

Senior Elective Courses

**HOWARD UNIVERSITY
COLLEGE OF MEDICINE
WASHINGTON, D.C.**

Sheik N. Hassan, M.D., FCCP
Associate Dean for Academic Affairs

Last Revised January 2007

CONTENTS

Forward.....	5
General Information.....	6
Introduction.....	6
Types of electives.....	6
Policy and Procedures for international electives.....	7
General instructions.....	8
Non-Howard medical students.....	8
Guidelines for selecting electives for the senior year.....	9
Schedule.....	11
Senior groups electives periods for 2007-2008.....	12
Course descriptions for intra-mural electives.....	13
International elective application form.....	40
Senior year rotation schedule form.....	41

ELECTIVES

Anesthesiology	14
Clinical Anesthesiology	
Clinical Cardiovascular Anesthesiology	
Community Health & Family Medicine	15
Applied Clinical Epidemiology	
Clinical Nutrition	
Complementary/Alternative Medicine	
Senior Primary Care	
Dermatology	16
Clinical Dermatology	
Research in Dermatology	
Emergency Medicine	17
Internal Medicine	17
Advanced Clinical Skills	
Cardiology	
Critical Care Medicine (MICU)	
Cardiac Intensive Care Unit (CCU)	
Endocrinology - Clinical	
Endocrinology – Research	
Gastroenterology	
Geriatrics	
Hematology	
Infectious Diseases – Clinical	
Internal Medicine – General	
Nephrology – Clinical	
Oncology – Medical	
Pharmacology – Clinical	
Pulmonary Medicine – Clinical	
Neurology	23
Neurology – General	
Neurology – Pediatric	
The Aging Brain	
Obstetrics and Gynecology	24
Gynecology	
Gynecologic Oncology	
Maternal-Fetal Medicine	
Obstetrics	
Ophthalmology	25
Ophthalmology – Basic	
Ophthalmology – Advanced Clinical	
Orthopedic Surgery	26
Pathology	26
Pathology – Anatomical	
Pathology – Clinical	

Pediatrics	27
Adolescent Medicine	
Allergy and Immunology - Pediatric	
Developmental and Behavioral Pediatrics	
Endocrinology and Metabolism - Pediatric	
Genetics – General Clinical	
Genetics – Pediatric Clinical	
Hematology/Oncology – Pediatric	
HIV disease – Pediatric	
Neonatology	
Physical Medicine and Rehabilitation	30
Physical Medicine and Rehabilitation – Clinical	
Physical Medicine and Rehabilitation – Research Problems	
Psychiatry	31
Addiction Medicine	
Clinical Psychiatry	
Cognitive and Behavioral Therapy	
Mental Health in Hearing Impaired People	
Psychiatry and Organ Transplant	
Research in Psychiatry	
Radiation Oncology	34
Radiology	35
Surgery	35
Otolaryngology and Head & Neck Surgery	
General Surgery	
Neurosurgery – Clinical	
Neurosurgery – Clinical Research	
Pediatric Surgery	
Surgical Intensive Care Unit (SICU)	
Transplant Surgery and Immunology	
Urology - Clinical	
Others	38
Inter-disciplinary Clinical Research in GCRC	
Telehealth	

FOREWORD

This booklet provides descriptions of clinical electives offered to Senior Medical Students at the Howard University College of Medicine for the academic year 2006-2007. It also provides information relating to selection of electives. It is not a complete calendar of events and other important dates. These other dates are shown in the schedules booklet.

The members of the third year class are urged to review these descriptions in planning their electives. The procedures for registration are given at the beginning of this booklet. Please read this carefully and note the deadline dates. Seniors must adhere to deadline dates to ensure timely clearance for graduation recommendations.

The descriptions for intramural courses are shown in this booklet. Specific course numbers for extramural courses will be assigned in the Office of Academic Affairs.

When places are available, exchange senior medical students from accredited medical schools in the United States and Canada may enroll in these courses. Interested students should write to the Associate Dean for Academic Affairs for application forms and consult the Howard University web page for complete description of electives.

**Sheik N. Hassan, M.D., FCCP
Associate Dean for Academic Affairs
Howard University College of Medicine
Washington, D.C. 20059**

**Tel. (202) 806-9494, Fax (202) 806-7934
E-mail address: shassan@howard.edu**

**Mrs. Irene N. Pandit
Staff Director, Academic Support Section
Office of Academic Affairs
Tel. (202) 806-9492, Fax (202) 806-7934
E-mail address: ipandit@howard.edu**

**Descriptions may also be found on the College of Medicine Website
Web page: <http://www.med.howard.edu>**

GENERAL INFORMATION

Introduction: The senior year consists of a maximum of thirty six (36) weeks. Four (4) weeks are required as an acting intern (AI) in internal medicine **and** four (4) weeks are required as an AI in surgery. Twenty eight (28) weeks are available for clinical electives and research experience during the senior year.

Each senior student must spend **a minimum of twenty four (24) weeks or a maximum of twenty eight (28) weeks on elective rotations.** Four (4) of the twenty eight (28) weeks, in addition to regular holidays, may be spent as “vacation” at the option of the student. Students are encouraged to use these four (4) weeks as a block to attend interviews for residency programs. Students who choose to enroll in electives for the full twenty eight (28) weeks, are expected to complete all courses for which they register (both required and elective) to fulfill graduation requirements. Students can take only those electives that are approved at HUCM or other institutions. **Students will not be awarded credit for non-approved electives.**

Primary Care Elective: This elective in primary care is coordinated by the clerkship director in the Department of Community and Family Medicine. For the purposes of these rotations, primary care is considered to be one of the following: general internal medicine, family medicine, general pediatrics, adolescent medicine and women’s health. The student selects the period (4 weeks) and an approved site. This is included among the six (6) or seven (7) electives that the student will take. **Each student must select at least one elective (4 weeks) in primary care.**

Types of electives

Intramural Electives: These electives are approved by the curriculum committee, shown in this booklet offered at Howard University College of Medicine or at Howard University Hospital. Since this booklet is printed several months prior to the start of the first elective period for the academic year, students should confirm with the respective department/division the availability of any elective. **Students must enroll for at least one intramural elective.**

Extramural Electives: Students may also enroll in approved electives that can be taken at other institutions in the United States. These electives must have prior approval by the appropriate department chair and by the Dean or the Associate Dean for Academic Affairs at the Howard University College of Medicine (HUCM). **No more than five extramural elective courses will be permitted.** Information about these electives can be accessed at <http://www.aamc.org/students/medstudents/electives/start.htm>

Research Electives: Students are encouraged to take at least one elective in research. For research electives, students may enroll for **no more than two (2) such electives.** Research electives may be intramural or extramural.

International Electives: Electives outside of the United States or at institutions other than at LCME accredited medical schools or at ACGME accredited residency

programs that offer electives to medical students may be approved. The student must submit to the Associate Dean for Academic Affairs the necessary documents regarding these electives. Information regarding the process of securing international electives may be obtained from the Office of the Associate Dean for Academic Affairs. **Only one international elective (4 weeks) is permitted. This is included among the five extramural electives.**

Policy and Procedures for Students on International Electives

Rationale:

Students who travel outside the United States are at risk to become infected by various pathogenic organisms or they may be at risk for mental or other bodily harm.

Protocol

- All students traveling abroad on approved electives or other Howard University College of Medicine sponsored programs must meet with the Associate Dean for Academic Affairs prior to travel. The Associate Dean may direct the students to see specific physicians or report to specific clinics prior to travel.
- Each of these students must also make an appointment with Student Health Services or with his/her personal physician to review required immunizations that are necessary for travel to the particular country, to discuss required medical prophylaxis issues and to discuss the post exposure prophylaxis (PEP) protocol.
- Each student must review and be thoroughly familiar with standard precautions (universal precautions)
- Students are encouraged to take some of their own standard precautions materials including gloves, masks and face shields.

It is the responsibility of each student to monitor the country where he/she plans to travel for safety. If there is concern by the student, he/she must discuss this with the Associate Dean for Academic Affairs who will assist the student in securing another elective that may not necessarily be an international elective.

The Dean or the Associate Dean for Academic Affairs may postpone or cancel any elective if they have sufficient information to indicate that the risk to the health of the student will be greater than normal for travel to the country

By applying for, traveling to or rotating on international electives, students acknowledge that they will be at risk to become sick or incur bodily harm during such electives. Such risks are not completely eliminated even if the student takes all precautions.

Howard University, the College of Medicine or their employees assumes no liability in case any student becomes ill or is harmed in any way by any means while traveling to or rotating on international electives.

General Instruction:

Electives are to be chosen for not less than four (4) weeks per course, the maximum being seven courses for a total of twenty eight (28) weeks. One credit hour is awarded for each week served in any elective. **Students are not permitted to enroll in more than two (2) electives in the same discipline.** During senior electives, students may simultaneously serve as externs in the selected course, or receive compensation as an US-PHS appointee in connection with an approved elective. **Externship or preceptorship appointments must be served at the time of the scheduled elective and must be for the elective course in which the student is enrolled.**

Students should consult with a clinical faculty advisor in selecting electives for the senior year. General guidelines for selecting electives are shown below. Decisions regarding electives are to be made by students during the junior year and prior to formal registration for the senior year. **Program changes will not be permitted after the deadline date shown in the next section.** These deadlines are essential for accurate clearances of senior records prior to graduation.

Students will be permitted to rotate on extramural electives, international electives or an extramural research elective only after they have satisfactorily completed all clerkships in the junior year, satisfactorily completed the course on Introduction to Health Care Ethics/Jurisprudence, satisfactorily completed all assignments in all clerkships and passed all examinations. Students who sat for an examination or examinations at the end of the junior year curriculum and are awaiting the result(s) will generally be permitted to rotate and complete the elective immediately at the beginning of the senior year until the results become available.

Final approval of a request for an extramural elective is granted by the Dean or the Associate Dean for Academic Affairs after the student has received a letter of approval and acceptance from the chairman, director or chief of service at the host institution where the elective is to be taken.

Non Howard University College of Medicine Students

Senior medical students from accredited schools of medicine in the United States and Canada may apply for electives at Howard University Hospital or Howard University College of Medicine. These students must be enrolled in their medical schools and must be in good standing at their respective schools at the time of the proposed elective and must be approved for the experience by their Deans. Interested students should write to the Associate Dean for Academic Affairs for application forms and instructions. Electives will be approved when space is available. In addition, these students must show evidence of liability coverage, personal health insurance, appropriate immunizations and HIPAA training. Completed forms must be submitted directly to the Associate Dean for Academic Affairs at Howard University College of Medicine. Housing is not available for visiting medical students; therefore the visiting student must make living arrangements.

GUIDELINES FOR SELECTING ELECTIVES FOR THE SENIOR YEAR

In general electives are selected with the following objectives:

- Broaden basic knowledge and intellect
- Learn new skills that the student will use during residency and beyond
- Strengthen knowledge in selected areas
- Meet individual needs in career planning
- Enhance knowledge of research/research methods
- Increase awareness of local, national and international health challenges
- Help in specialty selection
- Increase your chances of being selected for a particular training program

Outline of the process in selecting electives

- Ensure that you immunizations are current
- Ensure that you have evidence of your HIPAA training
- Prioritize your objectives for electives
- Select electives to meet your personal needs
- Narrow the list to the maximum and minimum number of electives allowed
- Prioritize the list of objectives so narrowed
- Note the periods when you are scheduled to rotate on senior medicine **and** on senior surgery. ***Do not schedule electives for these periods***
- Select the institutions where you prefer to take each elective – select alternate sites for each elective
- Contact the respective departments/institutions for availability of the elective(s)
- Obtain signed approvals (by the chairs of the departments) from the corresponding clinical departments at Howard
- Complete the senior electives and required courses grid
- Submit the completed form to the Office of the Associate Dean for Academic Affairs
- Adhere to the deadlines for enrolling in electives

Description of the process in signing up for electives

The student should review the description of courses offered for senior electives at Howard University Hospital in this Handbook. During the period designated below, the student should also contact the faculty member(s) in charge of each course for any additional information. Each student must sign up with the respective department for the course (s) selected. Consult the Schedules Booklet for the exact dates of your elective periods. Students will remain in the same group and sub-group as in the junior year. Exceptions will be made for those students who will be in special (early) match programs and for those students who started the junior year off the normal schedule. These students (special match) should request special senior year schedules from the Office of the Dean for Academic Affairs. Each elective course covers a four-week period. Students pursuing research electives may enroll for multiples of four weeks, if space is available, and permission is granted by the faculty. **Each student is expected to take all courses for which he or she has registered.**

The student must initiate inquiries about availability of electives at other institutions (extramural). Information regarding clinical elective opportunities at other institutions is generally available on the institutions' web sites. In making selections, each student must obtain the title of the elective, the name, title, telephone number and email address of the person to whom application should be directed, and the address of the institution.

Applications for extramural electives are to be made on the four-action form designed for that purpose entitled, "***Medical Student Application for Extramural Elective/Clerkship***". The form may be obtained from the Student Records Section, Office of the Associate Dean, Room 527, Seeley G. Mudd Building. The student should complete items 1 through 8, obtain departmental approval, and return the form, including all copies, to the Student Records Section for processing. Upon acceptance of the student by the host institution, copies will be appropriately distributed by the staff in the Office of the Associate Dean. As soon as possible, or preferably no later than four weeks prior to departure, the student must **leave a temporary mailing address and telephone number** where he or she may be reached while rotating on an extramural elective. This information should be left in the office of the Associate Dean for Academic Affairs, Student Records Section. The student must also ensure that his/her correct email address is on file in the office of the Associate Dean for Academic Affairs, Student Records Section. Students must check their emails regularly.

A student who receives confirmation, signs up for an elective and later learns that the elective is no longer available to him/her must provide such documentation to the Associate Dean for Academic Affairs. The Associate Dean for Academic Affairs will then permit the student to enroll in the same elective at another institution.

SCHEDULE

(The full year calendar can be found in the Schedules Booklet)

February 12, 2007-March 30, 2007	Request special schedules in the Office of Academic Affairs
April 30, 2007-July 13, 2007	Students will enroll in intramural senior electives in the respective departments. SELECT AND ARRANGE extramural electives as described above.
July 27, 2007	LAST DAY for submission of applications for extramural electives.
August 1, 2007 (8:00 a.m.)	OPENING EXERCISES , College of Medicine, Main Auditorium, Room 3019, Numa P. Adams Building.
August 1, 2007 (9:00 a.m.)	FORMAL REGISTRATION for all courses for the senior year, Room 3019, Numa P. Adams Building.
August 6, 2007	Instruction begins for senior medical students.
September 14, 2006	LAST DAY for change of Electives NO CHANGE WILL BE MADE IN THE SENIOR ELECTIVE SCHEDULE OR REQUIRED COURSES AFTER THIS DATE.

SENIOR GROUP ELECTIVE PERIODS: 2007-2008
4-Week Blocks Dates (Inclusive)

GROUPS IA, IB, IC, ID

Elective.....	08/06/07-09/02/07
Elective.....	09/03/07-09/30/07
Elective.....	10/01/07-10/28/07
Required Sr. IM or Sr. Surgery.....	10/29/07-11/25/07
Elective.....	11/26/07-12/23/07
Written examination Sr. IM or Sr. Surgery.....	12/21/07
Recess.....	12/24/07-01/01/08
Elective.....	01/03/08-01/27/08
Required Sr. Surgery or Sr. IM	01/28/07-02/24/08
Written examination Sr. IM or Sr. Surgery.....	02/22/08
Elective.....	02/25/08-03/23/08
Elective.....	03/24/08-04/20/08

GROUPS IIA, IIB, IIC, IID

Elective.....	08/06/07-09/02/07
Required Sr. IM or required Sr. Surgery.....	09/03/07-09/30/07
Elective.....	10/01/07-10/28/07
Elective.....	10/29/07-11/25/07
Required Sr. Surgery or Sr. IM.....	11/26/07-12/23/07
Written examination Sr. Surgery or Sr. IM.....	12/21/07
Recess.....	12/24/07-01/01/08
Elective.....	01/03/08-01/27/08
Elective.....	01/28/07-02/24/08
Elective.....	02/25/08-03/23/08
Elective.....	03/24/08-04/20/08

GROUPS IIIA, IIIB, IIIC, IIID

Elective.....	08/06/07-09/02/07
Elective.....	09/03/07-09/30/07
Required Sr. IM or Sr. Surgery.....	10/01/07-10/28/07
Elective.....	10/29/07-11/25/07
Elective.....	11/26/07-12/23/07
Written examination Sr. IM or Sr. Surgery.....	12/21/07
Recess.....	12/24/07-01/01/08
Required Sr. Surgery or Sr. IM.....	01/03/08-01/27/08
Written examination Sr. IM or Sr. Surgery.....	01/25/08
Elective.....	01/28/07-02/24/08
Elective.....	02/25/08-03/23/08
Elective.....	03/24/08-04/20/08

COURSE DESCRIPTIONS
INTRAMURAL ELECTIVES

ANESTHESIOLOGY

Clinical Anesthesiology

Faculty: Faculty - Anesthesiology
Where: Howard University Hospital, Room B105
When: Year Round
Enrollment: Four (4) students per four-week period

Objectives: At the end of the rotation the student should be able to describe

- the role of the anesthesiologist during the preoperative, intra-operative and postoperative period;
- the role of the anesthesiologist as a consultant in obstetrics, pain management, intensive care, respiratory care, etc.;
- the clinical pharmacology of anesthetics and adjuvant drugs used in the practice of clinical anesthesiology;
- basic airway management, intubation, and intravenous techniques.

Clinical Cardiovascular Anesthesiology

Faculty: Dr. Kwesi Edusei
Where: Howard University Hospital, and Veterans Administration
When: Year Round
Enrollment: One (1) student per four-week period

Course Description:

A four-week clinical anesthesia course designed to provide:

- Familiarization with basic sciences as applied to the clinical practice of cardiovascular anesthesiology.
- Exposure to the management and manipulation of cardiovascular parameters using advanced pharmacological therapy.
- Participation in preoperative evaluation of the cardiac patient.
- Participation in the postoperative management of the cardiac patient.
- Participation at conferences related to cardiovascular disease given by the Divisions of Thoracic Surgery and Cardiology.
- Experience in vascular catheterization techniques including Swan-Ganz and arterial catheterizations.

Course Outline:

Students will be required to read selected topics in “Anesthesia for Cardiac Surgery” by DiNardo and Schwartz. Hands-on participation in patient care (from catheter insertion to endotracheal intubation) will be on a one-to-one basis under the direct supervision of the attending anesthesiologist. Participation in preoperative workup as well as operative and postoperative management will complete the experience.

COMMUNITY HEALTH AND FAMILY MEDICINE

Applied Clinical Epidemiology

Faculty: Dr. Adnan H. Eldadah
Where: Community Health and Family Medicine
When: Year Round
Enrollment: Four (4) students per four-week period

Course Description:

The student will choose an area of interest in the field of Applied Epidemiology. He/she will design a plan to collect and analyze data from a selected population. Thereafter the student will proceed to make conclusions and recommendations suitable for publication and/or submit a report to the responsible policy makers. The student will work closely with the faculty on his/her project. Projects may explore the epidemiology of acute diseases, chronic diseases, mental health, environmental health, health administration, or related fields.

Clinical Nutrition

Faculty: Lalita Kaul, Ph.D., and Dr. Joseph Nidiry
Where: Community Health and Family Medicine
When: Year round
Enrollment: Four (4) students per four-week period

Course Description:

This course is designed to teach students how to evaluate the nutritional status of patients and address the special needs of individuals with some pathologic conditions. The general plan of the course includes case presentations at Nutrition Rounds. In addition, students will participate in nutrition counseling in the Family Health Center.

Complementary/Alternative Medicine

Faculty: Adnan Eldadah, Ph.D
Where: Community Health and Family Medicine
When: Fall and Spring Only
Enrollment: Five (5) to Six (6) students per four-week period

Course Description:

The field of Complementary / Alternative Medicine (CAM) will be reviewed. The CAM six major categories and the subcategories will be defined. The student will choose a subcategory for emphasis. The student will review the literature using the electronic search technique as well as other related books and materials not available through the medline searches. The student will write a scientific paper worthy of publication and presentation. Furthermore, the student will practice different relaxation techniques and develop experience in using biofeedback and regression techniques.

Senior Primary Care

Faculty: Joseph Nidiry, M.D.
Where: Washington D. C. Metropolitan Area
When: Fall and Spring Only
Enrollment: Five (5) to Six (6) students per four-week period

Course Description:

The preceptorship elective exposes students to primary care medical setting during their basic professional training years. Students work on a one-to-one basis with a primary care physician in a private office setting, or community health clinic. Each student is assigned to a preceptor, who is expected to orient them to office procedures and management. The student may be involved in nursing home visits, hospital rounds, medical meetings, and other practice-related activities. The preceptor is expected to emphasize the family physician's role as a member of the health care team providing longitudinal and comprehensive care.

DERMATOLOGY

Clinical Dermatology

Faculty: Dr. R. Halder and faculty
Where: Howard University Hospital, Children's Hospital, V.A. Medical Center
When: Fall and Spring
Enrollment: Four (4) students per four-week period

Course Description:

This is a four-week course training in clinical dermatology which provides greater exposure to dermatological patients and problems. Students will attend dermatology rounds and clinics and also the scheduled didactic conferences of the department. An opportunity is also provided to observe private patients referred for consultation.

Course Outline:

Use will be made of the various current textbooks of dermatology. Stress is placed on pertinent basic science material as it relates to dermatology: the eczematous dermatoses, papulosquamous diseases, bacterial, fungal and viral infections of the skin, acne, and seborrhea, bullous diseases, exfoliate dermatitis, skin tumors, as well as external manifestations of internal disease. There will also be exposure to dermatologic surgery. Students completing this elective should possess a good basic knowledge of the more common dermatoses encountered in hospital emergency rooms and in general medical practice.

Research in Dermatology

Faculty: Dr. Rebat M. Halder
Where: Howard University Hospital
When: Year Round
Enrollment: One (1) student per four-week period

Course Description:

This elective will concentrate on a clinical a laboratory research project in dermatology. The project will be selected from current ongoing research in the department.

EMERGENCY MEDICINE

Faculty: Drs. Michael Washington and faculty
Where: Howard University Hospital
When: Year Round
Enrollment: Six (6) students per four-week period

Course Description:

The student will be involved in the management of a variety of medical/surgical emergencies. During the four week elective the student will attend four (4) laboratory sessions (splint suture, slit lamp and arrhythmia recognition) and the emergency medicine departmental conferences which are offered for a total of seven hours each week, as well as emergency medicine conferences designed for medical students only. An emergency medicine workbook will be distributed for each student.

Course Outline:

The student will be involved in the management of medical and surgical problems such as: cardio-pulmonary arrest, obstetrical and gynecological experiences acute kidney failure, vaginal bleeding, abortions, diabetic coma trauma, drug overdose, respiratory emergencies and cardiac emergencies.

INTERNAL MEDICINE**Advanced Clinical Skills**

Faculty: Dr. Sheik Hassan and College of Medicine Faculty
Where: Howard University Hospital
When: September and October
Enrollment: Open

Course Objective: Students will attain/sharpen the knowledge, skills and attitude to begin and successfully complete Graduate Medical Education

Course Description:

This (4) four-week course is offered yearly during the months of September and October. Refinement of history taking, techniques for performing physical examinations, case presentation strategies and procedures for medical records keeping will occur along with special lectures. Students will also be instructed in self evaluation, peer evaluation, professionalism, reading the medical literature, evidence-based medicine, clinical reasoning and differential diagnosis.

Objectives: At the end of the rotation the student should be able to:
Obtain a medical history, perform a physical examination and record the findings in acceptable manner

- Develop a problem list with possible plans for management
- Interpret basic chest films
- Interpret pulmonary function tests and arterial blood gases
- Interpret common abnormalities on the electrocardiogram
- Interpret sputa smears and urine sediments
- Discuss fluid and electrolytes balance and abnormalities
- Discuss end-of-life care
- Interpret the medical literature
- Demonstrate professional behavior
- Critically evaluate self and peer
- Construct a good curriculum vitae

Cardiology

Faculty: Cardiology Faculty
Where: Howard University Hospital
When: Fall and Spring Semesters
Enrollment: Four (4) students each four-week period

Course Description:

This elective is designed to acquaint the student with the recognition and management of various cardiovascular disorders which require cardiac intensive care, as well as arrhythmia monitoring by telemetry. Daily teaching rounds emphasize the pathophysiology of cardiac illness, physical diagnosis, electrocardiography, hemodynamic monitoring, and patient management. The student's educational experience is enhanced through interaction with cardiology fellow, as well as through weekly echocardiography/electrocardiography conferences, monthly preventive cardiology lectures/conferences, a cardiology journal club, and a medical/surgical catheterization conference.

Critical Care Medicine (MICU)

Faculty: Drs. Alvin Thomas, Wayne Davis and R. George Adams
Where: Howard University Hospital
When: Year Round
Enrollment: Three (3) students per four-week period

Course description:

The elective is designed to provide the student with supervised first-hand experience in the care and management of critically ill patients. Physical diagnosis, hemodynamic monitoring/support and respiratory monitoring/support are stressed. Students may be taught routine ICU procedures which include Swan-Ganz catheterization, arterial catheterization, etc. and will be introduced to computer applications to patient care.

Cardiac Intensive Care Unit (CCU)

Faculty: Cardiology Faculty
Where: Howard University Hospital, Coronary Care Unit, and Step Down Unit
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

This elective is designed to acquaint the student with the recognition, diagnosis and management of various cardiovascular disorders, which require cardiac intensive care, as well as arrhythmia monitoring by telemetry. Daily teach rounds emphasize the pathophysiology of cardiac illness, physical diagnosis, electrocardiography, hemodynamic monitoring, preventive cardiology skills/techniques and patient management. The student's educational experience is enhanced through interaction with the cardiology fellow, as well as through weekly echocardiography conferences, monthly preventive cardiology lectures/conferences, a cardiology journal club, and a medical/surgical catheterization conference.

Endocrinology (Clinical)

Faculty: Drs. Gail Nunlee-Bland and faculty
Where: Howard University Hospital
When: Fall and Spring Semesters
Enrollment: Three (3) students per four-week period

Course Description:

The elective in endocrinology is designed to acquaint the student with the presentation, evaluation, and management of patients with a spectrum of endocrine and metabolic disorders both on an inpatient as well as an outpatient basis. To this end, experience with adult medical, pediatric, and gynecologic endocrinopathies as well as some exposure to the basic science aspects of endocrinology is planned. The student is expected to:

- Participate in the evaluation and follow-up patients with endocrine and metabolic disorders in the clinic and through answering consultations on ward patients.
- Actively participate in conferences, ward rounds, and teaching sessions involving the clinical as well as the basic science aspects of endocrine physiology and pathology. In this latter regard, the student is expected to make a 30-45 minute presentation to his/her peers and the endocrinology faculty on some subject of his/her choice in endocrinology.

Endocrinology (Research)

Faculty: Kanwal K. Gambhir, Ph.D.
Where: Howard University Hospital, Room 3C44/5C28
When: Year Round
Enrollment: Three (3) students per four-week period

Course Description

The student is expected to spend the entire elective time in the endocrine laboratory learning research techniques in endocrinology and participating in ongoing research.

Gastroenterology

Faculty: Drs. Duane Smoot and faculty
Where: Howard University Hospital
When: Year Round
Enrollment: Three (3) students each four-week period

Course Description:

Senior medical students who choose an elective in gastroenterology are assigned to the G.I. Service either at D.C. General Hospital or at Howard University Hospital. Each student answers consultations along with the fellow, seeing and working up in-patients referred for gastrointestinal problems. The student will be expected to write the formal consultation after presentation of the case to an attending physician. In addition, the student will assist in (or actually perform) diagnostic maneuvers for assessing gastrointestinal disorders.

Geriatrics

Faculty: Drs. Thomas Obisesan and faculty
Where: Washington Center for Aging Services and Howard University Hospital
When: Fall Only
Enrollment: One (1) student per four-week period

Course description:

This elective is an introduction to clinical geriatrics. The students will evaluate elderly patients at the Washington Center for the Aging Services (WCAS) and at Howard University Hospital. He/she will learn to appreciate the common and/or unique illnesses and disorders in the elderly.

Hematology (Clinical)

Faculty: Dr. Victor Gordeuk and faculty
Where: Howard University Hospital
When: Year Round
Enrollment: One (1) student each four-week period

Course Description:

The student will have the opportunity to evaluate both inpatients and outpatients. He/she will be expected to develop a management plan for each patient seen. Interpretation of peripheral smears and bone marrow preparations will be emphasized. Participation in the section's seminars, journal clubs, and conferences will be expected. A pretest and post-test will be given. The preparation and presentation of a short paper is required.

Infectious Diseases (Clinical)

Faculty: Dr. V.R. Mody and faculty
Where: Howard University Hospital
When: Year Round
Enrollment: Two (2) to three (3) students per four-week period

Course Description:

The student should develop a sound academic framework in Infectious Diseases and a rational approach to the use of antibiotics. The student will respond to consultation requests and make rounds with the attending physician, participate in Journal Club and other conferences. The student will also be exposed to laboratory methods in Infectious Diseases including interpretation of antibiograms, culture, and serology results. Extensive practical information and clinical aspects of HIV/AIDS are also taught.

Internal Medicine – General

Faculty: Drs. Shelly McDonald-Pinkett and faculty
Where: Howard University Hospital
When: Year round
Enrollment: Two (2) students per four-week period

Course description:

During this four week elective, students are exposed to broad concepts of internal medicine and their application in the delivery of comprehensive health care.

Nephrology (Clinical)

Faculty: Nephrology Faculty
Where: Howard University Hospital
When: Summer, Fall, and Spring Semesters
Enrollment: Three (3) students per four-week period

Course Description:

The student is given broad exposure to the clinical practice of nephrology. He/she works as part of the ward team, doing patient work-ups, participating in daily attending rounds, and attending scheduled renal conferences. He/she becomes proficient in examination of urine, and observes first hand the management of renal patients including those on hemodialysis, and peritoneal dialysis also those with renal transplant and fluid and electrolyte problems.

Oncology (Medical)

Faculty: Dr. Victor Gordeuk and faculty
Where: Howard University Hospital
When: Year round
Enrollment: One (1) student per four-week

Course Description:

Emphasis is placed on clinical oncology and the clinical pharmacology of the antineoplastic agents. Students are expected to develop a diagnostic and therapeutic plan for each patient seen. Pathology, pathophysiology, staging and the selection of treatment modalities will be taught as well as the recognition and management of the complications of cancer and toxicity of its treatment. The student will participate in the section's seminars, journal clubs and conferences. A pretest and post-test will be given. The preparation and presentation of a short paper will be required.

Pharmacology – Clinical

Faculty: Drs. Robert E. Taylor and Clifford Ferguson
Where: Howard University Hospital
When: Year Round
Enrollment: Four (4) students per four-week period

Course Description:

The clinical rotation in the Division of Clinical Pharmacology is designed to present an intensive period of training in therapeutics to selected students. To accomplish this instructional goal, the students will actively participate as part of the clinical team with the Division's consultative service. Each patient will serve as a focal point for lectures in therapeutics. In addition, formal lectures will be given which will introduce the students to the principles of pharmacokinetics, drug epidemiology, pharmacogenetics, recognition and management of adverse drug reactions, clinical toxicology, drug interactions, and antibiotic clinical pharmacology and pharmaco informatics.

In addition, the students will have the opportunity to participate with the division in activities and conferences at other medical centers.

Students who enroll in this elective will be expected to develop a project suitable for scientific presentation and/or publication.

Pulmonary Medicine – Clinical

Faculty: Drs. Alvin V. Thomas, Jr. and faculty
Where: Howard University Hospital, Towers Building Suite 5000)
When: Year Round
Enrollment: Two (2) students per four-week period
Objectives: At the end of the rotation the student should be able to:

- Discuss the clinical applications of respiratory structure and function
- Interpret plain films of the chest
- Interpret pulmonary function tests, including arterial blood gases
- Interpret sputa smears and stains
- Evaluate patients respiratory status pre-operatively
- Discuss management of patients intra and post operatively
- Evaluate and discuss management options of patients with simple and complex respiratory diseases

Course Description:

The student will be exposed to clinical pulmonary medicine including consultations, conferences, ambulatory service clinics, diagnostic procedures, pulmonary function testing and interpretation.

NEUROLOGY

General Neurology

Faculty: Drs. A. Jayam Truth, A. Adams and Roger Weir
Where: Howard University Hospital
When: Year Round
Enrollment: One (1) student per four-week period

Course Description:

The student will actively participate in the evaluation and treatment of patients afflicted with disorders involving the central nervous system. He/she will essentially be acting in the capacity of an extern and working under the direct supervision of members of the Neurology staff. He/she will participate in the various teaching activities and conferences as listed below. He/she will have the opportunity to develop special interests in Clinical Neurophysiology.

Pediatric Neurology

Faculty: Dr. A. Jayam-Truth
Where: Howard University Hospital
When: Summer, Fall and Spring Semesters
Enrollment: Two (2) students per four-week period

Course Description:

This course provides pediatric neurology clinical exposure. The student will be assigned cases at Howard University Hospital Pediatric Neurologic clinic for evaluation. Cases may also be assigned from the consultation service or private patients. Techniques of neurological examination will be demonstrated, followed by a brief discussion of the patient's problems. Students will help with consultations, sit in on lectures and demonstrations offered to the junior medical students rotating through neurology, and attend the weekly grand rounds, as well as stroke conferences. In addition, the student may be given assignment related to pertinent pediatric neurological problems and will attend topic discussions with residents.

The Aging Brain

Faculty: Roger L. Weir, M.D.
Where: Howard University Hospital
When: Year Round
Enrollment: One (1) student per four-week period

Course Description:

Alzheimer's disease and Parkinsonism are two disorders, which are associated with advanced age. Under faculty guidance, students will perform clinical examinations, review the literature and use audiovisual aids while studying these disorders.

OBSTETRICS AND GYNECOLOGY

Gynecology

Faculty: Dr. Olanrewaju Adeyiga and faculty
Where: Howard University Hospital
When: Fall and Spring Semesters
Enrollment: Two (2) students per four-week period

Course Description:

The student will be exposed to and interact with patients who present with common gynecological diseases in the hospital and the clinic with emphasis on diagnostic procedures and therapy.

Gynecological Oncology

Faculty: Dr. Russell Hill
Where: Howard University Hospital
When: Year round
Enrollment: One (1) student per four-week period

Course Description:

Emphasis is on basic principles of anatomy, pathology, chemotherapy, surgery, and radiotherapy in treatment of gynecologic malignancies.

Maternal-Fetal Medicine

Faculty: Dr. Kerry Lewis
Where: Howard University Hospital
When: Year round
Enrollment: One (1) student per four week period

Course Description:

Clinical experience in dealing with high risk obstetrics and basic ultrasound training

Obstetrics

Faculty: Dr. Augustus Godette
Where: Howard University Hospital
When: Year round
Enrollment: Two (2) students per four-week period

Course Description:

The student will have clinical experience in obstetrics dealing with basic physiology and anatomy of mother and fetus. Some high risk obstetrical cases will be included.

OPHTHALMOLOGY

Ophthalmology - Basic

Faculty: Dr. Robert Copeland and Ophthalmology Faculty
Where: Howard University Hospital
When: Year round
Enrollment: Two (2) students per four-week period

Course Description:

This elective is intended to give the student an overview of general ophthalmology. The clinical experience includes participation in all clinics, observation of ophthalmic surgery and opportunity to observe the practice of ophthalmology in a private office setting. All students are expected to discuss a topic in ophthalmology at the end of the rotation.

Course Outline:

Diagnosis and management of common and major ophthalmologic surgical diseases is a major component.. Principles of preoperative and postoperative techniques, surgical pathology and pathophysiology of fundamental diseases: inflammatory, neoplastic, congenital and traumatic. Particular emphasis will be placed on the diseases of the eye and their treatment.

Ophthalmology – Advanced Clinical

Course Chair: Robert A. Copeland Jr., MD and faculty
Location: Howard University Hospital
Coordinator: Saltia Prothro, 202-865-3302
Where: 2nd Floor, Conference Room 2013
When: Year round
Prerequisites: Medicine, Ophthalmology
Enrollment: Two students per 4-week period

Description:

Students will become skillful at history taking, ophthalmologic examination, diagnosis and management of common disease: dry eye; red eye; glaucoma; cataracts; retina; strabismus; trauma. Students will be involved in weekly lecture series, grand rounds and combined retina lectures. Students will observe surgery and become a part of the resident team.

Objectives:

- Obtain skills in ophthalmic history and examination
- Gain knowledge of ophthalmologic disease
- Observation of surgical procedures
- Participate in teaching conference and rounds
- Participate in patient consultation
- Learn the proper use of the slit lamp biomicroscopy, indirect and direct ophthalmoscope.

ORTHOPEDIC SURGERY

General Orthopedic Surgery

Faculty: Terry L. Thompson, M.D. and Orthopaedic Faculty
Where: Howard University Hospital
When: Year round
Enrollment: Three (3) students per four-week period

Course Description:

Students will:

- Participate in the pre-operative, operative and post-operative care of orthopaedic patients
- Make daily rounds with orthopaedic team that includes residents and attending physicians
- Participate in orthopaedic clinics
- Actively participate in conferences, including preparation of brief presentations on a variety of orthopaedic topics

Course Outline:

Students will be exposed to:

- Diagnosis and management of fractures and dislocations
- Common orthopaedic diseases
- Pathophysiology of orthopaedic diseases
- Operative techniques including:
 1. total joint arthroplasty
 2. closed and open reduction of fractures
 3. arthroscopy
 4. hand surgery
 5. surgery of the spine

Evaluation:

Each student will be evaluated on a continuous basis that includes formative evaluation and an end of rotation summative evaluation.

PATHOLOGY

Pathology – Anatomical

Faculty: Dr. Lee and faculty
Where: Howard University Hospital
When: Year round
Enrollment: Open

Course description:

The student is expected to:

- demonstrate an understanding of surgical specimens
- review normal gross anatomy and identify deviations from normal

- review normal histology and identify deviations from normal
- identify different and discuss different types of abnormalities
- observe processing techniques
- describe accurately (written) analysis of a given specimen
- describe the principles of selected stains
- describe cytomorphology of invasive carcinoma
- review Human Papilloma Virus
- identify common pathogenic organisms
- participate in autopsies and review the glass slides
- demonstrate understanding of preparation of materials for electron microscopy

Pathology – Clinical

Faculty: Dr. Lee and faculty
Where: Howard University Hospital
When: Year round
Enrollment: Open

Course description:

The student will rotate for one week each in the following areas:

- Blood Bank/Transfusion Medicine/Immunoserology
- Hematology/Clinical Microscopy/Coagulation
- Microbiology

The student will:

- be expected to meet the objectives that will be distributed at the beginning of the rotation
- develop a handy personal pocket reference
- evaluate the course

PEDIATRICS

Adolescent Medicine

Faculty: Dr. Esther Forrester
Where: Howard University Hospital, Room 6B04
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

This elective is designed to introduce students to common medical presentations of Problems . The assessment of the adolescent in terms of developmental, psychological and environmental influences will be reviewed. Students will be exposed to different sites and settings of ambulatory adolescent health care such as hospital based clinic, school based clinic, University Health Center, and health center at a job-training program.

For additional didactic sessions, students will spend half a day each week at the Children's National Medical Center. Students are also expected to spend time on an individual research project.

Allergy and Immunology – Pediatric

Faculty: Dr. Elena R.G. Reece
Where: Howard University Hospital, Suite 4100A (Tower Bldg.)
When: Year Round
Enrollment: One (1) student per four-week period

Course Description:

The student will be taught the evaluation and care of children with allergies such as asthma, eczema, and allergic rhinitis. Evaluation and care of children with suspected immuno-deficiencies will also be taught. Activities include attendance at three clinics per week, consultation, lectures, presentations, and discussions.

Developmental and Behavioral Pediatrics

Faculty: Dr. Akua Asidu
Where: C.B. Powell Building (CDC)
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

The course will expose the student to:

- Frequently encountered behavior and developmental problems of school age children:
 - a. ADHD
 - b. Learning disabilities
 - c. Speech difficulties
 - c. Developmental difficulties
 - d. Issues of loss
- Will become familiarized with psychological testing and its uses in developing an Individualized Education Plan for a student
- School or day care visit.
 - a. The student will visit a patient in his natural environment-school or day care and observe his behavior and development there
- Students will view videos and movies which emphasizes the week's topic
- Students will participate in the center's activities-seeing patients, consulting on The floor and multidisciplinary team meetings
- Students will participate in the weekly didactic sessions with Attending
- At the end of the one month block, the student will make a 30 minutes presentation on a topic related to behavior, academic success or development to the group of residents.

Endocrinology and Metabolism – Pediatric

Faculty: Dr. Gail Nunlee-Bland
Where: Howard University Hospital, Room 6B04
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

Endocrine and metabolic influences in health and disease are studied. Both outpatients and inpatients are managed. Some clinical genetics are included.

Genetics – Clinical General

Faculty: Dr. Robert Murray and Faculty of the Genetics Division
Where: Howard University Hospital
When: Spring Semester only
Enrollment: One (1) student per four-week period

Course Description:

The student will participate in 2-1/2 genetic clinics per week. Conferences (chromosome, case, Journal Club) are held each week. Students will assist in answering consultations and work on library research projects for presentation to the faculty in the Genetics Division.

Genetics – Pediatrics Clinical

Faculty: Dr. Barbara Quinton, Medical Genetics Clinic
Where: Howard University Hospital
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

The student will participate in a minimum of 3 clinics per week. They will participate in divisional conferences, assist in answering consultations, and conduct library research on selected clinical topics.

Hematology/Oncology – Pediatric

Faculty: Dr. Sohail R. Rana
Where: Howard University Hospital, Room 6B08
When: Year Round
Enrollment: One (1) - Two (2) students per four-week period

Course Description:

Emphasis is placed on management of children and adolescents with cancer and hematological disorders. Basic laboratory studies such as interpretation of peripheral blood and bone marrow smears are taught. Students are introduced to the principles of chemotherapy. Opportunities are available for clinical and biochemical research for students who are interested.

HIV Disease – Pediatric

Faculty: Dr. Sohail Rana
Where: Howard University Hospital, Room 6B08
When: Year Round
Enrollment: One (1) student per four-week period

Course Description:

Students will participate in multidisciplinary comprehensive care of children infected with human immunodeficiency virus. Students will be exposed to clinical trials and care of terminally ill patients.

Neonatology

Faculty: Drs. Fariborz Rahbar and Pauline Ting
Where: Howard University Hospital, 3 South Nurseries
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

Problems of the newborn infant and sometimes fetus are discussed. The student attends rounds in the NICU, Intermediate and Normal Nurseries. They also attend special clinics for high-risk infants. He/she takes part in multidisciplinary conferences where physicians, nurses, social workers, and other support personnel discuss patient problems. The student assists in management of newborns with problems of intermediate severity.

PHYSICAL MEDICINE AND REHABILITATION

Physical Medicine and Rehabilitation - Clinical

Faculty: Dr. Janaki Kalyanam
Where: Howard University Hospital
When: Year round
Enrollment: Six (6) students per period

Course Description:

This is an elective clerkship in the evaluation and physiatric management of patients with disabilities. Emphasis will be given during the first four (4) weeks to functional evaluation and disability assessment. The student will receive experience in the prescription of common physical modalities (heat, light, sound, electricity, water, and therapeutic mechanical energy) and in the coordination of rehabilitation team efforts to deliver comprehensive care.

Physical Medicine and Rehabilitation – Research Problems

Faculty: Dr. Janaki Kalyanam
Where: Howard University Hospital
When: Year round
Enrollment: Two (2) students per four-week period

Course Description:

This is a short term investigative project in the sphere of the clinical application of psychiatric principles, modalities, or appliances. The project will be completed during the elective period and a paper written about the findings. The student will have the opportunity to study research methods readily available for clinical research, and receive practice in the application of the scientific method of problem solving.

PSYCHIATRY

Addiction Medicine

Faculty: Drs. Robert E. Taylor, Robert Copeland, Sonya Sobrian,
Martha Davila-Garcia and Clifford Ferguson
Department of Pharmacology

Drs. William Lawson, Walter Bland, Tanya Alim, Alyce Gullattee,
and Robert Mickey
Department of Psychiatry

Dr. Anton Bizzell
Community Health and Family Medicine

Drs. Charles Hall and Mr. Robert Johnson
D.C. Addiction Prevention and Recovery Administration

Where: Howard University Department of Pharmacology & Psychiatry and
Howard University Alcohol Research Center
When: October, January, April
Enrollment: 4 students per four-week period

Course Description:

The purpose of this elective is to give students information and clinical exposure to methods of diagnosis, intervention, and management of patients with substance use and associated disorders. The elective will educate medical students on a broad range of topics related to substance abuse and dependence, and effects on individual patients, the healthcare and social systems.

Lectures/seminars in the epidemiology and basic science of addiction medicine, screening for alcohol and substance abuse disorders, treatment of withdrawal syndromes, brief intervention, behavioral and pharmacological treatment, medical and psychiatric co-occurring illnesses will be presented. The elective is also structured in a manner that will facilitate student participation in clinical research activities.

Clinical activities include: D.C. Detoxification Clinic, Alcohol Anonymous, Outpatient methadone and buprenorphine treatment clinic, Department of Psychiatry In-Patient Substance Abuse Service, Community based Long – Term Substance Abuse Treatment Clinics.

Clinical Psychiatry

Faculty: Drs. Tanya Alim, Walter P. Bland, Alyce Gullattee, Janice Hutchinson , William B. Lawson, Mansoor Malik, Robert Mickey, and Thomas Mellman
Where: Howard University Hospital
When: Summer, Fall and Spring Semesters
Enrollment: Four (4) students per four-week period

Course Description:

The purpose of the elective is to give the student a more detailed theoretical and practical experience in general Psychiatry. The student will be expected to:

- Develop thorough knowledge and experience in the conduct of an initial interview including the mental status evaluation.
- Acquire keener recognition of symptoms and greater familiarity with psychiatric terminology.
- Develop knowledge and skill in consultation and liaison psychiatry.
- Develop knowledge and skill in addiction psychiatry
- Develop skills in working with children and adolescents as well as adults.
- Develop an increased awareness of terminology in accordance with DSM III-R
- Develop an increased awareness of the psychiatric therapies including indications, contraindications, mechanisms of action, actions, interactions and side effects of drugs commonly used.
- Develop knowledge and skill in formulating a treatment plan, to monitor such plan and make necessary changes based on the patient's response.

Cognitive and Behavioral Therapy

Faculty: Drs. R. Elaine Graves, and Evaristus Nwulia
Where: Howard University Hospital
When: Fall and Spring Semesters
Enrollment: Maximum four (4) students per four-week period

Course Description:

The purpose of this elective is to introduce the student to the theory, principles and techniques of cognitive behavior therapy with a specialized focus on emotional self-help techniques. Psychiatric inpatients and outpatients comprise the primary patient population. An opportunity to work with other patient groups (e.g. cancer patients) will be provided.

The student is expected to:

- Develop theoretical and empirical knowledge of cognitive-behavior theory and therapy

- Develop theoretical knowledge and clinical experience in the assessment of patients who would be appropriate for cognitive-behavioral therapy.

And to develop knowledge and skills:

- In analyzing the work of cognitive-behavior therapy.
- In analyzing the work of cognitive-behavior therapists through videotapes, audiotape, and theory protocols.
- In formulating a cognitive-behavioral treatment plan and providing a rationale for the treatment plan based on patients.
- In interviewing patients and providing brief treatment interventions, using cognitive-behavioral therapy.
- Develop an increased awareness of the cognitive distortions and dysfunctional attitudes and beliefs that characterize specific diagnostic designations.
 - Develop keen recognition of symptoms of neurotic depression and anxiety and effective cognitive-behavioral strategies for alleviating symptoms.
 - Develop keen recognition of symptoms of neurotic depression and anxiety and effective cognitive-behavioral strategies for alleviating symptoms.

Mental Health in Hearing Impaired People

Faculty: Dr. Luther D. Robinson

Where: Howard University Hospital and Facilities Serving the Hearing Impaired Population

When: Fall and Spring Semesters

Enrollment: Two (2) students per period

Course Description:

The student will be given special orientation to the psychological implications of audio-communicative difficulties in adjusting to a hearing environment. The student will also have the opportunity for a better understanding of the deaf culture and the need for special training to work with those hearing impaired persons who have mental health problems.

To accomplish this, the student will be assigned to work under the supervision of mental health professionals who are skilled in communication with the hearing impaired population and who are thoroughly familiar with the deaf culture. Under these conditions the student will have contact with hearing impaired persons who have mental health problems for which professional help is needed.

The student will also visit organizations and facilities serving the hearing impaired population such as Gallaudet University, Hearing Impaired Services Division of the D.C. Commission on Mental Health Services, the programs of the National Health Care Foundation for the Deaf, the Senior Center for the Hearing Impaired, and others.

Psychiatry and Organ Transplant

Faculty: Drs. William Lawson and John Robinson
Where: Howard University Hospital
When: Summer, Fall and Spring Semesters
Enrollment: Two (2) students per four-week period

Course Description:

The purpose of this elective is to introduce the student to the relationship between psychiatry and organ transplantation. The course will focus on the psychiatric aspects of organ transplantation and psychiatric care of transplant patients. Students will get an understanding of psychological needs of these patients and their families while surgical care is being provided. To accomplish this, students will attend morning rounds with the transplant surgeon, as well as with the psychiatrist assigned to the service. They will also participate in the on-going activities of the support group for transplant patients. Students will assist in the daily management of patients and are expected to participate in research and/or clinical activities, which may lead to publications in the professional literature.

Research in Psychiatry

Faculty: Drs. William Lawson, Evaristus Nwulia, Tanya Alim and Thomas Mellman
Where: Howard University Hospital and the H.U. Mental Health Clinic
When: Fall, Spring, Summer
Enrollment: Four (4) students per four or 8 week period

Course Description:

The student will develop skills in diagnosing mental illness, and in the use of psychiatric research assessment instruments and clinical protocols. The student will also gain knowledge about new treatment interventions in psychiatry. The elective also offers opportunities to conduct an in-depth literature review and related secondary data analysis that could potentially lead to an academic presentation.

Research opportunities are available to medical students through multiple research grants. Projects explore understanding of the psychology, culture and biology of post traumatic stress disorder, the genetics and treatment of bipolar disorder and novel treatments for depression and alcoholism

RADIATION ONCOLOGY

Radiation Oncology (Therapy)

Faculty: Drs. Ibrahim Ashayeri and faculty
Where: Howard University Hospital Department of Radiation Therapy, Room BA-10
When: Year Round
Enrollment: Two (2) student per four-week period

Course Description:

Introduction to basics of radiation physics, radiation biology and clinical radiation oncology.

RADIOLOGY

Diagnostic Radiology

(This elective may not be available for the 2007-2008 academic year)

Faculty: Dr. Roma Gumbs and Radiology Faculty

Where: Howard University Hospital

When: Year Round

Enrollment: Six (6) students per four-week period

Course Description:

This course is designed to formally introduce the senior medical student to fundamental concepts in diagnostic radiology which will be of importance throughout his/her medical career. Course material is presented in formal lectures, as assigned reading and during film reading sessions.

After completion of this course, the student should be able to approach most routine radiographs systematically and should be familiar with the indications for commonly requested radiographic studies.

SURGERY

Otolaryngology and Head & Neck Surgery

Faculty: Drs. Ernest M. Myers and faculty

Where: Howard University Hospital

When: Year Round

Enrollment: One (1) student per four-week period

Course Description:

ENT Clinic -4 days a week

Oncology Rounds (weekly)

General Surgery - Grand Rounds

ENT Surgery - 2-3 Days a week

Head and Neck Oncology Grand Rounds (weekly)

Objectives: Upon completion of this unit, students should be able to:

- Label diagrams of external and internal structures of the ear, nose, and throat
- Describe and discuss the physiological functions of the anatomical structures of the ear, nose, and throat.
- Describe and discuss logical growth patterns pertinent to ENT development
- Complete a patient's history and physical examination.
- Identify and complete necessary tests for diagnosing ENT problems.

- Identify, recognize and explain signs and symptoms of ENT abnormalities and diseases presented by patients.
- Identify and recommend treatment for common conditions, abnormalities and diseases associated with ENT.

General Surgery

Faculty: General Surgery Faculty
Where: Howard University Hospital
When: Summer, Fall and Spring Semesters
Enrollment: Three (3) students per four-week period, maximum eight weeks

Course Description:

Daily rounds with surgical teams and attending physicians; participation in conferences and clinics; involvement in the care of severely ill surgical patients in intensive care and recovery room areas; assistance in patient work-up, preoperative, operative and postoperative care; also personal discussion with residents and attending physicians on a variety of surgical topics. On occasion, assistance with and participation in research projects will be required.

Course Outline:

Diagnosis and management of common and major surgical diseases, preoperative and postoperative care, operative techniques, surgical pathophysiology of fundamental diseases: inflammatory, neoplastic, congenital and traumatic.

Neurosurgery – Clinical

Faculty: Dr. Gary Dennis
Where: Howard University Hospital
When: Year round
Enrollment: Three (3) students per four-week period

Course Description:

The course is set up on an individual basis, depending on the student's interests, desires, needs and skills, as well as on the available clinical material. The elective includes clinical activity, library work, and preparation of a paper or report. Laboratory activities, teaching activities, conference participation, and attendance at lectures, etc. may be included. The elective provides clinical instruction and students are given individual schedules which allow time for independent study.

Neurosurgery Clinical Research

Faculty: Dr. Gary Dennis, Chief
Where: Howard University Hospital
When: Summer, Fall and Spring Semesters
Enrollment: Three (3) students per four-week period

Course Description:

Basic science and clinical research experiences in Neurosurgery will be provided.

Pediatric Surgery

Faculty: Dr. James Gilbert
Where: Howard University Hospital
When: Year round
Enrollment: Two (2) students per four-week period

Course Description:

The student will receive instruction in the diagnosis and management of common and major surgical diseases, including the principles of pre- and post-operative management as well as operative management and operative techniques for inflammatory, neoplastic, and congenital diseases in the pediatric surgical patient.

Surgical Intensive Care Unit (SICU)

Faculty: Drs. Suryanarayana M. Siram and Haile. M. Mezghebe
Where: Howard University Hospital
When: Summer, Fall, and Spring Semesters
Enrollment: Two (2) students per four-week period

Course Description:

Upon completion of the elective students should be familiar with the following:

- Management of critically ill patients.
- Ventilator management and interpretation of blood gases.
- Use of various inotropic agents
- Selection of antibiotics in surgical infections.
- Management of various electrolyte imbalances and bleeding disorders.
- Hyperalimentation.

Course Outline:

Students are required to attend daily rounds with Hyperalimentation and the Intensive Care Unit teams, assist in patient management activities and participate actively in central venous pressure measurements, and in monitoring of patients with arterial and Swan-Ganz catheters. Students will also assist in critical postoperative patient care.

Transplant Surgery and Immunology

Faculty: Dr. Clive O. Callender and faculty
Where: Howard University Hospital
When: Year Round
Enrollment: Two (2) students per four-week period

Course Description:

The rotation consists of daily rounds; participation in conferences and clinics; preoperative, operative, and postoperative management of end organ failure of patients with kidney pancreas and liver diseases. A segment of this rotation will be served in the histocompatibility and immunogenetics laboratory. The student will learn all phases of

the management of end organ failure including the complexities of dialysis, vascular access, and renal and extra renal transplantation.

Urology – Clinical

Faculty: Dr. Aaron Jackson, and Faculty
Where: Howard University Hospital
When: Year round
Enrollment: Two (2) students per four-week period

Course Description:

The student will participate fully in the primary care of urologic inpatients and outpatients under the direct supervision of attending and resident personnel. He/she is expected to participate in daily rounds, surgery, clinic and conference. If interested he/she can be assigned to a clinical research problem.

OTHERS

Inter-disciplinary Clinical Research in GCRC

Faculty: Dr. Victor Gordeuk and GCRC Investigators
Where: Howard University Hospital
When: Year round
Enrollment: Two students per four-week period

Course Description:

The Howard University GCRC Research Curriculum consists of lectures, seminars, conferences, patient evaluations, preparation of protocols, overall and specialized review of hypothesis designs paying special attention to randomization, blinding procedures, statistical design and analysis. There will be direct contact with principal investigators on active GCRC protocols. Students will work with the GCRC staff; conducting histories and physical examinations. They will also be assigned an active project/protocol.

Time is available/allotted to discuss the design of protocols with the GCRC statistician. The student will give the assigned protocol top priority. He/She will review the results of all laboratory tests along with the protocol and pertinent references in preparation for discussion with the statistician and a presentation on the 4th Friday of the month. Each student should be well-versed in the following. 1) Protocol design and hypothesis(es), 2) specific aims and/or goals, 3) statistical design and methods to be used for data analysis, and 6) the proposed outcome. Students will also be asked to identify a topic which can be researched and reviewed in detail. A faculty advisor has to be identified for the research topic chosen. The student should generate a hypothesis, prepare an abstract, begin the literature search, and prepare a view paper on the topic suitable for publication. Each student will participate in the activities required to obtain an *Informed Consent*.

Telehealth

Faculty: Drs. Celia Maxwell
Where: Howard University Hospital, 4West
When: Year round
Enrollment: Ten (10) students per four-week period

Course Description:

This course will enable students to make a comprehensive study of planning, developing and implementing TeleHealth. The core topics are (1) TeleHealth technologies; (2) applications of Telehealth; (3) implementation of TeleHealth; (4) management and support of TeleHealth; and (5) legalities and liabilities, including medical malpractice. As part of the program, students have the opportunity to visit the Howard University TeleHealth Sciences and Advanced Technology Center TeleHealth facilities and observe and participate in actual TeleHealth consultations.

**HOWARD UNIVERSITY SCHOOL OF MEDICINE
APPLICATION FOR INTERNATIONAL ELECTIVE**

One of our medical students (Section 1) is interested in pursuing an elective at your institution. Please complete Section II and III of this form and return it to the medical student listed below. Upon completion of the elective a written evaluation with narrative comments is required. The student will give the course director an evaluation form with a return address. To receive academic credit, students must register with you one-month prior to beginning the course.

SECTION I: (To be completed by the student)

Student Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: (____) _____ Student's e-mail address: _____
Title of Elective: _____

The student must provide on separate pages the institutional description of the elective

SECTION II: (To be completed by accepting institution.)

Name of Institution: _____
Address: _____
City: _____ Country: _____ Zip or Postal Code: _____
Phone: (____) _____ Fax: (____) _____ e-mail address: _____
Web Site: _____

SECTION III: (To be completed by accepting institution.)

The above mentioned student has been accepted for the following elective:

Elective title: _____
Dates accepted for: _____
Print name and title of Director for the above elective: _____
Phone number for Director: (____) _____ Fax: (____) _____ email: _____
Print name and title of person completing this form: _____
Phone number of person completing this form: (____) _____ email: _____
Approval – Signed (Director of Elective) _____

SECTION IV: FOR USE AT HOWARD UNIVERSITY COLLEGE OF MEDICINE

Name of Chair of appropriate department _____
Signature (Chair) _____
Approved: _____ Not approved _____ Date: _____
Associate Dean for Academic Affairs: Approved: _____ Not approved: _____ Date _____
Signature: _____ Date: _____

**Howard University College of Medicine
Senior Rotation Schedule
2007 – 2008**

SECTION A

Student's name:.....**Phone:**.....**email:**.....

Students must complete this form prior to submission to the Associate Dean for Academic Affairs for review and signature. It is the responsibility of the students to secure and confirm all rotations. Include all required rotations and electives

Dates	Elective/Course	Institution	Course director	Director's phone/email
08/06/07- 09/02/07				
09/03/07- 09/30/07				
10/01/07- 10/28/07				
10/29/07- 11/25/07				
11/26/07- 12/23/07				
01/02/08- 01/27/08				
01/28/08- 02/24/08				
02/25/08- 03/23/08				
03/24/08- 04/20/08				
04/21/08- 05/18/08				
05/19/08- 06/15/08				

Student's signature:.....

SECTION B

This section to be completed by the Associate Dean for Academic Affairs

Approved:.....

To be modified:.....

.....Date:.....

**Sheik N. Hassan, M.D., FCCP
Associate Dean for Academic Affairs**

STUDENTS: Please print and complete section A of this form and return it to the office of the Associate Dean for Academic Affairs