Course Descriptions

PDNT 303-01 - *Introduction to Clinical Research* - This first year class introduces students to the principles of Biostatistics and Epidemiology. This course is concerned with how to find scientific

information necessary to sustain and enhance the clinical practice of dentistry and how to interpret that information. In this context, scientific information refers to the published results of clinical research among humans, which provides the rationale for understanding, preventing and treating oral diseases in dental practice and the community. **(1 credit hour)**

PDNT 310-01 - *Introduction to Practice Management* - This course has been designed to acquaint the first year dental student with basic concepts that will provide insight into the business and management side of dentistry. We will raise issues relating to basic problems of dental practice as well as provide the students with a formula for success. The course also provides for a community-based mentoring program. The purpose of the program is to expose students to the extramural practice of dentistry in order for them to experience the dental profession from the perspective of the private practitioner. Students are exposed to real-life practice situations and learn to deal with the emotional, financial and social aspects of dentistry and patient care. **(1 credit hour)**

PDNT 322-01 - *Applied Nutrition* - The primary focus of this first year course is on the concepts of human nutrition, their relevance and application to clinical dentistry. The nutritional complications of major chronic diseases are presented. Students participate in classroom exercises designed to provide familiarity with dietary and nutritional assessment methodologies. **(1 credit hour)**

PDNT 401-01 - *Introduction to Community Based Education* - This second year course introduces the student to dental public health. This course will also provide the sophomore dental student with the basic principles in promotion, improvement and maintenance of oral health. In addition, students will participate in community outreach programs. **(1 credit hour)**

PDNT 411-01 - *Cultural Competency in Healthcare* - This second year course is designed to help students understand theories and skills that prepare them to become culturally competent members in their communities. Emphasis will be placed on the acquisition and promotion of skills, attitudes, behaviors, and knowledge necessary for students to work respectfully and effectively with patients and each other in a culturally diverse environment. **(1 credit hour)**

PDNT 501-01 - *Practice Management* - This third year course presents information that is essential to establishing or purchasing a dental practice or joining an existing practice as an associate or partner. Models of solo practice, group practice, partnership practice and associateship practice are discussed. Topics are presented that assist in the development of the management skills necessary to successfully operate a dental practice. Personnel management, office design, financing, jurisprudence, managed care organizations, estate planning, business and cost accounting are discussed. **(1 credit hour)**

PDNT 521-01 - *Behavioral Management in Dental Practice* - This third year course is designed to provide students an opportunity to develop communication skills for interacting appropriately with patients, peers, and other health care professionals. Students will develop oral, written, and non-verbal communication skills and an understanding of psychological needs of patients. **(1 credit hour)**

PDNT 522-01 - *Community Dental Health* - This third year course focuses on the basic concepts of dental public health as related to the community. The history of dentistry, principles of fluoride and sealant usage, epidemiology of oral diseases and cancer, HIV/AIDS, OSHA guidelines, current issues in health care, social policy and health care economics are discussed. Models of health care delivery systems and quality assurance are presented. The course teaches basic skills in the data collection and interpretation of population-based and community-based surveys and programs. **(2 credit hours)**

PDNT 561-01 - *Geriatric Dentistry* - This multidisciplinary and interdisciplinary third year course focuses on the oral diagnosis and treatment planning for the older adult. It prepares the student with the essentials of how to evaluate the geriatric patient including the physical, mental, pharmacological, and socioeconomic aspects of assessment. Oral assessment, enhanced by actual case studies, is presented so that the student will have an understanding of various therapies that are necessary to appropriately accomplish the delivery of dental care to the older adult. Ethical issues in geriatric health care and elder abuse will also be discussed. **(1 credit hour)**

PDNT 562-01 & PDNT 632-01 *Practice Management Symposium* - This joint third and fourth year seminar promotes the attainment of a successful dental practice. Information on third party payment, dental services corporations, the dental supplier, record-keeping, informatics and marketing strategies is presented. **(1 credit hour)**

PDNT 620-01 *Public Health/Biostatistics Seminar* - This fourth year course is designed to review and expand the principles of biostatistics and epidemiology. Methods for the analysis of experimental and observational data are presented. Various research concepts pertinent in the critical reading of scientific literature are discussed. The knowledge gained enables the student to effectively evaluate health research literature. **(1 credit hour)**

PDNT 621-01 *Behavioral Science Seminar* - This fourth year seminar examines the principles and dynamics of human behavior in the context of dentistry. Effective dental practice requires not only technical competence but also behavioral knowledge and skills to achieve full professional potential. In order to become successful practitioners, dentists must recognize the social and psychological factors that affect patients and influence dental care. **(1 credit hour)**

PDNT 631-01 *Dental Jurisprudence and Ethics* - This fourth year course consists of lectures covering the fundamental principles of law as applied to the practice of dentistry, including malpractice, compensation, expert testimony, and others. The American Dental Association's principles of dental ethics are reviewed. **(1 credit hour)**

Department of Restorative Dentistry

OBJECTIVES

The Department of Restorative Dentistry (Operative and Prosthodontics) presents the concepts and principles that prepare the graduate to competently deliver dental health care for the restorative dental patient. The department presents the biomechanical and clinical principles necessary to restore the oral cavity to optimum health. Students receive instruction in dental biomaterials, pre-clinical restorative procedures involving caries detection and removal, cavity design, choosing restorative materials, operative dentistry and fixed and removable prosthodontic concepts. The department also correlates the diagnoses and treatment of caries, trauma or pathosis of the dentition as it relates to the various basic sciences and other disciplines of dentistry. Students are also instructed on the restoration of the occlusion. A vital part of the discipline of Prosthodontics, occlusion encompasses the anatomical, physiological, and bio-mechanical relationships of the total masticatory system, the restoration and reproduction of occlusal relationships to their proper function in the system, and the examination procedures that allow proper diagnosis and treatment of the pathologic or dysfunctional states.

COURSE DESCRIPTIONS

PROS 412-01 - *Removable Partial Dentures* - This second year course teaches students the principles necessary for utilization of removable partial dentures. Students are exposed to diagnosis and treatment planning for the partially edentulous patient, with emphasis being placed on prognosis with various treatment modalities. Students gain experience in diagnosis and treatment planning, mouth preparation, impression techniques, survey, design, tooth arrangement, delivery and post-operative care of removable partial dentures. Laboratory procedures and dental materials related to removable partial dentures are reviewed. Students are exposed to concepts that relate other specialty areas to removable partial dentures, such as elective endodontics, fixed prosthodontic abutment preparation, pre-prosthetic surgery, and periodontal considerations. **(8 credit hours)**

PROS 422-01 - *Removable Prosthodontics (Complete Dentures)* - This second year course is designed to explore and discuss the biological principles related to the fabrication and function of a complete denture prosthesis used to rehabilitate completely edentulous patients. Emphasis is placed on thorough examination, recognition of the problems, and how to make a diagnosis, treatment plan, and

prognosis for each patient in a clinical setting. Textbooks, lectures, demonstrations, audio-visual aids, and discussions of the clinical aspects are used to broaden the scope of relative biological and technical knowledge. By the end of the course students gain the thorough, step-by-step, technical know how of the fabrication of complete dentures. **(8 credit hours)**

PROS 492-01 - *Fixed Prosthodontics I and II* - This second year course presents the basic principles to prepare dental students for pre-clinical crown and bridge procedures, as well as provides a foundation for students to grasp principles of clinical crown and bridge procedures. It gives students general knowledge in fixed prosthodontic treatment planning, crown preparations and prosthesis fabrication. At the completion of this course, students should be able to fabricate a fixed partial denture that satisfactorily meets the requirements of biomechanics and promotes the health of the remaining oral structures. Textbooks, lectures, demonstrations, audio-visual aids, along with discussions of the clinical aspects are used to broaden the scope of relative biological and technical knowledge. By the end of the course, students gain the thorough, step-by-step, technical know-how of the fabrication of fixed partial dentures. **(6 credit hours)**

PROS 493-01 - *Fixed Prosthodontics II* - This third year course presents biological and clinical principles to prepare students to restore existing teeth and replace missing teeth, when possible, by means of fixed prosthodontic restorations. The lecture series presents basic principles of crown preparations (specific for porcelain to metal restorations, fabrication of provisional restorations, cast dowel posts, pin retained cores, and the chemical nature of porcelain, color and esthetics in fixed prosthodontics). All clinical procedures presented in lecture will be supplemented by laboratory exercises to prepare the student to perform the procedures in a clinical situation. **(8 credit hours)**

PROS 512-01 - *Junior Prosthodontics* - This third year course is designed to review and reemphasize some of the important principles, concepts and techniques of fabrication of removable and fixed prostheses. This course adds to their basic knowledge and competency in comprehensive care of their patients. **(2 credit hours)**

PROS 521-01 - *Junior Dental Clinics* - This third year course is designed to introduce the student to clinical treatment of the dental patient. Basic prosthodontic treatment modalities are completed by students to integrate the knowledge base gained in the pre-clinical courses with clinical treatment of patients. Students are guided in the diagnosis, treatment planning, and comprehensive care for the edentulous, partially edentulous, and dentate patient. **(7 credit hours)**

PROS 620-01 - *Prosthodontic Seminar* - This fourth year course combines brief lectures, formal oral case reports, literature review, and directed discussions on clinical techniques and problems in prosthodontics in order to: gain additional experience in some of the most advanced areas of prosthodontics; organize and present a case for a patient in need of comprehensive prosthodontic care; and become familiar with the latest scientific literature in the field of prosthodontics. **(1 credit hour)**

PROS 621-01 - *Senior Dental Clinics* - This fourth year course is designed to provide additional clinical experiences for students. Student are guided in the diagnosis, treatment planning, and comprehensive care of more advanced cases to both complete their clinical experiences and develop a basic level of competency to deliver prosthodontic dental health care. Several competency-based clinical exercises and examinations are conducted in fixed and removable prosthodontics. **(8 credit hours)**

PROS 311-01 - *Dental Anatomy (Tooth Morphology and Surrounding Structures)* - This first year course provides students with knowledge in the anatomical and morphological characteristics of teeth. It also includes a study of the eruption sequence for primary and permanent teeth as well as a study of pulp morphology for each type of tooth. **(12 credit hours)**

PROS 312-01 - *Principles of Occlusion I* - This first year course is designed to acquaint students with a thorough understanding of the anatomic relationship that exists between the dynamics of mandibular movement (anatomy and physiology of the stomatognathic system) and occlusal morphology. **(12 credit hours)**

PROS 511-01 - *Occlusal Adjustment* - This third year course emphasizes biological and clinical principles in the preparation of students for diagnosing and treatment planning for psychological, pathological, and physiological problems related to the gnathostomatic system. Laboratory training in the application of occlusal treatment, instrumentation and procedures for occlusal adjustment are also taught in this course. **(2 credit hours)**

PROS 611-01 - *TMJ (Temporo Mandibular Joint) Seminar* - The dynamics of occlusion are presented in this fourth year and analyzed by instructors of the various disciplines. Biological, pathological, and psychological aspects will be emphasized. **(1 credit hour)**

ASDD 483-01 - *National Board Review (Part I)* - The course consists of all of the basic sciences courses covered on the National Board Dental Examination Part I. The review emphasizes concepts contained in board questions as well as a comprehensive review of all basic science courses. The course is held in June for students to take the examination in July. **(8 credit hours)**

ASDD 301-01 (Freshman), ASDD 410-01 (Sophomore), ASDD 510-01 (Juniors) ASDD 602-01 (Seniors) - *Analytical Reasoning and Critical Thinking* - The Analytical Reasoning and Critical Thinking course is designed to teach students how to evaluate what they hear in lectures and/ or read in textbooks. The course enables students to raise and answer important questions involved with self-deception. They are taught to distinguish between fact and opinion and to decide which ideas to examine closely during exams. The difference lies between those students who merely see or hear words and those who see beyond words, achieving a higher level of reasoning and comprehension.

ASDD 301-01 (1 credit hour), ASDD 410-01 (1 credit hour) ASDD 510-01 (1 credit hour) ASDD 602-01 (1 credit hour)

ASDD 610-01 - *National Board Review (Part II)* - This course is offered strictly as a review of all subject areas that will be covered on the National Board Dental Examination (Part II). These areas include endodontics, orthodontics, operative dentistry, oral pathology, oral surgery, pedodontics, periodontics, pharmacology and prosthodontics. Other subject areas include occlusion, biomaterials, anesthesia, roentgenotology, dental public health, behavioral science, study skills and test taking techniques. This course is a prerequisite for participation on the national dental boards (Part II). The students must complete a diagnostic examination at the beginning of the course and an advisory examination at the end of the course. **(4 credit hours)**

OPDN 321-01 - *Introduction to Operative Dentistry* - This first year course is designed to teach students to apply the biological, mechanical and esthetic principles, necessary to recognize dental caries and perform proper tooth preparation. **(2 credit hours)**

OPDN 402-01/403-01 - *Pre-Clinical Operative Dentistry* - This second year technique course is designed to give the sophomore dental student a basic background in the biological and manipulative fundamental principles of operative dentistry and make available the opportunity to practice these principles utilizing the various dental protective liners, bases and restorative materials for replacing lost tooth structure as a result of caries or trauma. **(1 credit hour)**

OPDN 421-01 - *Dental Biomaterials* - This second year course presents the basic chemical and physical properties of dental materials as they relate to their manipulation by the dentist. It is intended to bridge the gap between the knowledge obtained in the basic courses in materials science, chemistry, and physics and the dental operatory. **(1 credit hour)**

OPDN 501-01 - *Operative Dentistry* - This course is designed to acquaint the junior student with clinical procedures and regulations; to relate, review and reinforce the knowledge gained in the pre-clinical Operative Dentistry course and the sophomore Biomaterials course to clinical practice; to teach students to distinguish between decayed and normal tooth structure; to aid students with patient management; and to teach additional material and techniques not covered in the sophomore course in Operative Dentistry. Prerequisite: OPDN 402 - OPDN 403. **(2 credit hours)**

OPDN 531-01 - *Junior Operative Clinic* - This third year course is designed for the clinical practice of operative dentistry. The major objective is to give the student practice in diagnosis, treatment planning, and comprehensive restorative care for the patient possessing all or part of the natural dentition. Prerequisite: OPDN 402 -OPDN 403. **(7 credit hours)**

OPDN 581-01 - *Dental Auxiliary Clinic* - This third year course is designed to familiarize the junior student with methods of saving time and motion. It also is to introduce to the student the concept of four-handed dentistry and to familiarize him/ her with the fundamentals of utilizing the chair-side dental assistant. **(1 credit hour)**

OPDN 583-01 - *Junior DAU Clinic* - This third year course is designed for the clinical practice of utilizing the chair-side dental assistant. Prerequisite: OPDN 581. **(1 credit hour)**

OPDN 611-01 - *Operative Dentistry Seminar* - This fourth year course is a lecture-class participation course in which the most recent advancements in dental materials and restorative procedures are discussed, with an emphasis on esthetic materials and procedures. Clinical problems associated with patients are also presented and discussed. Prerequisite: OPDN 501. **(1 credit hour)**

OPDN 620-01 - *Senior Dental Biomaterials Seminar* - This fourth year course is a complete review of all aspects of dental materials as they relate to dental practice. This course serves to reinforce the biomaterials presented during the freshman, sophomore and junior years in this field prior to graduation. **(1 credit hour)**

OPDN 631-01 - *Senior Operative Clinic* - This fourth year course is designed for the clinical practice of operative dentistry. It involves the continuation of patient treatment with more advanced procedures than the junior year. Prerequisite: OPDN 531. **(8 credit hours)**

OPDN 681-01 - *Senior DAU Clinic* - This fourth year course is designed for the clinical practice of utilizing the chair-side dental assistant. Prerequisite: OPDN 583. **(1 credit hour)**

Department of Periodontics

OBJECTIVES

The mission of the Department of Periodontics is to train pre-doctoral students in the art and science of periodontology. The Department provides pre-doctoral dental students with laboratory, pre-clinical and clinical instruction in diagnosis, treatment and prevention of periodontal disease.

COURSE DESCRIPTIONS

EDPR 421-01 - *Periodontics I* - This two semester pre-clinical course is offered in the sophomore year. Students are introduced to the principles of periodontal disease diagnosis, treatment and prevention through lectures and laboratory, and clinical practice sessions. Students work in teams of two practicing examination and treatment techniques in the clinic to build the skills necessary to treat patients. **(2 credit hours)**

EDPR 511-01 - *Periodontics II* - This two semester didactic course is offered in the junior year. The course focuses on non-surgical and surgical periodontal therapy of various forms of periodontal disease. (EDPR 421 -01 is a prerequisite for this course.) **(3 credit hours)**

EDPR 523-01 and 621-01 - *Periodontics Clinic* - In the junior and senior year, students treat patients in the clinic under the supervision of faculty. A high student-faculty ratio is maintained to ensure that each student develops the skills to treat gingivitis, and early and moderate periodontitis. Students also assist with surgical therapy to foster a familiarity of various surgical techniques. EDPR 523-01 (3 credit hours) EDPR 621-01 **(3 credit hours)**

EDPR 620-01 - Senior Seminar - This seminar is offered in the fall semester and introduces the concept of critical analysis of the dental literature and advanced treatment planning. (EDPR 421 and 511 are prerequisites) (1 credit hour)

Department of Oral Biology and Research

The mission of the Department of Oral Biology and Research is to bridge Basic Sciences and the Dental clinical practice through research excellence and to educate dental scientists for academic and research leadership positions. Recent advances in basic sciences, the completion of the human genome project, the advancement of genomics and proteomics as well as the interdisciplinary nature of research in oral health and disease processes and treatment, are key to position the department as a leader in the national effort to relate these findings to systemic health, and to translate these advances into improved dental care and oral health especially as they relate to the health of underserved populations and the elimination of oral health disparities.

Division of Graduate Programs

OBJECTIVES

The Division of Graduate Studies is committed to establishing graduate training in the recognized specialty areas of dentistry and general practice. The program will prepare the residents to challenge the American Board in their recognized specialty area or similar certification in general dentistry. The training of the postgraduate residents will be consistent with the mission of Meharry and the SOD.

Advanced Training

The Division of Graduate Studies is committed to conducting graduate training in the recognized specialty areas of Dentistry and General Practice. The program will prepare the resident to challenge the American Board in the recognized specialty area or provide similar certification in General Dentistry. The training of the postgraduate residents is consistent with the Mission of Meharry and the School of Dentistry.

There are currently two postgraduate programs in the School of Dentistry:

- General Practice residency Program
- Oral and Maxillofacial Surgery Program

The General Practice Residency program is a one year, accredited program that is affiliated with the Metropolitan General Hospital and the Nashville Veterans Affairs Hospital. The program provides the residents the opportunity to treat a diverse group of patients and gain experience in managing patients in outpatient treatment and hospital inpatient settings. This program provides the opportunity for residents to acquire additional training and experience in all phases of general dentistry while serving an underrepresented population in dental healthcare.

The Oral and Maxillofacial Residency program is a four year, accredited program that trains residents in the full scope of oral and maxillofacial surgery. Resident training is both an inpatient and outpatient service of the School of Dentistry, Metropolitan General Hospital and the Nashville Veterans Affairs Hospital. Residents receive a certificate after successfully completing the program and are eligible to apply for American Board Certification by examination.

Continuing Dental Education

The dental education program is organized to promote a continuous learning process in the profession. The pursuit of continuous education is fostered in the academic program through continuing education programs and special lectures. The Lifelong Learning course is equivalent to a total of sixteen (16) clock hours. Students must earn a minimum of thirteen (13) clock hours of life long learning each year. Attendance at these programs is mandatory for all students. All students must attend eighty percent

(80%) of the required programs to successfully complete the Lifelong Learning Course. Record of attendance at these programs is maintained by the Director of Continuing Education for the School of Dentistry and the Associate Dean for Academic Affairs.

Throughout the course of each academic year, the School of Dentistry sponsors special programs to honor persons who have made significant contributions to the School of Dentistry and to Meharry Medical College.

These programs provide the opportunities to invite outstanding academicians and clinicians to the School and to the College to present lectures in areas of contemporary interests and concerns in education, research or clinical practice. They also provide the opportunity for faculty and students to interact with these visitors in an atmosphere of tradition and history. Questions from Heritage Lectures are included in appropriate departmental examinations.

In addition, the School of Dentistry along with the College's continuing education program conduct several dental education courses each year for students, alumni, and other dental healthcare professionals as a part of life long learning in the dental profession.

Academic Regulations

Requirements for D.D.S. Degree

1. Regular dental school attendance for minimum of four years of total instruction. In instances where students transfer from other dental schools, the student must matriculate a minimum of two academic years at the School of Dentistry Meharry Medical College. (See the School of Dentistry Catalog regarding admission and advance standing)
2. Satisfactory completion of both Part I and Part II of the National Board Dental Examinations (NBDE).
3. Satisfactory completion of all didactic and clinical courses, all clinical experiences, practical examinations and all Clinical Competency Examinations- which constitute the prescribed curriculum.
4. Demonstration of high standards of moral and ethical conduct.
5. Payment of all financial obligations to the School of Dentistry and to Meharry Medical College.
6. Return of all loaned equipment, patient charts, borrowed items, etc.

Advising

Academic and personal advising assistance is provided. Confidentiality is strictly maintained. Appointments are available upon request.

Licensure

The Final Clinical Competency Examinations (FCCE) are designed to allow senior students to demonstrate clinic competencies and time management.

If the student has applied to participate on a state/regional board examination for licensure, the student will be required to successfully complete the FCCE in all disciplines to be tested as a qualifier to take that state/regional board examination.

Violation of the above stated guidelines will result in immediate suspension of the student until the next semester or a period of eight (8) weeks if the violation occurs during or after the summer session.

Examination and Grades

Examinations are held at the discretion of the instructor.

Grade Point Averages are based on the 4-point system. The symbols A (Excellent), B (Above Average), C (Average), or F (Fail) which appear on the official transcript and on the grade report given to each student at the end of each semester express the evaluation of the student's work. (Note: The "C" is unacceptable in the graduate School; it is awarded, but the grade must be balanced by exceptional academic performance in other courses.)

"I"- Incomplete work indicates (1) that the student has satisfactorily completed at least three-fourths of the course but, that for legitimate reasons, a small fraction of the work remains to be completed; or (2) that the student's record indicated that he/she can obtain a passing grade, but that he/she lacks a specific requirement such as the final examination because of illness or some other unique or extraordinary circumstances beyond the student's control. A student receiving an "I" must complete the requirements for the Course to remove the "I" by the end of the next semester. If the work is not completed within the specific time, no credit will be given and an "F" will be officially recorded as the final grade.

All final grades shall remain on a student's permanent academic transcript.

The symbols "WV" and "WA" indicate that the student "Withdrew Voluntarily" or was "Withdrawn Administratively."

The symbols "WP" and "WF" indicate that the student "Withdrew Passing" or "Withdrew Failing" respectively. These symbols are to be used only when the student has withdrawn after at least six weeks in attendance.

The grade "B+" (outstanding), "C+" (above average) and "P" (pass) are used in both Schools.

In addition to the letter grades of A, B, C, and F. the following grading symbols are also used in the School of Graduate Studies and Research: "S" (Satisfactory) and "U" (Unsatisfactory).

Continuing Courses

There are didactic and clinical courses (clinics) that extend beyond one semester in duration. Progress is evaluated throughout the year, although final grades are assigned only at the end of the final semester. A record of student academic progress is reported at mid-term and at the end of the first semester, using the terms "Satisfactory" or "Unsatisfactory". A grade of "IP" (in progress) will be awarded at the end of the first semester. The final grade is reported in the usual manner at the end of the course. Students may request information regarding their progress from the course coordinator at any reasonable time that is convenient for both the student and course coordinators.

Leave of Absence

A leave of Absence is an interruption of the normal course of study requested by the student and requires prior written approval by the Dean or his/her designee. A student's leave of absence shall not extend beyond one calendar year. The official date of leave shall not antedate the date of the student's request. An official leave of absence form must be processed and can be obtained from the Office of Records. Students will be administratively withdrawn (WA) from classes during an official leave of absence.

A leave of absence may be granted upon receipt of written request for reasons of illness, personal and/or family extenuating circumstances (i.e., pregnancy, military duties, or other matters), financial hardship, emotional states and similar situations. The Associate Dean for Academic Affairs may require documentation to accompany a request. If the situation is appropriate, the Associate Dean for Academic Affairs may place a student on an Administrative Leave of Absence. A student must make a written request to terminate a Leave of Absence for reinstatement to active status. Failure of such requests will result in automatic dismissal. If a leave of absence is requested for physical or mental health reasons, a qualified and appropriate health professional must provide a letter justifying the request. A similar letter justifying the student's readiness for return after a granted leave is necessary.

At the end of a granted leave of absence, all courses completed will be credited with the **exception** of preclinical-didactic and technique courses which may require repeating. Incomplete courses must be completed or repeated if indicated prior to advancement in the program. Preclinical technique and didactic skills must be certified as adequately retained by relevant clinical departments. Those preclinical courses must be repeated successfully in order to receive credit and advancement, if indicated, prior to further advancement in the academic program. Students who are on conditional reinstatement provisions are ineligible for a leave of absence.

Return from Leave – A written request to return to the college following a granted leave of absence is required. (This correspondence must be provided to the College Office of Admissions and a copy provided to the Dean of the School of Dentistry not less than **two** months prior to the date of anticipated return.) Exception may be granted for maternity, military duties, or other short-term leave.

Students will be accepted for return at the beginning of class periods (semesters) only and will not be allowed to return after the close of the registration period of any semester.

Any student who returns from an approved leave of absence will be repositioned in the academic program in accordance with evaluations of the pre-leave of absence level of academic progress.

Evaluation and Student Performance

Department chairs and course coordinators establish the examination and grading policies for examinations and all additional forms of student evaluation in the School of Dentistry courses. These policies are distributed as part of each course syllabus. At the completion of each course, each student enrolled in the course is evaluated by the faculty and course coordinator. Each student is awarded a letter grade for the course. The letter grades correspond to the A, B, C, P or F system.

Grades for all students are recorded by the course coordinator and department chair on official grade forms provided by the Office of Records to the Office of Academic Affairs. From this office, the grades are submitted to the Office of Records of the College. Only grades which have followed the appropriate process are considered to be final grades and are placed on the permanent student transcript, after approval by the Student Evaluation and Promotions Committee.

Academic Performance and Progress

The student's performance and subsequent progress is evaluated at mid-semester and at the end of the semester. These evaluations are based on departmental reports submitted to the Student Evaluation and Promotions Committee of the School of Dentistry. Each student is informed of his/her progress in each didactic course and clinic and advised in writing of deficiencies. Each clinical department has established criteria for clinical competency (clinical experiences), and standards of adequate performance (see Clinical Manual). Based on the evaluation of the student's performance and progress in each area, a grade of "S" or "U" is assigned at mid-semester. At the end of the first semester, "IP" (in progress) grades are awarded for courses extending beyond one semester. Definitive final letter grades are assigned at the end of the semester when the course ends.

The Student Evaluation and Promotions Committee consists of course coordinators, department chairs, the Associate Dean for Academic Affairs, the Associate Dean for Student Affairs, and the Associate Dean for Clinical Affairs. The Student Evaluation and Promotions Committee meets on a regular basis, minimally at mid semester and at the end of the summer session, to monitor student performance. This evaluation committee, after careful review of each student, makes recommendations to the Dean relative to student status, academic progress and other student related issues. The deliberations may include recommendations for counseling, intervention, student support, or other student needs. Students may also be referred to the Center for Educational Development and Support for additional academic support, e.g. test taking skills, time management and stress management.

Official grades for courses taken during a semester are provided to the students by the Office of Records at the end of each semester.

At the end of the senior year, the dean and the general faculty of the respective schools recommend to the Board of Trustees those students who have satisfactory scholastic records for the entire course of study and who, in the judgment of the faculty, give evidence of personal fitness for the practice of their profession.

Unsatisfactory Academic Performance

If a student receives one or more failing grades, the Evaluation Committee shall recommend appropriate action in keeping with the academic regulations adopted by the general faculty.

Satisfactory Academic Progress

Satisfactory Academic Standing- A student at Meharry Medical College is in good academic standing if he/she is properly registered with the Office of Records and is unencumbered by pending action of the Office of the President or Dean pursuant to recommendations from a faculty evaluation committee arising from academic or other difficulties.

Satisfactory Academic Progress- In order to attain and/or maintain good academic standing, a student enrolled full-time must satisfy the following conditions:

1. The student must be registered and enrolled in the course load which meets the minimal number of credits or class hours (fifteen (15 hours) established by the School of Dentistry for full-time student status for any semester.
2. The student must pass or successfully complete the minimum number of credit hours (sixty-seven percent (67%) to maintain full-time student status for a subsequent semester.
3. The full-time student must maintain a cumulative grade point average that meets or exceeds the minimally accepted academic standard of "C". Part-time students in enrichment programs must also meet or exceed the minimally accepted cumulative grade point average for the School of Dentistry in courses in which they are enrolled. Each student must maintain a minimum grade point average of 2.0 ("C"). A student who has a GPA below 2.0 for a semester is placed on academic probation.

Academic Probation

A student with a semester or cumulative grade point below a 2.0 will automatically be placed on academic probation. A student that is unsuccessful on the National Board Dental Examination Part I or Part II will be placed on academic probation. A student on academic probation is not eligible to hold student leadership positions. A student currently in a leadership position whose performance is as described above will be removed from the position effective immediately.

Academic Citations

All citations for outstanding performance in the School of Dentistry are issued by the Student Evaluation and Promotions Committee.

Students cited for excellence will have performed at an outstanding level during the period in which their performance was evaluated and are selected for citation by the appropriately involved faculty members.

Dean's List

A student is eligible for the Dean's List if he/she performs at an exemplary level consistent with the achievement of a cumulative grade point average of 3.50 and above during an academic year.

Honor Graduates

The School of Dentistry faculty recommends to the Dean students for graduation with **HONORS** based on the student's scholastic record over the entire four years of the academic program. A minimum cumulative grade point average of 3.50 is required for graduation with **HONORS**.

Honors, prizes, and awards are recommended by the Student Evaluation and Promotions Committee. This committee processes awards based on stated criteria of the Donor, the Department, the Dental School, and the College.

Auditing

Students in the School of Dentistry may be required by the Dean or the Student Evaluation and Promotions Committee to audit one or more courses previously passed based on academic performance. The students must be officially registered to audit. The 80% required attendance policy as described in the School of Dentistry Academic Policies and Procedures Manual applies to audited courses. Auditing students must participate in and complete all phases of an audited course at a passing level. In the event of an unsatisfactory audit, the student will be dismissed for poor academic performance.

Withdrawal from a Course

To withdraw from a course, a student must first obtain approval from the appropriate Instructor/Department Chairperson, Associate Dean for Academic Affairs, and the Associate Dean for Student Affairs of the School of Dentistry. The written approval must then be filed by the student in the Office of Records of the College. Only at this point will the student's name be deleted from the official class roster.

A student may not withdraw from a School of Dentistry course unless unusual or extenuating circumstances beyond the student's control make it extremely difficult to complete the course.

Withdrawal from Meharry Medical College

A student may withdraw from Meharry Medical College after filing an official Withdrawal Form properly executed, with the Office of Records. The student's total performance in all courses will be evaluated at the time of the requested withdrawal in accordance with the policies of the School of Dentistry. Based on the review of the student's performance, he/she may be dropped from the College for poor academic performance. Grades for completed courses shall be recorded on the official transcript. If, at the time of withdrawal from the College, 60% or more of a course in which the student is enrolled is completed, the student will receive a "WF" or "WP", whichever indicates the student's performance at the time of withdrawal. Should the student seek to return to Meharry following withdrawal, the regular application process must be completed.

Admissions

Procedures

The School of Dentistry participates in the Associated American Dental Schools Application Service (AADSAS) sponsored by the American Dental Education Association (ADEA). Persons desiring to make application for regular admissions, advanced standing or readmission must make application through the AADSAS, 1400 K Street, N.W, Suite 1100, Washington, D.C. 20005; 1-800-353-2237. Persons applying must instruct ADEA to forward their credentials to the Office of Admissions, Meharry Medical College, 1005 Dr. D.B. Todd Jr. Blvd., Nashville, TN 37208.

The deadline for all applications is February 1 of the year of anticipated matriculation. Upon receipt of the application from AADSAS, the Office of Admissions will send the applicant a letter acknowledging receipt of the AADSAS electronic data and advising them of materials needed to conduct a preliminary evaluation. An application fee of \$60 must be paid to continue the process. This fee is non-refundable and cannot be credited toward tuition if the applicant is accepted.

It is the applicant's responsibility to have a report of his/her performance on the Dental Admission Test transmitted to Meharry's Office of Admissions. The test must have been taken within three years of the proposed matriculation date.

Applicants who have been accepted by the Committee on Admissions or placed on the alternate list, but who were not enrolled and who wish to enter in a subsequent year, must apply for readmission and must meet all the requirements in force at the time of the new application.

All credentials received in fulfillment of admission requirements become the property of Meharry Medical College. Falsification of any portion of the data submitted for admission disqualifies the applicant for further consideration by the Committee on Admissions.

The Committee on Admissions reviews all applications. Candidates presenting credentials that do not meet the minimum requirements are so advised by the Director of Admissions and Records. Each candidate who presents the minimum requirements is evaluated competitively and is either accepted, placed on the waiting list, or rejected on the basis of relative qualifications. The appropriate officer will inform the applicant of the action of the committee as soon as possible.

Admission Requirements

The Committee on Admissions of the School of Dentistry selects students for admission into the School's academic program. The committee is charged with the responsibility of selecting students who will make suitable candidates for the study and eventual practice of dentistry. One freshman class is admitted at the beginning of each academic year. The number of applicants greatly exceeds the capacity, and all applicants are considered on a competitive basis from the standpoints of scholarship, intelligence, aptitude, character, and general fitness to meet the historic mission of the college.

The Committee on Admissions will consider the applications of candidates who meet the following minimum qualifications:

1. Graduation from a US or Canadian accredited college or university.
2. At least two full academic years of acceptable credit earned in a college or university currently recognized by the Commission on Dental Accreditation of the American Dental Association.

These recognized agencies are as follows: Middle States Association of Colleges and Secondary Schools; New England Association of Colleges and Secondary Schools; North Central Association of Colleges and Secondary Schools; Northwest Association of Secondary and Higher Schools; Southern Association of Colleges and Schools; and Western Association of Schools and Colleges.

3. The satisfactory completion of two years of pre-professional education by August of the year the applicant desires to be admitted, with the following courses and credits indicated:

Courses	Sem. Hours	Qtr. Hrs.
General Biology, Botany, or Zoology, with laboratory	8	12
Inorganic/Gen. Chemistry-Qual. Analysis, with lab.	8	12
Organic Chemistry with laboratory	4-8	8-12
General Physics, with laboratory	4-8	8-12
English Composition	6	9

Desirable: If the course in inorganic chemistry offered for admission does not include adequate instruction in the physical chemistry of solutions and in quantitative technique, courses in these subjects are recommended.

4. Students with "conditions" in college courses are not accepted. "Satisfactory Completion" of required courses is interpreted by the Committee on Admission as an average grade of at least C (2.00) in each subject field. "Satisfactory Completion" of two years pre-professional education is interpreted as an average grade of at least C for the entire work of the two years. No student who has attained a general college average below C will be eligible for consideration.

5. An official record of performance on the Dental Admission Test (DAT). The DAT scores must be no more than three years from the year of application.

It is highly recommended that the applicant supplement these basic requirements with courses in the humanities and natural and social sciences that are designed to promote broad cultural development. Highly specialized courses that occur in the dental curriculum, such as neurology, histology, human anatomy, bacteriology, and physiology, may not be substituted for one of the general courses required for admission. It is recommended that elective courses be selected from such subjects as the following: embryology, anatomy, quantitative analysis, mechanical drawing, mathematics, economics, history, psychology, sociology, microbiology, philosophy, fine arts and histology.

Candidates for admission are evaluated on a competitive basis relative to acceptable scholastic records, satisfactory performance on the DAT, favorable recommendations from their pre-dental committees or from two of their instructors in the natural sciences, and relative to whether in all other respects they give evidence of becoming successful dental students and health care providers.

Veteran Students

Meharry Medical College is authorized to certify the enrollment of veterans, dependents, and other eligible persons to the Veterans Affairs Department. These students are governed by the same policies and regulations as any student seeking admission and as any registered student. For additional information, see the section on Veteran Students in the College Overview of this catalog.

Admission to Combined Curriculum

Several colleges and universities approve the combined pre-dental and dental curriculum leading to the baccalaureate degree. A student seeking admission to the combined curriculum should ascertain from the registrar of the institution in which three years of pre-dental work were completed whether the first year of dentistry taken at Meharry Medical College will be acceptable to that institution as the fourth year toward a baccalaureate degree. An official statement to this effect must be presented with the application.

Joint Fisk/Meharry Program

Fisk University and Meharry Medical College have developed a joint program in the biomedical and health sciences. Outstanding students admitted to this program will complete a three-year curriculum in general education courses and most of the science courses for a major in either biology or chemistry at Fisk University. Such a curriculum will include all prerequisites necessary for entry into the School of Dentistry.

These students, upon admission to Fisk University, have a position reserved in the dental program at Meharry Medical College following the successful completion of the prescribed three-year program at Fisk University. Students are eligible for a bachelor's degree from Fisk University following successful completion of the first academic year at Meharry Medical College. It is anticipated that an additional three years will be required to complete training for the D.D.S. degree.

Admission to Advanced Standing

Application for admission to advanced standing should be made to the Director of Admissions to be presented to the Committee on Admissions. Students who have satisfactorily completed one or more years at other dental schools are eligible for admission. However, no students are admitted to senior advanced standing. A student must matriculate at least two years at Meharry Medical College.

The following requirements are necessary:

- matriculation at an approved dental school;
- official transcripts from each school attended, showing the fulfillment of entrance requirements for admission to this school;
- satisfactory scholastic and disciplinary records from the dental school from which the applicant is withdrawing. No students are accepted with failures or conditions incurred at other dental schools;
- a statement of honorable dismissal from the dean of the dental school from which the applicant is withdrawing; and,
- if the interval since attendance at dental school has exceeded two years, the applicant shall be required to take such examinations as the Committee on Admissions recommends for entrance to the class desired.

If any deficiency exists, disposition may require:

- validation of credits by certain department chairpersons;
- examination in any of the subjects presented for transfer; and,
- completion of certain courses not common to all dental curricula.

Admission as a Special Student

A person who is admitted as a special enrichment or summer student is not a candidate for a degree, but is governed by the same scholastic regulations as regular students. An interview with the department chair in which the work will be undertaken is required. A special student who decides to enroll as a regular student must apply to the SOD in the same manner as all other applicants. Fees are prorated in accordance with the number of hours the course offers.

Readmission

An application for readmission must be made to the Director of Admissions and must be approved by the Committee on Admissions. The applicant must meet all requirements in force at the time of submission. If the interruption has exceeded two years, applicants will be required to take examinations in courses for which they desire credit, unless otherwise advised by the Committee on Admissions. Students who have been dropped from the rolls of the College are eligible for reconsideration only under extenuating circumstances.

Admission of Graduates in Dentistry

The School of Dentistry annually offers short refresher courses in the different disciplines of dentistry. The refresher courses are of two types: Continuing Education and Enrichment.

Continuing Education courses are designed for general practitioners who are graduates of dental school and who wish to pursue post-graduate studies without becoming candidates for a degree. The courses, hours and fees will be announced in special brochures that are prepared annually and will reflect the desires and needs of the general practitioners.

The Enrichment program is designed to improve the skills of dentists in the discipline(s) requested by a state board, regional testing agency or special request of a dentist. At the conclusion of the enrichment program, each participating dentist will receive either a satisfactory performance evaluation or a statement indicating that he/she has spent the required time in the area(s) specified.

Inquiries regarding either of these training programs should be made to the Office of the Dean. Students in both programs have to register through the Office of Records to receive proper credit and/or grades if required.

Post-Baccalaureate Program

This program is a component of the Health Care Opportunities Program (HCOP) conducted by Meharry's School of Dentistry. The program is designed to increase the number of disadvantaged minority students entering and graduating from dental schools. The Program identifies and selects post-baccalaureate individuals who need a structured academic enhancement curriculum for one year and an acceptable score on the Dental Admissions Test to meet the specific requirements necessary for admission to the School of Dentistry.

The program assists participants in curriculum planning, counseling, academic enrichment and improvements in test-taking skills in preparation for the retaking of the Dental Admission Test. The students in this program participate in an initial eight-week summer program of diagnostic reinforcement. This is followed by one year of undergraduate strengthening taking those courses that are necessary for admission.

Exposure to the dental school environment during the one-year program will give these students a better understanding of the realities of the study and practice of dentistry. Additionally, these trainees will have an opportunity to learn from the experiences of dentists through their day-to-day campus contacts. This collaboration will play an important role in helping these trainees clarify their personal goals and will provide the stimulation and motivation for successful entry into and graduation from dental school.

Pre-Baccalaureate Program

The Pre-Baccalaureate Program is an eight-week summer initiative that identifies and selects disadvantaged undergraduate students during their sophomore and junior years who are strong academically.

The objective of this program is to provide preliminary education through enrichment courses, counseling and assistance in curriculum planning. Preparation for the Dental Admission Test is also a part of this program to help facilitate entry into the freshman dental class. These students are closely monitored throughout their undergraduate education.

Exposure to the dental school environment during the eight-week Pre-Baccalaureate Program gives students a better understanding of the realities of the study and practice of dentistry. Additionally, these participants will have an opportunity to learn from the experiences of dentists through their day-to-day campus contacts. This exposure to practitioners will play an important part in helping these trainees clarify their own goals and will provide the stimulation and motivation for their successful entry into and graduation from dental school.

Applications for the Pre-Baccalaureate Program should be submitted no later than March 1 of the year for which the applicant is applying. This program starts on the first Monday in June.

Financial Information

Tuition for the academic year 2006/2007 is \$27,956.84.

Tuition and fees are set annually by the Board of Trustees and are subject to review and change without further notice.

The Tuition and Fees Chart is as indicated below:

Tuition	Fresh	Soph	Jr	Sr
Tuition	27,956.84	27,956.84	27,956.84	27,956.84
Total fees	8,913.72	17,925.36	9,104.36	8,074.45
Total Tuition and Fees	36,870.56	45,882.20	37,061.20	36,031.29

This Chart does not include expenses for room and board, books & supplies, transportation, and miscellaneous. For additional information regarding these expenses, please contact the Office of Financial Aid.

Scholarships

A Scholarship file is maintained in the School of Dentistry in the Office of Student Affairs. The file is updated frequently to keep students informed of available scholarships.

Branches of the U.S. Military and National Public Health Service Corps offer student scholarships. Obligatory service requirements are associated with scholarship awards. Telephone numbers for these programs are listed below.

National Health Service Corps (NHSC) and Commissioned Officer Student Training and Extern Program (COSTEP)
1-800-221-9393

U.S. Air Force (615) 298-5487 – local
U.S. Army (615) 874-5006 – local
U.S. Navy (615) 332-0755 – local or 1-800-334-4394

Recipients of Scholarships, with the exception of the incentive scholarships, are selected by the Student Evaluation Promotions Committee and Awards (SEPAC) for the School of Dentistry. This committee is composed of Departmental Chairs and Course Coordinators. The scholarships are as follows:

Incentive Scholarships-These awards are granted to selected Dental students entering with undergraduate grade point average (G.P.A) of 3.50 (B) or above. This scholarship is renewable each year based upon maintaining an academic G.P.A. of 3.50 or above. Recipients are selected by the Admissions Committee.

Cumulative Academic Scholarships-These awards are granted to second, third, and fourth year Dental students who have maintained a cumulative academic grade point average (G.P.A.) of 3.50 or above in the designated academic year. They are determined by fund availability. The SEPC awards these scholarships.

Academic Achievement Scholarships- These awards are granted to students with an academic G.P.A. of 3.50 or above in the designated academic year. The number of scholarships awarded each year is determined by fund availability. The SEPC awards these scholarships.

American Dental Association (ADA)- A selected number of ADA Endowment Scholarships are awarded annually to Dental students. The National Awards are classified into two categories- underrepresented minority students and the general student population. The Awards Committee selects students who will compete for these awards.

National Dental Association Foundation- Colgate-Palmolive Scholarships- These awards are granted to underrepresented minorities.

1. Second, third and fourth year students.
 - a. Recipients are selected by the National Dental Association.

Honors and Awards

Convocation Awards- These are presented to students at various levels for outstanding didactic and clinical performance. Students are selected by the Student Evaluation and Promotions Committee based on criteria of the donor and procedures and policies established by the School and the College.

Commencement Awards- These are presented to graduating senior students for outstanding didactic and clinical performance. Students are selected by the Student Evaluation and Promotions Committee based on criteria of the donor and procedures and policies established by the School and the College.

Lectureships

Allen/Watson Lecture - This annual lecture and program honors Dr. William H. Allen and Dr. William H. Watson. Dr. William H. Allen is a former Dean of the School of Dentistry and Professor Emeritus in the Department of Restorative Dentistry (Prosthodontics Division). Dr. William H. Watson is Professor Emeritus in the Department of Restorative Dentistry (Operative Division). (inaugurated 1981).

Mobley-Singleton Lecture - This lecture and program honors Dr. Eugenia L. Mobley, former Dean of the School of Dentistry and former Chairperson of the Department of Preventive Dentistry and Community Health, and Dr. J. B. Singleton, former Professor and Chairperson of the Department of Oral Maxillofacial Surgery, for dedicated service and leadership to the School of Dentistry, Meharry Medical College, the Nashville Community, Local, State and National organized dentistry (inaugurated 1992).

The S. O. Banks, Jr. Lecture - This annual lecture and program honors Dr. S. O. Banks, Jr., Professor in the Department of Oral and Maxillofacial Surgery (inaugurated 1988).

Turpin Memorial Day - This annual lecture and program honors Dr. Donley H. Turpin, a pioneer in the School of Dentistry who was a Professor of Prosthodontics and the first Black Dean of the School of Dentistry. This celebration is co-sponsored by Omicron Omicron Chapter of the Omicron Kappa Upsilon (OKU) National Honor Dental Society. At this time, newly elected OKU members from the graduating senior class are presented to the assembly (inaugurated 1947). Honorary and faculty OKU members are also inducted at this time.

Occupational Safety and Health Administration (OSHA) – This seminar is required for all students at each level of the academic program (freshman, sophomore, juniors, and senior years).

All classes and clinics are cancelled to allow for mandatory student and faculty attendance at these special programs of the School and College.

Faculty

Department of Biomedical Sciences

Division Of Professional Education

Chairperson: George A. Breaux, M.D.

Vice-Chairperson: Arthur Jackson, Ph.D.

Professors: Mohit Bhattacharyya, Ph.D. (Physiology)

John T. Clark, Ph.D. (Physiology)

Maria de Fatima Lima, Ph.D. (Microbiology)

Mohammed A. Maleque, Ph.D. (Pharmacology)

Associate Professors: Emmanuel Atta-Asafo-Akjei, Ph.D. (Biochemistry)

Susan A. DeRiemer, Ph.D. (Embryology)

Alfred M. Nyanda, Ph.D. (Pharmacology)

Assistant Professors: Ian A. Fentie, Ph.D. (Anatomical Sciences)

Carol Freund, Ph.D. (Genetics)

Shyamali Mukherjee, Ph.D. (Pharmacology)

Olugbemiga B. Ogunkua, M.D., Ph.D. (Anatomical Sciences)

Professor Emeriti: Mukul Banerjee, Ph.D. (Physiology)

Henry A. Moses, Ph.D. (Biochemistry)

Dolores C. Shockley, Ph.D. (Pharmacology)

Department of Dental Public Health

Chairperson: Angel Rivera Torres, D.D.S., M.P.H., M.S.P.H., Ph.D.

Professor: John E. Maupin, D.D.S., MBA

Associate Professors: Cherae Farmer-Dixon, D.D.S., M.S.P.H.

Wilda Seibert, R. D.H., M.S.

Assistant Professors: Jacinta P. Leavell, M.S., Ph.D.,

Machelle Fleming Thompson, R.D.H., M.S.P.H.,

Yolanda Anthony-West, D.D.S., M.S.P.H.

Adjunct Professor: Rueben C. Warren, D.D.S., Dr. P.H.*

Adjunct Assistant Professor: Janet Clodfelter, D.D.S.

*Diplomate American Board of Dental Public Health

Department of Endodontics and Oral Diagnostic Sciences

Chairperson: Augustyne V. Hill, D.D.S., M.S., Associate Professor*

Associate Professor: Dudley E. Felix, D.D.S.,** Heidi L. Christensen, DDS, MS

Assistant Professors: **Tanya M. Gibson, D.D.S.,*** Gibson Johnson, Jr., D.D.S., William D. Scales , D.D.S., Tanya A. Wright, D.D.S.,*** Robert Williams, D.D.S.**

Instructor: Terrance L. Cason, D.D.S.,

*Diplomate American Board of Endodontics

**Diplomate American Board of Oral Medicine

***Diplomate American Board of Oral Pathology

Department of Oral and Maxillofacial Surgery

Chairperson: Charles W. Williams, D.D.S., Associate Professor*

Graduate Program Director: C. Ray Bennett, D.D.S., Professor*(Deceased)

Associate Professor: Felix Lawrence, D.D.S., D.Sc. *

Assistant Professors: Christian Bennerman, D.D.S., Ruth E. Ross, D.D.S., James King, D.D.S., (Visiting)

*Diplomate American Board of Oral Maxillofacial Surgery

Department of Orthodontics

Chairperson: Melvin S. Polk, Jr, D.D.S., M.S., Associate Professor *

Associate Professor: Shyam K. Malhotra, D.D.S.

*Diplomate American Board of Orthodontics

Department of Oral Biology and Research

Interim Chairperson: Maria F. Lima, Ph.D.
Associate Professor: Hua Xie, D.D.S., Ph.D.
Research Assistant Professor: Jie Wu, Ph.D.

Department of Pediatric Dentistry

Chairperson: Adolfina Montalvo-Polk, D.D.S., Associate Professor *
Professor: Edwin H. Hines, D.D.S., M.S.D. *
Instructors: Yvette Woodard, D.D.S., Eric K. Wood, D.D.S., (part-time)
Visiting Instructors: George Adams Sr., D.D.S.,* George Adams Jr., D.D.S.
*Diplomate American Board of Pediatric Dentistry

Department of Periodontics

Chairperson and Associate Professor: Paulette J. Tempro, D.D.S.
Assistant Professor: Luis Litonjua, D.M.D., M.S.

Department of Restorative Dentistry

Chairs and Associate Professor: Charles T. Smith, DDS, MA.*
Professor: William B. Butler, DDS, MS.*
Associate Professors: Satish Makrandi, BDS, , James E. Tyus, DDS, Rolando Bernui,* DDS, M.S., Roosevelt S. Smith, DDS, Henry L. Young, Jr., DDS, MS
Assistant Professors: Howard Dodd, DDS, Hyung G. Kim, DDS, MS, Daphne F. Young, DDS, MSPH
Assistant Professor (Part-Time): Thomas Brannon, DDS, William P. Davis, DDS, MSPH, Eric Carter, DDS
Instructor: Lindel Brookes, DDS,
Instructor (Part-Time): Tommy Dorsey, DDS, Jennifer Biter, DDS, Roney Guinn, DDS
Volunteer Clinical Instructor: Michael A. Yako, Jr. DMD
*Diplomate American Board of Prosthodontics

Division of Graduate Programs

Associate Dean: Charles W. Williams, D.D.S.
Program Director – Oral and Maxillofacial Surgery: C. Ray Bennett, D.D.S.
Program Director – General Practice Residency Program:
Henry L. Young, Jr., D.D.S., M.S

School of Graduate Studies and Research

Administration

Maria de Fatima Lima, Ph.D., Dean

Evangeline Motley-Johnson, Ph.D., Associate Dean

Christine Ninja-Trupin, Ph.D., Program Evaluator

William Washington, D.P.A., M.P.A., M.P.H., Director, Master of Science in Public Health

Steven Wolff, M.D., Director, Masters of Science in Clinical Investigation

Graduate Studies and Research Education at Meharry

The School of Graduate Studies and Research (SOGSR) is recognized as a valuable national resource for educating PhD's in the biomedical sciences, Masters-level graduates in Public Health (MSPH), and more recently, graduates of Masters in Clinical Investigation (MSCI). Since 1970, Meharry has conferred more than 10 percent of the PhD degrees awarded nationally to African Americans in all of the biomedical sciences. Graduates of the School serve on the faculties of America's best universities as well as in leadership roles for many of the nation's health, pharmaceutical, and biomedical technology corporations.

The divisions that participate in the graduate programs are housed on three floors of the West Basic Sciences Center and in the Clinical area. The Center provides some 280,000 square feet of teaching, laboratory, and office space. Each division has a seminar room, a library, small group meeting facilities, faculty laboratories, and offices. The building also houses shared seminar rooms, large lecture halls, and central research core facilities including an animal care facility; a molecular biology core facility that contains a DNA sequencer, an oligonucleotide synthesizer, a an Amgen densitometer; an Affymetrix gene array facility; a flow cytometry laboratory; a Biological Safety Level 3 (BL3) facility; a behavioral neuroscience facility which includes an optical animal activity monitoring system, a Morris water maze as well as Y and Radial arm mazes; a molecular neurobiology core and a neurohistological laboratory.

Mission of School

The School of Graduate Studies and Research strives to provide unique educational opportunities in basic biomedical research and clinical investigation training and public health service to promising African Americans and other under-represented ethnic minority students through outstanding basic, clinical, and public health oriented research with special emphasis on serving the underserved communities and in diseases and health conditions that disproportionately affect ethnic minority populations.

Research

The goal of the training programs in the Graduate School is to translate knowledge from the bench (Ph.D. program) to the bedside (Master in Clinical Investigation) to the community (Master of Science in Public Health). Research is the vehicle that supports training in all of these programs. Currently, investigators in the Department of Biomedical Sciences are involved in basic science research in Cancer Biology, Microbial Pathogenesis and Immune Response, Cardiovascular Biology, and Neurobiology and Neurotoxicology and train in the Cancer Biology, Microbiology and Immunology, Neurosciences and Pharmacology Ph.D. training programs. The PhD programs are designed to be broad, comprehensive, creative, individualized, and integrated to maximize each student's opportunity to develop a strong foundation in the basic sciences. Research supporting the programs leading to the Master of Science in Clinical Investigation is translating basic findings into applicable knowledge to patients and their health outcomes; current clinical areas of research, are Women's Health, Cancer, Sickle Cell Disease, and HIV-AIDS. At Meharry, we see as our mission to inform and engage the community to address diseases and health conditions that disproportionately affect ethnic minority populations; research leading to the Master of Science and Public Health addresses Access to Health and Health Care, Cancer Epidemiology, Behavior and Beliefs Affecting Treatment and Compliance of Cancer as well as other diseases and the Health of our Communities.

History of the School

The School of Graduate Studies and Research at Meharry Medical College began in 1938 as a series of short courses in the basic and clinical sciences. In 1947, a Master of Science Degree program was implemented as the first graduate degree, a Ph.D. program was established in 1972, and an M.D. /Ph.D. program in 1982. The Ph.D. program has graduated more than 180 PhDs in the US and currently is the top producer of African-American Ph.D.s in the Biomedical Sciences in the US. The Master of Science in Public Health Program at Meharry Medical College was established in 1974 and graduated its first class of one student in 1978. To date the program has graduated approximately 300 professionals who occupy positions of leadership in many public and private sectors of the country. The Master of Science and

Clinical Investigation was established in 2004 and has graduated four individuals who are at the forefront of clinical and translational research.

Objectives of the Program

Upon completion of the Graduate Program our graduates will:

1. Know current biomedical science and public health, and their historical context, with special emphasis on the diseases and conditions that affect underserved communities
2. Be prepared to conduct original research: design appropriate experiments, be expert in techniques of the life, clinical sciences and public health, and think scientifically and analytically.
3. Be able to translate basic science and public health to address problems of health and society; work collegially; communicate effectively verbally, in writing, and graphically; and practice the highest ethical and professional standards.

Our graduates will be creative and confident in exploring new areas and opportunities.

Academic Programs

D

octoral Program

The doctoral of philosophy degree opens the door to a career of research and discovery. It also leads to positions of broad responsibility in government, industry, and the academic world. Yet, the motive that drives scientists is not the desire for fame and wealth, prestige or power. Instead, it is curiosity, the unremitting desire to understand how the natural world works. If you share that desire, then you will find our graduate program challenging and exciting. We at Meharry believe these enterprises cannot reach their fullest capacity for human excellence until they draw upon the intellectual resources of all segments of the population. The doctoral program at Meharry, leads to the interdisciplinary PhD in biomedical sciences with major emphasis in cancer biology, microbiology and immunology, neuroscience and pharmacology.

The doctoral program is divided into core, major emphasis, and dissertation phases. The core phase occupies the first year of study; all students enroll in courses defined as the core curriculum courses. These courses include general biochemistry, cell and molecular biology, and laboratory rotations as well as scientific communications, bioethics and molecular biology. Students may be exempted from core courses by passing examinations prepared by the instructors for each course.

During the major emphasis phase, students complete advanced courses and begin research in one of the following areas: cancer biology, microbiology and immunology, neuroscience and pharmacology. The major emphasis phase ends when the student passes comprehensive examinations, thereby designating the student a candidate for the PhD degree. Students must be candidates for the degree no later than the spring semester of their third year. During the dissertation phase, the student completes the research begun during the major emphasis phase and writes a dissertation on the research.

To be granted the doctoral degree, the student must either publish or have accepted for publication a manuscript as first author in a peer-review journal, as well as present a public seminar on the dissertation research and pass an oral examination testing his or her knowledge of the methodologies and findings of the dissertation project.

C

ombined MD/PhD Program

The MD/PhD program is offered jointly by the School of Medicine and the School of Graduate Studies and Research. The program trains leaders in academic medicine by providing education in medicine and immersion in a research program of excellence. Successful completion of the program leads to the MD and PhD degrees.

Students considered for admission to the combined degree program must meet the admission requirements of both the medical and graduate schools. Students enrolled in the MD/PhD program matriculate in the School of Medicine for the first two years of their training. After successful performance on the United States Medical Licensing Exam (USMLE) Part I, students began their research training inclusive of graduate level courses. Once the PhD requirements are successfully completed, inclusive of publishing a manuscript and successfully defending a dissertation, students re-enter their medical studies and complete the medical school curriculum.

M

aster of Science in Public Health Program (MSPH)

The Master of Science in Public Health (MSPH) is offered by the Division of Public Health Practice, School of Graduate Studies and Research. The M.S.P.H. degree program is

committed to training students who seek optimal health for people, and their communities. The M.S.P.H. program supports the World Health Organization's definition of health: "a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity."

Students in the M.S.P.H. program receive a foundation in the basics of public health that allows them to work as health professionals in the public, private and voluntary health agency sectors at the local, state, federal and international levels. Graduates of the program work in diverse settings in health fields which are / are not involved in the direct provision of health care.

While in the graduate program, students participate in externships, which have included the U.S. Centers for Disease Control, Department of Veterans Affairs, Blue Cross/Blue Shield, Tennessee Hospital Association, and the American Cancer Society. These externships lead to excellent opportunities for future employment.

M

asters of Science in Clinical Investigation Program (MSCI)

The Clinical Research Education and Career Development (CRECD) program at Meharry Medical College offers a two-year fellowship for Physicians and other doctoral-level care professionals leading to a Masters of Science for Clinical Investigation (MSCI) degree. The program's ambitions are to expand the cadre of well-trained clinical researchers, particularly minorities, and foster careers in clinical investigation that will address racial and ethnic health disparities.

The curriculum has two major tracks: 1) Patient Oriented and 2) Epidemiology/Health Service research. The program's curriculum includes core didactic, elective and experimental design sessions for clinical research training that spans the spectrum of translational science ranging from molecular medicine to epidemiology to qualitative research providing fundamental skills and methodology required by well-trained independent clinical investigators. Courses are offered at both Meharry Medical College and Vanderbilt University. Each trainee, during the first year, will develop a research project and establish a mentoring committee composed of faculty from both Meharry and Vanderbilt. The mentoring committee will review the project and assist the trainee in design and implementation. Each trainee will conduct the research trial and analyze the data to present a seminar and prepare a research paper.

The program offers tuition, book allowances, supplies and partial salary support along with resources to conduct clinical trials. Program candidates must be doctoral candidates, or have a doctoral degree and be able to have sufficient time to commit to the course of studies.

Non-Degree Program

The Graduate School conducts a post-baccalaureate research enhancement program (PREP) for underrepresented minority students. The PREP experience couples biomedical research training with complementary instruction designed to increase skills in scientific writing, critical analysis of the scientific literature, and presentation skills. This unique 2-year program is structured to meet the needs of each individual trainee to maximize their potential to successfully apply to graduate school.

Course Descriptions

Doctoral Program

Core Curriculum

ASGS 700 – Scientific Communication - This course emphasizes the three activities that occupy most of the effort of professional scientists: reading, writing, and speaking. The course covers (a) reading scientific literature; (b) oral presentation of scientific information; and (c) analyzing and improving your own writing. **(2 credit hours)**

ASGS 701 – Biomedical Sciences IA - Lectures, problem-solving sessions, and demonstrations designed to give the student mastery of the organization, composition, and function of the cell; the properties and biological functions of carbohydrates, lipids, proteins, and enzymes; the energetics and thermodynamics of life processes; metabolic pathways and their control; and protein synthesis and biochemical genetics. **(4 credit hours)**

ASGS 703 – Biomedical Sciences - IIA - An examination of the control processes that occur in eukaryotic cells, and appropriate study of similar aspects of eukaryotic cells and bacteria. The origin of the cell and the anatomy and function of cellular organelles are examined together with the role of the cell membrane in cellular homeostasis and the transfer of information from one cell to another; the action of hormones at both the cellular and molecular level; the organization of the eukaryotic genome and the control of gene expression; and the control of cell division and differentiation. The course also offers an introduction to formal genetics, and examines the function of one or more of the systems which are responsible for integration, movement, gas exchange, defense, and ion and water balance in higher organisms. **(4 credit hours)**

ASGS 705 – Biomedical Sciences – IIIA - A laboratory-lecture course which introduces research techniques and methodology covering experimental design, ultrastructural techniques, methods of analysis, cell culture, handling of biological materials, radioisotope methodology, optical instrumentation, chromatography, immunological and recombinant DNA research techniques. **(4 credit hours)**

ASGS 706 – Biomedical Sciences – IIIB - A laboratory experience. The purpose of this course is to acquaint first-year graduate students with research in progress in three different faculty laboratories. The student is supposed to be a participant in the research, not merely an observer. Ideally, the student will be exposed to scientific knowledge and techniques at a greater depth than is possible in formal laboratory courses, and will participate in the kind of informal discussions which take place in research laboratories among faculty, students and staff. **(4 credit hours)**

ASGS 711 – Bioethics - A graduate level course offered to all Ph.D. graduate students in the institution. The purpose of the course is to provide an opportunity for students to discuss and understand the ethical issues related to conducting research. Special emphasis is placed on the students developing problem-solving skills that will be useful when facing situations in the laboratory that require resolution of ethical problems. The course is an interactive one with significant discussion of case studies. Also, current events related to ethics in science are a source for materials to be discussed. Each student is required to write a paper on some ethical issue. Important in this paper is a documented presentation of different points of an ethical issue related to research. Active class participation is necessary. The students also present skits dramatizing an ethical situation that they feel is important. The course meets in a small group setting. **(2 credit hours)**

ASGS 723 – Recombinant DNA Module - The module consists of experiments designed to teach students important recombinant DNA techniques, including isolation of plasmid DNA, use of restriction enzymes, cloning of restriction fragments, nick translation, southern and northern hybridizations, DNA sequencing and other important techniques. Required of all students. **(6 credit hours)**

PhD Emphasis Programs

Cancer Biology

OBJECTIVES

The goal of the training program in Cancer Biology is to train the next generation of Cancer researchers. Studies of cancer require specific knowledge in multiple fields that have traditionally been independent. Students will receive cancer-oriented training in molecular biology, immunology, functional genomics, cell biology, biochemistry, and proteomics. An emphasis will be placed on hands-on training and students will have his or her course work tailored to their primary interest. Cancer research is a vitally important and growing field of research. Our graduates will be positioned to lead the way to the future prevention and cure of cancer.

COURSE DESCRIPTIONS

BICH 703 - Molecular Genetics - An advanced course on the biochemistry and molecular genetics of gene expression, gene regulation and mutation. Current advances in prokaryotic and eukaryotic systems are covered. Prerequisite: core curriculum. **(3 credit hours)**

BICH 704 – Topics in Cellular and Metabolic Regulation - An advanced course on the regulatory mechanisms controlling major metabolic and cellular physiological processes in eukaryotes. Prerequisite: core curriculum or background in metabolism or cellular physiology. **(3 credit hours)**

BICH 706 – Membrane Biochemistry - This course discusses basic and contemporary literature on the structure and functions of biological membranes and includes topics on membrane dynamics, biogenesis and transport by or through membrane components. The cytoskeleton and the extracellular matrix are also discussed. Prerequisite: background in cellular physiology and/or molecular biology. **(3 credit hours)**

BICH 710 – Seminar in Biochemistry- (1 Credit hour)

BICH 712 – Directed Studies - Individual instruction designed to meet the specific academic needs of the student. Prerequisite: consent of instructor. **(1-2 credit hours)**

BICH 713 - Advanced Topics in Biochemistry and Molecular Biology - A lecture course covering specialized areas of inquiry in biochemistry or molecular biology, consisting of one to three such areas per semester. This course may be taken more than once. Prerequisite: consent of instructor. This course is offered about once in every three years. **(1-3 credit hours)**

BICH 799 - Thesis Research - Students are required to conduct original research, culminating in the preparation and defense of a dissertation that is acceptable, at least in part, for publication in a professional journal. **(1-12 credit hours)**

Microbiology and Immunology

OBJECTIVES

Our program uses a wide array of approaches and techniques to explore the realm of molecular biology, microbial physiology, virology, parasitology, immunology, and microbial pathogenesis. An emphasis will be placed on studying immune responses to infectious agents including HIV-AIDS, the molecular and cellular bases of viral and bacterial pathogenesis, including microbes of the oral flora, mechanisms underlying mitochondrial transport and the regulation of gene expression in infectious agents. Graduate research in our division provides an opportunity to apprentice with distinguished faculty and emphasizes a close faculty-student relationship that creates a learning environment which is stimulating, productive, and rewarding for all its participants.

COURSE DESCRIPTIONS

MICR 702 - Perspectives in Immunology -This course consists of a series of seminars on recent research advances in immunology. Topics covered include immunochemistry, immunogenetics, cellular immunity, tumor and transplantation immunology, immunopathology and the complement system. Prerequisite: Medical Microbiology or equivalent preparation in immunology. **(3 credit hours) SPRING, even years.**

MICR 708 – Foundations in Research - The goal of this course is for the student to critically review the literature relevant to his/her proposed thesis research. The outcome of the course will be a student-prepared paper that provides a thoroughly documented background that supports the rationale for the proposed research project. The choice of the research problem should be determined by the student in consultation with the preceptor. Each student will be guided by a committee of three faculty members that will include the student's preceptor. Each student will be guided by a committee of three faculty members that will include the student's preceptor. **(3 credit hours) SPRING, every year.**

MICR 709 – Host Parasite Relationships - The course is designed primarily for advanced graduate students. Instruction consists of lectures, informal discussions, and guest speakers. Emphasis is directed to examining the theoretical, molecular, ultrastructural and physiological elements which characterize hosts and parasites in the broad sense (bacteria, viruses and parasites). Prerequisites: MICR-710 or equivalent preparation in immunology. **(5 credit hours) SPRING, odd years.**

MICR 710 – Fundamentals in Immunology - This course reviews the basic concepts in immunology. It consists of the immunology lecture and laboratory component of Introduction to Host Defense for medical students and seminar/discussions focused on selected topics in immunology. This course may serve as a pre-requisite for advanced immunology courses offered by the Department of Microbiology. **(3 credit hours) SPRING, every year.**

BSCI 719 – Gene Transcription and Regulation - Structure and function of different RNA polymerases (RNAPs). Role of CTD (C-terminal domain) of RNAP II. Basic aspects of initiation of transcription by RNAP I, II and III. Molecular mechanisms of transcription activation. Regulation of basic transcription initiation, elongation and termination in bacterial system. Regulation of transcription initiation, elongation and termination in eukaryotic system. Chromatin and regulation of transcription. DNA topology and gene expression. Structural studies (X-ray crystallography and NMR) of transcription factors. Nucleic acid-protein interactions. Regulation of expression of tumor suppressor genes and human tumor virus genes. Methods involved in transcription research. **(3 credits hours) SPRING, even years.**

BSCI 736 – Readings in Biomedical Sciences - (Directed Studies) - Intensive reading under the guidance of a faculty member in an area selected by the student. The student and faculty member meet weekly to discuss the readings; the student may be required to write a paper on the semester's reading. **(1-3 credit hours) FALL and SPRING, every year.**

MICRO 850 - *Microbiology Research* - Ph.D. Dissertation Research. Required of students who are candidates for the doctoral degree. **(1-12 credit hours) FALL and SPRING, every year.**

MICRO 900 – *Microbiology Seminar* - Weekly discussion of current topics in microbiological research and of research within the department. **(0-1 credit hour) FALL and SPRING, every year.**

MICRO 901 - *Advanced Seminar and Special Topics* - This course is a discussion by advanced graduate students and a faculty discussion leader who will make assignments from the current literature on a specific subspecialty. The course will examine experimental design, laboratory techniques used, validity of conclusions and contributions to the knowledge of the field under consideration. **(1-3 credit hours) FALL and SPRING, every year.**

Neuroscience

OBJECTIVES

This program aims to significantly contribute to the production of the next generation of neuroscientists by training students to conduct basic, translational, clinical, social and behavioral research to generate new knowledge that will contribute to the nation's effort to reduce health disparities in the areas of neurological disease, mental health as well as drug abuse and addiction, including alcoholism. Students will perform research with faculty whose interests range from the molecular neurobiology of cellular signaling and synaptic plasticity to the neurobiology of complex animal behavior.

COURSE DESCRIPTIONS

PHYS 706 – *Biology and Neuroendocrinology of Aging* - This lecture course explores age-related changes in the molecules, cells, tissues and organ systems of the body and examines the possible involvement of the hypothalamic-pituitary axis in aging processes. Topics covered will include changes during aging in normal nuclei in the hypothalamus (and elsewhere in the brain) that help to regulate pituitary hormone secretion; changes in neurotransmitters and hypothalamic pituitary-gonadal hormones; alterations in the secretion of growth hormone, corticotropin-adrenocortical hormones, thyrotropin-thyroid hormones, and their significance in terms of bodily functions. The liver will be considered particularly as it relates to time-dependent changes in drug metabolism. Various systems used to model the aging process such as cells, nematodes, paramecium, insects and rodents will be discussed. Prerequisites: core curriculum. **(3 credit hours)**

PHYS 709 – *Advanced Neurophysiology* - A functional approach to nervous system mechanisms. Topics include sensory and motor mechanisms, sensory motor integration and higher functions. The course will include lectures, selected literature discussions and essay examinations. Prerequisite: Human Physiology. **(3 credit hours)**

PHYS 710 – *Electric Current Flow in Excitable Cells* - Topics for this course include the theory of electric current flow in excitable tissues, methods for studying ionic currents in cardiac muscle, sodium current and the spread of excitation, calcium current and the initiation of contraction, the repolarization process, potassium currents and pacemaker activity, the sodium/potassium pump, sodium/calcium exchange, interaction between sodium/potassium and sodium/calcium exchange systems, transport measurement and changes in transport during the action potential. Prerequisite: Human Physiology. **(3 credit hours)**

PHYS 713 – *Synaptic Physiology* - Advanced study of synaptic function will consider physiological and biochemical aspects of transmitter metabolism and pre/post synaptic mechanisms. Format will be primarily literature readings with some lecturing. Prerequisite: Human Physiology. **(3 credit hours)**

PHYS 714 – *Research in Physiology* - Participation and credit in this course are arranged by the COI of students working on their dissertations in physiology. Students will receive pass or failure grades until

degree requirements have been fulfilled. At that time a letter grade will be assigned. This course may be repeated for credit. Prerequisite: core curriculum. **(1-12 credit hours)**

PHYS 719 – Methods of Neurotransmitter Physiology - The course will provide lectures in and practical exposure to the techniques used to study: 1) neuronal pathways and morphology, e.g., chemical tracing, neuronal lesions, electrical and chemical stimulation, and staining methods, 2) neurotransmitter isolation, quantification and characterization, e.g., solvent extraction, solvent separation, chromatography, ion exchange separation, radioimmunoassay, spectrophotometric biological assays and immunohistochemistry, 3) receptor identification and classification, e.g., membrane preparation and autoradiographic techniques, and 4) transmitter release e.g., perfusion methods and *in vitro* methods. Prerequisite: core curriculum. **(3 credit hours)**

PHYS 720 – Readings in Physiology and Biology - In this course, the student should complete a comprehensive reading list of subjects specifically associated with his/her area of research before the dissertation defense. There will be no formal meetings or exams; however, relevant material from the readings may be included in the dissertation defense. Pass or fail grades will be registered until degree requirements are fulfilled, at which time the COI will assign a letter grade. Prerequisite: COI approval. **(3 credit hours)**

PHYS 721 – Dissertation Research - Students are expected to register for this course in their last semester of residence. Course is completed with the approval of the written dissertation by the COI. Prerequisite: COI approval. **(1-3 credit hours)**

PHYS 722 – Development of the Nervous System - This course explores: development and plasticity of the nervous system. Topics considered will include: early embryonic development; differentiation of nerve cells; growth cones and mechanisms of neurite growth; trophic regulation and growth factors/ neuronal death during development; synapse formation; development of neurotransmitter function; regeneration; neuronal plasticity and rearrangement of synaptic connections. Prerequisite: core curriculum. **(3 credit hours)**

PHYS 723 – Behavioral Physiology/Neurobiology - This lecture and laboratory course will explore those aspects of physiology/neurobiology having the most bearing on overt behavior. It will offer perspectives on both current and persistent problems regarding the understanding of perceptual systems and behavior, and examine the neurotransmitter, hormonal, neuropeptide modulation of behavior with respect to specific anatomical loci. Prerequisite: core curriculum. **(3 credit hours)**

PHYS 724 – Neuronal Physiology - Advanced study of cellular processes related to nervous system functions will include aspects of neurophysiology, neurochemistry and neuroanatomy. Format will be primarily lectures and selected literature readings. Prerequisite: core curriculum. **(3 credit hours)**

PHYS 735 – Graduate Neuroscience - This course will help students achieve an integrated and correlated understanding of nervous system structure, function, dysfunction and therapeutics. The course will be taught in the following blocks: 1) excitable cells and synapses, including muscle and the autonomic nervous system; 2) Nervous system anatomy, meninges and vasculature; 3) sensory systems; 4) motor system; and 5) higher function. Each block will be composed of instruction in Biochemistry, Neurology, Pathology, Anatomy and Cell Biology, Pharmacology, Physiology, Psychiatry and Behavioral Sciences. **(5 credit hours)**

PHARM 722 - Neuropharmacology - This course presents an overview of neuropharmacology, including fundamentals of receptor theory, Neurotoxicology, neurophysiology and drug abuse. Mechanisms and problems concerned with neurotransmission will be discussed. Emphasis is given to the neurochemical basis of CNS disorders and drug intervention. Lecturers, current literature, discussions are included. **(3 credit hours)**

PHARM 723 – Toxicology - Principles involved in toxicity of drug and chemical agents will be presented. Topics include xenobiotic biotransformation, toxicokinetics, chemical carcinogenesis, neurotoxicology, metal toxicity, toxic response of skin & respiratory system & occupational toxicology. Toxicological mechanisms of action, rationale for therapeutic measures against effects of toxic chemical agents, and the basis for toxicological pathology, Current issues in toxicology (Toxicogenomics) will also be covered. Course format includes lectures, and student involvement in critical review of current literature. **(3 credit hours)**

Pharmacology

OBJECTIVES

This is an interdisciplinary program leading to the doctoral degree. The objective of the program is to provide students with an intensive knowledge of pharmacology as a science, sufficient exposure to pharmacological research methodology to provide skill in the practice of the science, and adequate opportunity to perform pharmacological research. More broadly, the program instills in its students a problem-solving approach to the understanding of pharmacology, an attitude that simulates reasoned, objective correlation in applying pharmacological and other knowledge to the solution of problems.

COURSE DESCRIPTIONS

PHAR 705 – Cardiovascular Pharmacology - The pharmacology of drug agents exerting major effects on the cardiovascular system will be presented in lectures, discussions, and demonstrations. Mechanism of action, basis for therapeutic application and limiting side effects of the drug agents will be discussed. Research methodology utilized in studying these agents will also be covered. **(3 credit hours)**

PHAR 706 – General Pharmacology - The pharmacological basis of therapeutics is presented by means of lectures, conferences and demonstrations. Emphasis is placed on the factors governing drug action, dose-response relationships, the relationship between chemical structure and pharmacological action, the problems associated with absorption, distribution metabolism and elimination, and the mechanism of action of the common classes of drugs. Attention is also given to contra-indications, side effects and toxic effects of these compounds. **(5 credit hours)**

PHARM 721 – Fundamentals of Pharmacology (3 MODULES) - General principles and introductory considerations of the pharmacological basis of therapeutics will be presented in this course. Course will be offered in modular format, consisting of three modules: Receptor Theory, Drug Metabolism, Pharmacokinetics. Areas to be covered include: receptor theory & kinetics, dose-response relationships, and mechanism of drug action; Phase I and phase II of drug metabolism, diversity of cytochromes P450(CYPs), CYP polymorphism (SNPs) & drug efficacy; pharmacokinetics concepts, Pharmacodynamic-Pharmacokinetic modeling, therapeutic drug monitoring, clinical correlates. **(6 credit hours (2 credit hours for each module))**

PHARM 722 – Neuropharmacology - This course presents an overview of neuropharmacology, including fundamentals of receptor theory, Neurotoxicology, neurophysiology and drug abuse. Mechanisms and problems concerned with neurotransmission will be discussed. Emphasis is given to the neurochemical basis of CNS disorders and drug intervention. Lecturers, current literature, discussions are included. **(3 credit hours)**

PHARM 723 – Toxicology - Principles involved in toxicity of drug and chemical agents will be presented. Topics include xenobiotic biotransformation, toxicokinetics, chemical carcinogenesis, neurotoxicology, metal toxicity, toxic response of skin & respiratory system & occupational toxicology. Toxicological mechanisms of action, rationale for therapeutic measures against effects of toxic chemical agents, and

the basis for toxicological pathology. Current issues in toxicology (Toxicogenomics) will also be covered. Course format includes lectures, and student involvement in critical review of current literature. **(3 credit hours)**

PHARM 735 – Research Problems in Pharmacology - This is essentially an independent study, qualified students work with individual staff members in areas not covered in other available courses. **(1-6 credit hours)**

PHARM 736 – Current Topics in Pharmacology - By means of lectures and/or discussion sessions, this course will offer opportunity to evaluate current advances in the field of pharmacology. Each student enrolled will be required to write and submit a critical evaluation of an assigned, current, published research article. **(3 credit hours)**

PHARM 737 – Pharmacokinetics - Also offered as a module in Pharm 721 (Fundamentals of Pharmacology). This course module is designed to understand the pharmacokinetics principles that govern the absorption, distribution, metabolism, and elimination of drugs. Basic pharmacokinetics parameters are examined using one- and two-compartment modeling. In addition, applications of pharmacokinetics are examined with respect to clinical situations, and students will be introduced to the use of computer programs in pharmacokinetics. **(2 credit hours)**

PHARM 738 – Carcinogenesis & Cancer Therapeutics - This course will cover the mechanisms underlying the carcinogenic process induced by chemical, viral or physical agents. Major emphasis will be focused on the mechanisms exploited in developing therapeutic targets for cancer treatment. Lectures on clinical correlates will be presented by clinical oncologists. (cross-listing with Cancer Biology) **(3 credit hours)**

PHAR 799 – Research in Pharmacology - Students are required to conduct original research, culminating in the preparation and defense of a dissertation. **(1-12 credit hours)**

Division of Public Health Practice

OBJECTIVES

The MSPH program strives to provide unique educational opportunities in public health related professions to students, allowing them to gain competencies to work as professionals in the public and private sector as well as voluntary agencies with special emphasis on serving the underserved.

COURSE DESCRIPTIONS

MSPH 70001 - Epidemiology (Introductory) - This course is designed to explore principles of investigating the differential distribution of disease among population groups, provide exercises demonstrating epidemiologic techniques and introduce students to the use of data to treat and prevent disease and evaluate health care effectiveness. **(3 credit hours)**

MSPH 70201 – Biostatistics I (Introductory) - This is an introductory course in the basic statistical concepts, principles, and methods used in the health sciences. Taught as part of the core curriculum for all Master of Science in public health students, the broad goal of this component is to enable students to have knowledge of the basics and their application in the experimental and non-experimental phases of health care administration and medical disciplines. The student should understand the traditional role of biostatistics and its newer role in the computer age and the age of innovative health care delivery systems. **(3 credit hours)**

MSPH 70301 – Health Planning - This course provides an introduction to the planning processes used in various health care organizations. Includes such issues as allocation of resources and institutional change in the health care environment. **(3 credit hours)**

MSPH 70501 - Strategic Management - This course provides students with a comprehensive understanding of strategic management in the health care environment. Strong emphasis is placed on the case study method. Healthcare organizations, like other organizations, are presented as ecological units relying on their environments (internal and external) as sources for attaining their various strategic objectives. As a result, students are exposed to the techniques for environmental analysis for the long-term direction of the organizations. **(3 credit hours)**

MSPH 70701 – Environmental Health - This course is designed to survey those factors that impact upon the environment and human health. The student will be provided a conceptual framework for the study, analysis and control of various environmental problems. **(3 credit hours)**

MSPH 70801 - Health Economics - This course is designed to acquaint students, through lectures and discussion, with those principles and techniques of economic analysis, which are helpful in developing and evaluating health programs. The course will concentrate on selected topics in economics, allocation of public goods and economic dynamics. Case studies will be selected for their special relevance to the health field. **(4 credit hours)**

MSPH 71101 – Health Care Accounting - An intermediate level course that will expose students to the process of generating and analyzing financial information in healthcare settings. The course will cover financial, managerial and cost accounting topics. The students will learn about the accounting tools and techniques used in health care organizations through the use of theory and practical examples. The course will also educate the students of the limitations of financial information generated through the traditional processes. **(3 credit hours)**

MSPH 71201 – Health Care Seminar - This seminar is designed to provide students an opportunity to integrate previous course content into a framework relevant to health care. Seminar sessions, utilizing case materials, the graduate faculty and occasional guest lectures, will focus on methods of health research, epidemiology, health economics, poverty and illness, evaluate research, communication skills, etc. **(1-3 credit hours)**

MSPH 71301 – Quantitative Methods in Health Administration - This course is about managerial decision-making in health care organizations (HCOs). Thus, the quantitative methods selected are regarded as the minimum essential tools that must be a part of the health care manager's repertoire of analytic tools for effective decision-making. There are basic methods as well as advanced methods, and a general understanding of algebra, statistics, financial and managerial accounting, health economics and health services administration. **(3 credit hours)**

MSPH 71401 – Epidemiology II (Advanced) - This advanced course deals with epidemiology theory and methods in the actual study of disease etiology with particular emphasis upon case control study methods including matching, confounding and selection techniques. Prerequisite: MSPH 70001 Epidemiology I. **(3 credit hours)**

MSPH 71501 – Organization and Human Resource Management - This course is designed to provide a comprehensive, current introduction to the human resources management function as it relates to the delivery of health care and related services. **(3 credit hours)**

MSPH 71601 - Biostatistics II (Advanced) - This course deals with statistics required for the analysis of medical care data. It covers further techniques for the application of statistical theory to actual data, combining lectures with computational experience. Particular emphasis will be placed upon the analysis of variance (ANOVA), linear and multiple regression, correlation and distribution free methods. Prerequisites: MSPH 7000 Epidemiology I and MSPH 70201 Biostatistics I. **(3 credit hours)**

MSPH 71701 - Occupational Health I (Introduction) - A general overview of occupational health and safety, including historical development, concepts and a general introduction to recognition, evaluation and control of hazards. The diagnosis, pathophysiology, management, and prevention of work connected illness and accidents are surveyed. **(3 credit hours)**

MSPH 71801 – Externship/Field Placement - The application of skills gained in the class to actual health agency and community programs. Students will identify and solve real health problems in communities, operating agencies, local and state governments, etc. **(1-6 credit hours)**

MSPH 72001 – Data Management - An introduction to principles needed for processing large data files. Subject material will cover editing, encoding, structuring and manipulating data, as well as timing considerations. Use will be made of the data processing computing equipment at Meharry Medical College. **(3 credit hours)**

MSPH 72201 – Occupational Health II (Advanced) - Workplace relationship of specific hazards such as solvents and metals are examined. Cancer is the main entity covered; its etiology, prevention, diagnosis, treatment and control. History taking (standard and predictive for placement and surveillance), patch treating, treatment trials and protective measures are reviewed. **(3 credit hours)**

MSPH 72501 – Health Behavior - The purpose of this course is to provide an introduction to the application of the social and behavioral sciences to health. Emphasis will be placed on (1) how theories, empirical research, findings, and methodologies of psychology, sociology, and anthropology apply to health issues, and (2) the major social and cultural determinants of health-related behavior. **(3 credit hours)**

MSPH 73001 – Health Administration - This course provides an introduction to the basic principles, concepts and theories of management in the context of the health care delivery system. It emphasizes the facts, problems and issues of health care administration at all levels of the delivery system. **(3 credit hours)**

MSPH 73201 – Health Finance - This course includes analytic techniques, capital budgeting, cost of capital, evaluation, leverage, aspects of financial planning and control. **(3 credit hours)**

MSPH 73601 – Research Design - This course is designed as an overview of research design and methodology with specific attention to individual student needs as related to the completion of the thesis. **(3 credit hours)**

MSPH 73801 – Managed Care - This course is designed to create a basic understanding of the managed health care environment in the United States. The course will cover: the history, growth and development of managed care; the various types of managed care organizations; contracting in the current health care delivery system; medical management; general management; marketing; finance; underwriting; and legal/regulatory issues. The commercial HMO/PPPO market, the emerging public HMO market (Medicaid, Medicare, CHAMPUS) and special market segments (such as worker's compensation) also will be covered in the course. The objectives of the course include: preparing students to understand the basic structures, organization and functions of managed care organizations; preparing students to function knowledgeable in a variety of managed care settings; preparing students to understand the relationship between managed care and various health care reform initiatives; and preparing students to negotiate effectively in managed care contracting scenarios. **(3 credit hours)**

MSPH 73901 - Readings in Public Health - An intensive reading course under the guidance of a division faculty member in an area of public health. The class meets weekly to discuss the selected readings; each student will be required to write a minimum of one research paper on the semester's readings. This paper cannot be related to the student's thesis. The objectives of this course are to provide students an opportunity to investigate a topic of interest in public health in detail that is not covered by the required division curriculum for the Master of Science in Public Health degree, and to provide an opportunity for advanced graduate students to conduct individual readings in public health to broaden their areas of knowledge and potential research opportunities. **(1 - 3 credit hours)**

MSPH 74201 - Organizational Behavior - An advanced seminar on the health care organization in a competitive environment. Emphasis on concepts and practices of total quality management, new techniques and regulations in personnel management and group development. **(3 credit hours)**

MSPH 74501 – Program Evaluation - This course introduces students to the basics of program evaluation from the public health perspective. Elements of program evaluation will include steps as engaging stakeholders, describing the program, focusing on the evaluation design, gathering credible evidence, justifying conclusions, and ensuring the use and sharing of lessons learned. **(3 credit hours)**

MSPH 74601 – Health Promotion and Health Education - This course will provide a basic framework for systematically applying the behavioral and social sciences to address public health problems. Emphasis is placed on the delineation of risk behavior, their determinants, and the design and implementation of appropriately targeted health promotion and education interventions that are likely to impact critical health behaviors and health status. Prerequisite: MSPH 73601 Research Design. **(3 credit hours)**

MSPH 75301 –Occupational Toxicology - Basic toxicological principles such as dose response, metabolic pathways and factors influencing toxicity are studied. The response of specific organ systems to toxic agents and recognition of clinical manifestations of specific classes of toxicants are emphasized. **(3 credit hours)**

MSPH 75701 – Industrial Hygiene - This course is a survey of the identification, evaluation and control of those factors of the environment that may cause illness, lack of well being or discomfort among workers or among the community. **(3 credit hours)**

MSPH 76001 – Interdisciplinary Seminar - This seminar is designed to provide students an opportunity to integrate previous course content into a framework relevant to community health scientist and practitioners. Seminar sessions utilize case materials, problem formulation, poverty and illness, epidemiology, health economics, evaluation research, etc. **(2 credit hours)**

MSPH 79001 – Health Law, Policy & Ethics - A seminar designed to introduce the definitions, structures and functions of the law and its effects on and its use in the American health care system. Fundamental legal principles relating to the delivery of health care services in this context are emphasized. Important topics include a primer on administrative law and the medical practice acts, health care practitioners and patient relationships, medical liabilities, hospital practices and the law, economic and social regulation of health care facilities, health antitrust law and important ethics concepts in health care delivery. **(3 credit hours)**

MSPH 79201 - Health Care Marketing - This course provides students with a comprehensive understanding of health services marketing. Strong emphasis will be placed on developing understanding of carefully selected field projects that will serve to practically apply marketing knowledge to the practitioner environment. **(3 credit hours)**

MSPH 80001 – Thesis Research - This course will familiarize students with the process of research. The thesis process will help students better understand the effects of that process on providing new knowledge to the field of research (utilizing research design, methodology, and literature search). Prerequisite: MSPH 71801-Externship. **(1 - 8 credit hours)**

Division of Clinical Investigation

OBJECTIVES

Meharry Medical College offers a Masters of Science for Clinical Investigation (MSCI) degree based on a two-year fellowship Clinical Research Education and Career Development (CRECD) program. The program's ambitions are to expand the cadre of well-trained researchers, particularly minorities, and foster careers in clinical investigation that will address racial and ethnic health disparities. The curriculum has two major tracks: 1) Patient Oriented and 2) Epidemiology/Health Service research. The program's curriculum includes core didactic, elective and experimental design sessions for clinical research training

that spans the spectrum of translational science ranging from molecular medicine to epidemiology to provide fundamental skills and methodology required by well-trained independent clinical investigators. Courses newly created for this program focus on health related issues including health disparities, culture and health, clinical research methodology and research ethics.

Courses are offered both at Meharry Medical College and Vanderbilt University. In addition to the formal courses, small group seminars provide for informal interaction and discussions between trainees and faculty. Each trainee, during the first year, will create a research project and establish a mentoring committee composed of faculty from both Meharry and Vanderbilt. The mentoring committee will review the project and assist the trainee in design and implementation. During the second year, each trainee will conduct the research trial and analyze the data to present a seminar and prepare a research paper. The program offers tuition, book allowances, supplies and salary support along with resources to conduct the clinical trial.

COURSE DESCRIPTION

MSCI 524-5002 - MEDICAL WRITING FOR CLINICAL INVESTIGATORS. This course is designed to teach clinical investigators medical writing skills required to publish scientific articles in a peer-reviewed medical journal. Since candidates in the MSCI program are expected to complete their Master's thesis based on their research project in the Spring of Year 02, this course is scheduled prior to this deadline to assist students in writing their thesis. Teaching will consist of demonstrations and discussions of how to improve the writing quality using each student's thesis-in-progress as an example. Students will be expected to write and revise their Master's thesis as course-work, no additional written assignments will be required. **1 credit hour.** January, Year 02

MSCI 524-5003 - MOLECULAR MEDICINE. The Molecular Medicine course will provide an overview of basic cellular and molecular processes to acquaint physicians who have been engaged in clinical training with recent advances in these areas. Each module of the course will consist of didactic lectures addressing a fundamental process followed by clinical illustrations to demonstrate the relevance of molecular biology to clinical medicine and investigation. In general, the fundamental didactic lectures will be delivered by basic science faculty and the clinical illustration will be presented in a "case oriented" fashion by a member of the Department of Medicine or other clinical department. **4 credit hours.** June, Year 01 or 02.

MSCI 524-5004 - HUMAN GENETICS. This course will consist of lectures and literature discussion. Outlines or handouts will be available for most lectures, presentations may also be available on the web. Several papers will be assigned for reading and presentation during this course. There will be two literature presentations. Teams of two students each will review and present their findings on publications selected from a list provided by the Course Director. Both team members will share in the presentation time. **4 credit hours.** January-April, Year 01.

MSCI 524-5007 - MEASURING PHARMACOLOGICAL AND PHYSIOLOGICAL RESPONSES. The goals of this course are to provide students with a broad understanding of the techniques used to measure response in drug development over a wide range of therapeutic areas, including: cardiovascular, renal, neurological, psychiatric, pulmonary, infectious diseases, pediatric, gastrointestinal and rheumatology. The strengths and weaknesses of established methodologies and the potential contribution of new techniques will be discussed using real examples. **1 credit hour.** November, Year 02.

MSCI 524-5009 - BIOSTATISTICS I WITH SPSS. This course will teach practical biostatistical skills. Students will use the statistical software SPSS to learn data analysis methods using actual clinical research data sets. Students will also learn about statistical power and sample size calculations using the software nQuery Advisor. An emphasis will be placed on performing statistical analyses and interpreting the output. The commonly used statistical methods will be explained as well as techniques experienced biostatisticians use to analyze data. **4 credit hours.** September, Year 01.

MSCI 524-5015 - BIOSTATISTICS II WITH SPSS. This course will teach the fundamental biostatistics concepts related to univariate and especially multivariate analysis including proper strategies for developing reliable multivariable models from complex data and checking model assumptions, analyze data from a complex clinical research project and interpret and review/critique statistical methods used in published papers, master the dynamics between epidemiological concepts and biostatistics, master the statistical software package SPSS and develop complementary skill using R-software, and to introduce students to a modern area of Biostatistics such as analysis of gene-expression data and use of non-linear spines for fitting continuous data. **4 credit hours.** *February, Year 01.*

MSCI 524-5052 - CASE STUDIES IN CLINICAL INVESTIGATION I. TBA. **1 credit hour.** *January-June, Year 01.*

MSCI 703 - APPLIED RESEARCH METHODS AND MEASUREMENT. This course will teach basic research design and measurement. Students will learn sampling and recruitment techniques in addition to practical aspects of research. The first half of each session will consist of a didactic lecture in which students learn tools related to the application and measurement of research constructs. The second half of each lecture will involve adult learning theory based on the McMasters University problem based learning and Knowles Adult learning theory (andragogy). This problem based learning technique will be used in the context of each students chosen research project. Students will learn how to develop hypotheses and specific aims, how to define outcomes and operationalize constructs, and how to apply the correct and necessary methods to accomplish specific aims. **3 credit hours.** *November-December, Annually.*

MSCI 707 - RESEARCH ETHICS. This course is designed to develop expertise in the principles, practices, and challenges of ensuring the ethical conduct of biomedical research. Research ethics will be reviewed in historical and contemporary contexts. The course will address themes including: What makes research design ethical?; How are the goals of informed consent best achieved?; How best to recruit and retain research subjects?; and How should issues of discrimination and disparity specific to minority populations be addressed? The course will respond to current issues in research ethics as they arise, such as regulatory oversight of pharmaceuticals, research using genetic samples, and responding to new drug data that may cause alarm among the public. **2 credit hours.** *Spring, Annually.*

MSCI 723 - CLINICAL TRIALS. This course is designed to cover all the aspects of performing *Clinical Trials*. It includes the complete fundamentals for the design, administration, scientific conduct, ethical considerations, data management, data analysis and summary of clinical trials for both patients and epidemiology oriented studies. The course is divided into four sections: 1) Design of Clinical Trials, 2) Practical Issues of Clinical Trials, 3) Trial Conduct, Ethical and Regulatory Issues and 4) Practical Experiences. The course reviews both epidemiological and patient based research along with all of the statistical, design, conduct, ethical, regulatory and conduct requirements necessary for conducting clinical research. The course includes a practicum on preparing FDA and IRB forms including writing a consent form and conducting an IRB meeting. Successful completion of the course will educate students in aspects of all methods for clinical research and provide a practical basis for the writing of clinical protocols and the conducting of clinical research. **3 credit hours.** *Spring, Annually.*

Academic Regulations

Requirements for Ph.D., MSPH, MSCI

Doctoral Program

To receive the Ph.D. degree a student must (a) complete at least 40 hours of graduate coursework; research courses do not count towards this requirement; not more than nine credit hours of graduate courses taken at other institutions may be credited toward the forty hours (grades earned in courses at other institutions prior to admission to Meharry are not included in computations of the student's average); (b) pass qualify examinations prepared by his or her major emphasis division; (c) complete a dissertation which meets the approval of his or her committee on instruction, division chair, an the graduate dean; d) publish or have accepted for publication in a peer reviewed journal, a manuscript based on the dissertation research of which the student is the first author; and e) successfully defend the dissertation in a public seminar. (Note: The requirements above are the minimal stipulations by the SOGSR; the major emphasis divisions may present additional requirements.)

Master of Science in Public Health (MSPH) Program

To receive the MSPH, a student must complete the required course work including an externship and either a thesis or a comprehensive examination. If the student selects the thesis option, his/her curriculum must include research courses and a thesis that meets approval of the student's thesis chairperson and committee, division director, and the Graduate Dean, which must be submitted and successfully defended prior to graduation. The completion of the curriculum consisting of 60 credit hours of approved course work, 480-hour externship and a thesis or comprehensive examination leads to the MSPH in Public Health.

Students with medical degrees, who are admitted into the Meharry Medical College General Preventive Medicine Residency or Occupational Medicine Residency programs, must apply to be admitted to the MSPH program to receive their degrees. Residency program curriculum is as follows:

- Occupational Medicine Residency
 - 32 hours of approved course work and a thesis
- General Preventive Medicine Residency
 - 32 hours of approved course work and thesis

Master's of Science Degree in Clinical Investigation (MSCI)

To receive the MSCI, a student must a) complete 36 hours of the appropriate coursework (27 hours of core curriculum instruction and 9 elective hours); b) develop and conduct original mentored research and must participate on an on-going clinical research project; c) present the research project at a local or national meeting; d) must prepare a manuscript suitable for submission to a peer-reviewed journal in the medical field; d) must have the endorsement of the mentoring committee, the program director and the graduate dean.

Advising

At Meharry Medical College, graduate students are part of a purposeful community in which they are challenged to understand the basic biomedical sciences and public health. Their educational experience is directed toward serving the underserved communities and in diseases and health conditions that disproportionately affect ethnic minority populations the students are partnered with others at Meharry Medical College engaged in this mission.

The Graduate School is a caring and supportive community that encourages meaningful collaboration within and outside the College with outside individuals and institutions. There is a culture of freedom and creativity that encourages individuals to fulfill their roles with excellence within a context of purposeful work, and work that serves others. Students will be challenged to pursue original research with integrity

and high ethical standards. Students will also be supported in their work with academic resources, laboratory resources, computational resources, a financial stipend or financial aid, and have access to the expertise of the scientists and the administration of the school.

Students will have an academic and research adviser throughout the period of their matriculation. In addition, students will engage other members of the faculty to form a committee on instruction (COI) or mentoring committee which will advise the student from the beginning of their program to recommending the student for the degree. A congenial and respectful student relationship with the faculty is vital to the progress of the student through graduate school and the continuing development of the student as a professional. The advisers' responsibility is to assist the students in achieving their goals in a timely manner. While the students will become acquainted with the entire faculty, the formal responsibility of advising the students resides with the designated advisors.

Career Counseling

Ph.D. students are advised by their mentors, COI members, and instructors as to possible career options. The students are also given opportunities to meet with invited speakers over lunch to discuss careers. Ph.D. graduate students present their research at major scientific meetings; many scientists at these meetings attend the student's presentations and discuss postdoctoral options with the students. The students also participate in summer internships at NIH and major research institutions where they get advice for their career decisions. Every two years, Meharry Medical College and Vanderbilt University sponsor a Career Workshop with representatives from industry, government and private foundations to discuss career options.

Advising and Career Counseling are provided to MSPH students by 1) the Academic Program Administrator, 2) Faculty, 3) Preceptors, and 4) Alumni. The Academic Program Administrator is a full-time position dedicated to student advising, student career counseling, and other student services. This individual helps students on matters pertaining to coursework and other academic issues such as externship opportunities and fellowship openings. Faculty, Preceptors and Alumni also interact with our students and provide advice about careers. The Graduate School and the students run a Career Week every Spring in which individuals in the field come to meet and lecture to our students about career opportunities.

Examinations and Grades

Grades for didactic courses taken for graduate credit are A, B+, B, C+, C, F, S, U, IP and I. Grades for thesis research in the Ph.D. program are S and U; grades for thesis research in the MSPH program are letter grades. Grade point averages (GPA) are calculated on the basis of A=4, B+=3.5, B=3, C+=2.5 C=2, F=0. S and U grades are not computed into students' GPA and are not converted to A, B+, B, C+, C, or F grades when students complete the requirements for degrees. All final grades shall remain on the student's permanent transcript. Students receiving a D grade in an off campus course because of cross-registration will receive a grade of F.

The grade of "I" (Incomplete), indicates that the student has satisfactorily completed at least three-fourths of a course, but for legitimate reasons a small fraction of the work remains to be completed; or that the student's record indicates that he or she can obtain a passing grade, but lacks a specific requirement such as the final examination, because of illness or some other unique or extraordinary circumstance beyond the student's control. A student receiving an "I" must complete the requirements for the course to remove the "I" by the end of the next semester the course is offered. If the requirements are not completed within the specified time, no credit will be given and the Office of Records will automatically record the final grade as "F".

The symbols "WV" and "WA" indicate that the student "Withdrew Voluntarily" or was "Withdrawn Administratively by the Dean." The symbols "WP" and "WF" indicate that the student "Withdrew Passing" or "Withdrew Failing," respectively. These symbols are used only when the student has withdrawn after at least six weeks of attendance in a course during the fall or spring semester or after two weeks during the summer.

The "IP" (In Progress) is awarded for certain courses that are continuous over more than one semester and, as such, are not finally evaluated until the conclusion of the sequence. Final grades are given in such courses only at the end of the final semester of the course sequence. A record of academic progression, however, shall be reported in the Office of Admission and Records at the end of any given semester using the designation In-Progress (IP). Quality points will be calculated using the total hours of the course.

Academic Standing

A student must maintain an average of 3.0 to remain in good academic standing. A student whose average falls below 3.0 may be dismissed or given up to one calendar year to raise his or her average back to 3.0; during this period the student is said to be on academic probation.

A student whose average does not reach 3.0 by the end of a designated period of academic probation may be dismissed from the SOGSR per the recommendation of the Evaluation Committee and approval by the Dean. In addition, if, in the judgment of the Evaluation Committee, a student fails to make satisfactory progress towards the completion of the degree or to demonstrate sufficient promise in the discipline, the student may not be allowed to continue in the SOGSR. In any academic year, students must pass 70% of coursework (21hrs) with a grade of "B" or higher. A graduate student may become academically ineligible to continue in the SOGSR if he or she receives a grade of "F", or receives more than three grades of "C", depending on his/her academic standing. Receipt of a second "F" grade will result in automatic dismissal. If in any semester, a student enrolled in the MSPH program receives a grade of "C" in two courses, then those courses also must be repeated and a grade of "B" or better must be received in each course. When a course is repeated, the first grade is not used to determine the student's grade point average. Students are allowed to repeat a course only once.

Adding or Withdrawal from Course(s)

If a student wishes to add a course(s), he or she should get the appropriate form from the Office of Records. The student is required to get the approval of their respective division chairperson and final approval from the graduate dean and return the signed approval form to the Office of Records. A student may add a course prior to the end of the 3rd week of classes and prior to the end of the 1st week of classes during the summer session. If a student wishes to withdraw from a course(s), he or she should get the appropriate form from the Office of Records. The student is required to get the approval of their respective division chairperson and final approval from the graduate dean and return the signed approval form to the Office of Records. A student may receive a grade of "W" if he/she withdraws from a course prior to the end of the 6th week of classes during the regular semester or prior to the 2nd week of classes during the summer session. However, grades for courses progressed beyond this time period will be recorded on the official record as "WF" or "WP".

Leave Of Absence and Withdrawal

A Leave of Absence is an interruption of the normal course of study requested by a student and requiring prior approval by the graduate dean. A student's Leave of Absence shall not extend beyond one calendar year. The official date of leave shall not ante date the date of the student's request. An official Leave of Absence form must be processed and can be obtained from the Office of Records. A student who fails either to register or to obtain an approved Leave of Absence by the end of registration during a given semester will be regarded as having withdrawn and must apply as a new student to resume study. A Leave of Absence from the college is given only to students who are in good academic standing. Any other interruption in the normal course of study constitutes a withdrawal. At the discretion of the dean, a student may be required to take an Administrative Leave of Absence. A student who has obtained an approved Leave of Absence may return to school by informing the SOGSR in writing, when he or she intends to resume study and registering when the semester starts.

A withdrawal is a permanent cessation of graduate study. If a student withdraws, he or she must reapply to Meharry as a new student and be considered for admission by the SOGSR Admissions Committee to resume graduate work. If a student receives a medical withdrawal, he or she will be required to present medical clearance before being readmitted. A student withdrawing without presenting to the director of Admissions and Records written permission from the dean forfeits all claims for credit or refund.

APPLICATION FOR GRADUATION

All graduate students anticipating graduation must complete a Diploma Application Card. Cards are available during fall registration and may be picked up from the Office of Records or Student Academic Affairs. The deadline for receipt of the card is shown in the College's Academic Calendar. Provided that no use of college faculty time and/or facilities is required, a student need not be registered in the semester in which the degree is to be awarded, unless the thesis or dissertation is defended and/or submitted to the SOGSR during the same semester, since submission constitutes a significant use of College's time and facilities. Master's and doctoral degrees are awarded in May, October, and December. Formal commencement exercises are held in May.

Graduation Clearance

Prospective graduates should get the Graduation Clearance Form from the dean's office and secure the appropriate signatures. However, the student must complete the following steps, prior to being issued a Clearance Form:

- Submit a letter from the divisional or divisional chairperson informing the dean that all degree requirements have been completed and submit five and four error-free copies of the dissertation or thesis for Ph.D. and MSPH students respectively;
- Complete the Graduate Program Self-Assessment Student Questionnaire and return it to the dean's office;
- Complete and return to the SOGSR the National Research Council Survey of Earned Doctorates (Ph.D. graduates only); and
- Complete the Exit Survey

Admissions

The SOGSR Admissions Committee has the responsibility to review all applications for admission and full authority to accept or reject any applicant. The committee is charged with the responsibility of selecting students who will make suitable candidates for graduate studies. The number of applicants greatly exceeds the capacity, and all applicants are considered on a competitive basis from the standpoints of scholarship, intelligence, aptitude, character, and general fitness to meet the historic mission of the college. The dean, SOGSR, (hereafter referred to as the dean) sends a letter informing the applicant of the committee's decision. This correspondence constitutes the only official and binding notice of acceptance or rejection. An applicant also may be admitted to the graduate program as a special student, auditing student, or with conditional admission.

Applications

The Office of Admissions (OA) processes all applications to the PhD and MSPH Programs of the School of Graduate Studies and Research (SOGSR). To be considered for admission as a regular student an applicant must have a complete application. A complete application consists of the following: (1) an application form properly filled out; (2) official transcripts from all colleges the applicant has attended; (3) letters of recommendation from two college instructors in the sciences (for the doctoral program) or two persons who are qualified to assess your work or academic performance (for the MSPH program); (4) a report of the applicant's scores on the Graduate Record Examination; and (5) an essay focused on the applicant's academic strengths and career plans.

Procedures for Admission

The deadline for all applications is April 15 of the year of anticipated matriculation. An application fee of \$45.00 must be paid to continue the process. This fee is non-refundable and cannot be credited toward tuition if the applicant is accepted.

Requirements for Admission

To be admitted to the PhD Program, the applicants must:

- Hold a bachelor's, master's, or advanced degree from an accredited college or university;
- Have an overall B average and a B average in science courses;
- Submit scores from the General Test of the Graduate Record Examination; *the admissions committee will not review any student application until it receives official GRE scores*
- Submit two letters of recommendation from college instructors in the natural sciences;
- Submit an essay that describes their academic background, career plans, and reasons for pursuing graduate studies.

The admissions committee places great emphasis on recommendations. If you have worked on a research project at your undergraduate school or at a major research center, you should ask your research advisor for a recommendation. The admissions committee will give careful consideration to your essay. If you have conducted research, describe the specific problem you investigated, the methods you used to study it, the results you obtained and the conclusions you drew from these results.

To be admitted to the MD/PhD Program, the applicants must:

- Be accepted in the School of Medicine;
- Have an overall B average and a B average in science courses;
- Submit scores from the Medical College Admissions Test and/or Graduate Record Examination;
- Submit two letters of recommendation from college instructors in the natural sciences;
- Submit a research interest statement;
- Participate in a personal interview.

To be admitted to the MSPH Program, the applicants must:

- Hold a bachelor's, master's, or advanced degree from an accredited college or university;
- Have an overall B average and a B average in science courses;
- Submit scores from the General Test of the Graduate Record Examination; *the admissions committee will not review any student application until it receives official GRE scores*
- Submit two letters of recommendation from college instructors in the natural sciences;
- Submit an essay that describes their academic background, career plans, and reasons for pursuing graduate studies.

It is the applicant's responsibility to have a report of his/her performance on the Graduate Record Examination transmitted to the Office of Admissions. The test must have been taken within five years of the proposed matriculation date.

To be admitted to the MSCI Program, the applicants must:

- Submit a Curriculum Vitae;
- Submit three letters of recommendation;
- Submit a description documenting commitment to clinical research
- Submit a research plan of 2-3 three pages describing specific research interests (if developed) or areas of interest for consideration of future research projects;
- Submit a statement of how this proposed research plan fits into long-term career objectives;
- Have a MD, PhD, or equivalent professional degree;
- Be a U.S. citizen or permanent resident to be eligible to receive NIH funding.

Applications to the MSCI Program are submitted directly to the Director of the Program.

Special Student

A person may be admitted by the SOGSR Admissions Committee as a special student to take one or more courses, after obtaining permission from the Dean. Special students are not candidates for degrees at Meharry, but are governed by the same scholastic regulations as regular students. An interview is required with the chairperson of the department where the courses are to be taken. Fees are pro-rated in accordance with the number of hours which the course offers.

Conditional Admission

Conditional admission status may be assigned to an applicant with deficiencies in the quality of admission materials submitted; however, the applicant's conditional status must be recommended by the degree program and approved by the Graduate Admissions Committee. For conditionally admitted students to qualify for regular status, a minimum cumulative grade point average of 3.0 (B), with no grades lower than a "B" in core courses, must be earned during the academic year in which the first 24 graded hours of graduate course work are completed for the doctoral program and 12 hours for the master's program. (Degree programs may specify additional requirements for students granted conditional admission status.) If regular status is not achieved during the first year, the student will be dismissed from the degree program and the SOGSR.

All correspondence concerning admissions should be addressed to the Office of Admissions, Meharry Medical College, Nashville, Tennessee 37208. Each applicant must meet the specific requirements of the School of Graduate Studies and Research.

Readmission

An application for readmission must be made to the Director of Admissions and must be approved by the Admissions Committee. The applicant must meet all requirements in force at the time of submission.

Students not enrolled in the Graduate School for two consecutive semesters must reapply for admission. Students who have been dropped from the rolls of the College are eligible for reconsideration only under extenuating circumstances.

Transfer Course Credit

Doctoral Program

After a doctoral student begins the major emphasis phase, he or she may petition his or her department to receive credit for graduate work done at other accredited institutions or from Meharry for courses taken before admission to the SOGSR-provided that the total number of credits transferred for core courses and advanced courses does not exceed nine (9) credits. Grades earned on transferred work must be equivalent to a "B" or better. Dissertation credit is not transferable. The department chairperson requests in writing that the Office of Records enter the credits on the student's Meharry transcript. Grades earned in courses at other schools, prior to admission to Meharry are not included in computations of a student's average nor entered on the Meharry transcript. However, grades earned at Meharry before the student matriculates (e.g., bridging, joint programs, etc.) are computed in the student's GPA.

Masters of Science in Public Health Program

Students enrolled in the MSPH Program may receive transfer credit after approval by the Division Director. Up to six credit hours of MSPH course work may be transferred.

Masters of Science in Clinical Investigation Program

Trainees enrolled in the MSCI program may receive transfer credit after approval by the Director. Up to eight credit hours of MSCI course work may be transferred.

Courses Not Eligible for Transfer Course Credit

Correspondence or extension courses cannot be transferred for credit. Course(s) taken on a pass-fail or satisfactory-unsatisfactory basis are not eligible for transfer credit. Course credit earned in professional school, such as law, medicine, divinity or dentistry may not be transferred for graduate degree purposes. Exceptions from this rule are courses cross-listed as graduate school courses which carry graduate credits at the institution where taken. Students seeking the MS or PhD in addition to the MD or DDS degree may receive graduate credit, with approval of the graduate dean, for some of the courses taken at Meharry.

Enrollment Status

A full-time student must register for a minimum of 12 semester hours, during the fall and spring semesters, and for a minimum of six hours during the summer semester. However, during the dissertation phase of the PhD program, a student may be considered full-time even though he or she has registered for less than 12 credit hours of dissertation research. A student in the MSPH program may be considered full-time by registering for less than 12 hours of thesis research, only after being admitted to candidacy and after having completed the required course work and externship.

Attendance

No student is allowed to attend a class for which he or she is not officially registered by the Office of Records. No credit is given for coursework taken before official registration. Unexcused absences in excess of 20 percent of the scheduled classes may result in a failure in the course. A dean's excuse may be granted for personal illness, death of a close relative, financial exigencies, etc. If a dean's excuse is granted, the student will not be penalized for work missed during his or her absence from class, although departments may require make-up for the work missed. Requests for dean's excuses are made in the Office of the School of Graduate Studies and Research, and appropriate documentation is required at that time.

Financial Information

Tuition for Ph.D. Students during the academic year 2006/2007 is \$11,186.02. The annual expense of a first-year Ph.D. student in the School of Graduate Studies and Research is estimated to be \$33,779. Tuition for MSPH students during the academic year 2006/2007 is \$11,186.02. The annual expense of a first-year MSPH student in the School of Graduate Studies and Research is estimated to be \$33,176.

Tuition and fees are set annually by the Board of Trustees and are subject to review and change without further notice.

The Tuition and Fees Charts are indicated below:

	Ph.D. Year 1	Ph.D. Year 2+	Senior Ph.D.
Tuition	11,186.02	11,186.02	11,186.02
Total fees	3,580.57	3,521.99	3,590.99
Total Tuition and Fees	14,766.59	14,708.01	14,777.01

	MSPH Year 1	MSPH Year 2+
Tuition	11,186.02	11,186.02
Total fees	2,977.17	2,988.96
Total Tuition and Fees	14,163.19	14,174.98

The Charts do not include expenses for room and board, books & supplies, transportation, and miscellaneous. For additional information regarding tuition and fees, please contact the Student Affairs Department in your respective school. Feel free to contact the Office of Financial Aid regarding allowances for living and miscellaneous expenses (room and board, etc.)

Payment of Tuition and Fees

Please see information in the General Information Section entitled Financial Information of this catalog.

Financial Assistance

The SOGSR and the divisions of the College offer financial assistance in the form of fellowships, traineeships, service appointments such as teaching assistantships, graduate assistantships, and research assistantships for students enrolled in the Ph.D. Program. All inquiries concerning the availability of such assistance should be addressed to the dean, the divisional chairperson and/or advisers of the intended major area.

Ph.D. training is a full-time activity. Therefore, students receiving a stipend or fellowship are not permitted to hold outside employment. Violation of this regulation could lead to loss of the fellowship.

Emergency Loan Program

Graduate students may receive emergency loan assistance from the college's loan funds and the graduate school emergency funds. Please contact the Office of the Treasurer at 615/327-6220 or the graduate school dean at 615 327 6533 for additional information.

Honors and Awards

Dean's Award for Scientific Development

This award is given to the doctoral student who has shown the greatest scientific development during the past year.

Dean's Award for Scientific Productivity

This award is given to the doctoral student who has published, or whose work has been accepted for publication, as the best paper in a refereed journal during the past year.

Dean's Award for Excellence in Teaching

This award is given to an outstanding faculty member in the School of Graduate Studies and Research MSPH and PhD programs for exemplary teaching during the past year

The National Research Service Award

This award is presented to students who successfully competed among a national pool of applicants for pre-doctoral fellowship funds provided by the National Institutes of Health, National Science Foundation, and Department of Defense

First-Year Award

This award is presented to a current enrolled second year student in the MSPH and PhD programs who have attained the highest GPA for the year academic year immediately preceding

Division Awards

These awards are given to the top currently enrolled students (exclusive of first-year students) in each PhD training program and the MSPH program

School of Graduate Studies and Research Faculty

Department of Biomedical Sciences

Chair and Professor: Lee Limbird, Ph.D.

Division of Cancer Biology

Chair and Professor: Samuel E. Adunyah, Ph.D.

Professors: Gautam Chaudhuri, Ph.D., Salil K. Das, Ph.D., Josiah Ochieng, Ph.D., Manuel Valenzuela, Ph.D.

Assistant Professors: Sakina E. Eltom, D.V.M, Ph.D., Olugbemiga Ogunkua, M.D., Ph.D., Armandla Ramesh, Ph.D., Lamonica Stewart, Ph.D., Marilyn E. Thompson (Odom), Ph.D.

Adjunct Professors: Richard W. Hanson, Ph.D., Valerie Montgomery-Rice, M.D., C. Rollo Park, M.D.

Adjunct Associate Professor: James L. Sherley, M.D.

Adjunct Assistant Professor: Dineo Khabele, M.D.

Professor Emeritus: Henry A. Moses, Ph.D.

Division of Cardiovascular Biology

Interim Chair and Professor: Lee Limbird, Ph.D.

Professor: Ifeanyi J. Arinze, Ph.D.

Associate Professors: Zhongmao Guo, M.D., Ph.D., Evangeline D. Motley-Johnson, Ph.D.

Assistant Professor: Hong Yang, M.D.

Division of Microbial Pathogenesis and the Immune Response

Chair and Professor: Fernando Villalta, Ph.D.

Professors: Gautam Chaudhuri, Ph.D., James Hildredth, M.D., Ph.D., Robert G. Holt, Ph.D., Bogdan Nowicki, M.D., Stella Nowicki, D.D.S., Raju Ramasamy, Ph.D.,

Assistant Professors: Donald Alcendor, Ph.D., Minu Chaudhuri, Ph.D.,

Faculty with Secondary Appointments:

Professors: George C. Hill, Ph.D., Department of Microbiology & Immunology, Vanderbilt University SOM; Maria de Fatima Lima, Ph.D., Division of Professional Education, MMC; John A. Phillips, III, M.D., Departments of Pediatrics & Medicine, Vanderbilt University SOM

Associate Professors: Terence S. Dermody, Ph.D., Department of Pediatrics, Vanderbilt University SOM; Scott M. Williams, Ph.D., Department of Internal Medicine, Vanderbilt University SOM; Waldemar Popik, PH.D., Department of Internal Medicine, MMC; Hua Xie, D.D.S., Ph.D., Department of Stomatology, School of Dentistry, MMC

Assistant Professors: Bindong Liu, Ph.D., Department of Internal Medicine, MMC

Professor Emeritus: Fred Jones, Ph.D., Mark E. Levitch, Ph.D.

Division of Neurobiology and Neurotoxicology

Chair and Professor: Clivel G. Charlton, Ph.D.

Professor: Sukhbir S. Mokha, Ph.D.

Associate Professors: Sanika S. Chirwa, Ph.D., Darryl Hood, Ph.D.

Assistant Professors: Twum Ansah, Ph.D., Guo-Huang Fan, Ph.D., Habibeh Khoshbouei, Ph.D.

Visiting Assistant Professor: Otis Campbell, M.D., Ph.D.

Adjunct Professor: Daniel M. Quinn, Ph.D. University of Iowa, Iowa City, Iowa

Adjunct Associate Professors: Syed Ali, Ph.D., National Center for Toxicological Research (NCTR); David Black, Ph.D., Aegis Laboratory, Nashville, Tennessee; Burham I. Ghanayem, Ph.D., National Institute of Environmental Health Sciences; James Powell, M.D., Proctor and Gamble Company

Professor Emeritus: Ralph J. Cazort, M.D., M.S., James G. Townsel, Ph.D.

Division of Public Health Practice

Director and Professor: William Washington, D.P.A., M.P.A., M.P.H.

Associate Professor: Stephanie Bailey, MD, M.S.H.S.A

Assistant Professors: Chau-Kuang Chen, Ed.D. M.S., Otis Cosby, M.D., M.S.P.H., Christine Minja-Trupin, Ph.D., M.P.H.

Faculty with Secondary Appointments:

Associate Professor: Flora Ukoli, M.B.B.S., M.P.H., Department of Surgery, MMC

Assistant Professors: Green Ekadi, Ph.D., Department of Family and Community Medicine, MMC; Alecia Malin, Dr.PH., MS, Department of Surgery, MMC

Adjunct Professors: Roxanne Spitzer, R.N., Ph.D., M.B.A.; Rueben Warren, D.D.S., M.P.H., Dr. PH., Office of Urban Affairs, Agency for Toxic Substances and Disease Registry

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