Universidad Central del Caribe

SENIOR ELECTIVES CATALOG

Medical Electives Office

2026-27

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This catalog has been designed to describe and outline the policies of the Electives Program and elective opportunities offered at the Universidad Central del Caribe School of Medicine and its affiliated hospitals.

I. *GOALS AND OBJECTIVES OF THE ELECTIVES PROGRAM*

The Electives Program is aimed to provide students with the opportunity to individualize their course of study. Students are expected to examine their academic records and utilize the senior year to:

A. Broaden their educational horizons beyond narrow specialty areas and gain valuable experience in areas peripheral to their main areas of interest;
B. Select experiences in areas not generally covered by the core curriculum; and
C. Gain some research experience.

The elective courses are available to students who have satisfactorily completed the required courses. Students are required to complete ***18 weeks*** of approved elective courses during the fourth year of medical school.

No more than ***12 weeks*** in a particular specialty is permitted. ***Additional electives in the same specialty are not included in the 18 weeks required for graduation***. Elective courses taken prior to the fourth year of medicine are not part of the 18 weeks required during the fourth year of medical school.

At UCC elective courses are offered in a minimum of 2 week periods, unless otherwise specified.

A two-part orientation on the requirements and scheduling of elective courses is offered to UCC third-year medical students in December and February of each academic year.

Pre-registration for Elective Courses Periods

There are two pre-registration periods for the fourth year program:

On the assigned days, students are required to visit the Electives Office between 9:00 A.M. and 3:30 P.M. Prior to the visit, the application form must be completed and accompanied with all required information.

II. *PROCEDURES FOR COORDINATING ELECTIVES AT OTHER MEDICAL SCHOOLS*

It is each student's responsibility to schedule electives at other institutions. He/she should apply directly to the external institution. Once the external institution approves the elective, the student must submit to the Office of Elective Courses a written description of the elective, including the name of the supervisor and the letter of approval of the UCC corresponding department chairperson. The student may submit the elective for approval by the corresponding chairperson of the UCC-SOM prior to applying to the external institution. The chairperson has the final decision on the approval of the elective. The student must provide the Coordinator of Elective Courses the complete mailing address of the supervisor for all electives outside UCC School of Medicine. All documents must be submitted at the time of registration.

Students who take an elective course without completing all the required steps risk receiving no credit for said elective. All students in this situation will be charged a $25.00 administrative fee, per course.
If the sponsoring institution requires a letter from the Dean of Medicine or requests completion of an application by the Dean of Medicine or the Dean of Student Affairs, please contact the Coordinator of Elective Courses.

If the student wishes to cancel an elective course at an external institution, he/she is responsible for notifying the sponsor of the elective course and the Coordinator of Elective Courses at the Universidad Central del Caribe-SOM.

Salaries, stipends, or other remuneration to students are not permitted as part of any elective course taken for academic credit. It is permissible for students to be reimbursed for necessary expenses incurred, if the location and circumstances require that a second residence be maintained for the elective. Ordinarily, there should not be any financial gain to the student, while pursuing elective course.

III. *DROP/ADD PROCEDURES*

Changes of elective courses may be permitted upon written approval of the proctor of the specific elective, as well as by the director of the respective department, using the Notice of Change or Withdrawal Form. Changes must be completed no less than one month prior to the date of the beginning of the elective. Changes on elective courses that are not completed during the specified time frame will be charged an administrative fee of ***$25.00. If the change is approved by the proctor, the student must bring the completed and signed form to the Office of Elective Courses***. If the student pursues an elective course without following official add procedures while he/she was officially registered in another elective, the student will not receive credit for said elective. Each case will be evaluated in its individual merits. An administrative fee of $25.00 will be charged.

Students who do not show up to scheduled electives impact the image of the UCC-SOM and themselves in an extremely negative manner. This has repercussions, such as making it difficult for other students to be granted electives in the future. Students who are no shows will have it reflected in their official transcript as such (no-shows, n/s) and a reprimand will be sent to the student with a copy attached to his/her record.

IV. *EVALUATIONS*

All elective courses require an original written evaluation of the student's performance at the conclusion of each course. Students are responsible for requesting that the evaluation form be sent to the Office of Elective Courses. For courses outside UCC the Office of Elective Courses must receive an original evaluation form completed by the host institution. Evaluations for all electives must be received prior to graduation in order to fulfill the requirements for the M.D. degree.

In addition, students are required to submit an evaluation of their experience in all elective courses. The official evaluation form is available at the Office of Elective Courses.

Student performance in the elective courses is evaluated on a ***Pass-rere*** basis. Outstanding performance is recorded as **Honors** for the purposes of future recommendations for professional opportunities.

V. *MALPRACTICE COVERAGE*

The malpractice insurance policy of UCC School of Medicine covers our students while they are pursuing approved elective courses both in Puerto Rico and in the United States.

To comply with minimum requirements will be the sole responsibility of the student who will submit evidence of such insurance coverage cover.

https://www.academicgroup.com/ampi-for-med-students

Visiting Students Information

UNIVERSIDAD CENTRAL DEL CARIBE School of Medicine welcome students enrolled at LCME accredited medical schools to apply for elective courses. Students must be in good academic standing and in their final year and MUST have completed all required clerkships.

Students should request dates for participation, which coincide with the dates for electives at UCCEM. There is $200.00 (non-refundable) for the processing of each course application. A check or money order payable to the UNIVERSIDAD CENTRAL DEL CARIBE School of Medicine must accompany each application.

Applications will not be processed until completed documents are received.

In order to be eligible for elective courses the following information is required.

1. The student must be in good academic standing at an LCME accredited medical school and have completed three years of medical studies. Submit a transcript of the medical courses approved.
2. Application is considered only after UCC students register.
3. The maximum number of weeks a student may take electives at the UCC is eight (8). Assignment of visiting students are made after the schedules of UCC students have been completed.
4. Visiting students must receive an evaluation from our medical school for elective course work completed at the UNIVERSIDAD CENTRAL DEL CARIBE School of Medicine.
5. Evaluation of the student's performance will be sent to the Office of Elective Courses at the visiting student's home school.
6. A written communication from the Dean or authorized delegate of the home school expressing the approval of the student's request is required.
7. The applicant student must submit a proof of immunity to measles, mumps and rubella, as well as successful completion of Universal Precaution Training.
8. The *UCCEM* School of Medicine does not provide student health, liability or malpractice insurance for visiting students. Visiting students must provide their own health insurance and be responsible for their malpractice insurance. Submit proof of health insurance and malpractice insurance.
9. The UCCEM will assist in the identification and location of housing facilities. However, the students are responsible for their room and board.
10. If the elective requested requires direct contact with patients, students must be able to speak fluent conversational Spanish. Student must be fully bilingual.

Students interested in applying for electives at UCCEM should contact:

Coordinator for Elective Courses
medicalelectives@uccaribe.edu
UNIVERSIDAD CENTRAL DEL CARIBE
P. O. Box 60327
Bayamón, Puerto Rico 00960-6032
(787)798-3001 (Exts. 2082 - 2324)

Universidad Central del Caribe
Medical Elective Office
Deanship of Medicine
P.O. Box 60327
Bayamón, Puerto Rico 00960-6032

E-mail: medicalelectives@uccaribe.edu
Telephone: 1-787- 798-3001 Ext. 2082, 2324

VISITING STUDENT APPLICATION

I. TO BE COMPLETED BY APPLICANT

Student's Name: _____
(Last) (First) (Middle)

Mailing Address: _____

_____

Telephone Number: _____ - _____ - _____

1st: _____
(Elective Title) (Course Number) From To

2nd: _____
(Elective Title) (Course Number) From To

II. TO BE COMPLETED BY THE DEAN OR AUTHORIZED OFFICIAL

1. The medical student named above is in good standing and is in the _____ year of a _____ program. **He/she** is authorized to take this elective course at the Universidad Central del Caribe.
2. The student **(will) (will not)** have health insurance while at UCC.
3. Malpractice insurance **(does) (does not)** cover the student away from the school.
4. The student **(will) (will not)** have completed the required clinical clerkship before taking the above requested elective.
5. An evaluation of the student's performance **(is) (is not)** required.
   The completed evaluation should be returned to:

_____ _____
Signature of School Official **Date**

_____ _____
Name of School Official **Title**

_____
Medical School

_____
Address **City/State/Zip**

_____
Telephone **Fax**

III. TO BE COMPLETED BY UCC ELECTIVE COORDINATOR

Your request for _____
(Elective Title) (Course Number) (From) (To)
(Is) (is not) approved.
Please report to: _____ at _____

_____ _____
Elective Coordinator **Dean of Medicine**

ELECTIVES DATES FOR REGISTRATION

Quiere decir que esta fecha no está disponible.

		2 Week	3 Week	4 Week	5 Week	6 Week
Aug. 3-7	1					
Aug. 10-14	2					
Aug. 17-21	3					
Aug. 24-28	4					
Aug. 31- Sept 4	5					
Sept. 7-11	6					
Sept. 14-18	7					
Sept. 21-25	8					
Sept. 28-Oct. 2	9					
Oct. 5-9	10					
Oct. 12-16	11					
Oct. 19-23	12					
Oct. 26-30	13					
Nov. 2-6	14					
Nov. 9-13	15					
Nov. 16-20	16					
Nov. 23-27	17					
Nov. 30-Dec. 4	18					
Dec. 7-11	19					
Dec. 14-18	20					
Dec. 21-25	X	**HOLIDAY RECESS** (Dec 21, 2026-Jan 6, 2027)				
Dec. 28-Jan 1	X					
Jan. 4-8	22					
Jan. 11-15	23					
Jan. 18-22	24					
Jan. 25-29	25					
Feb. 1-5	26					
Feb. 8-12	27					
Feb. 15-19	28					
Feb. 22-26	29	**Selected Topics and Bioethics IV**				
Mar. 1-5	30					
Mar. 8-12	31					
Mar. 15-19		MATCH PERIOD				
Mar. 22-26	32					
Mar. 29-Apr. 2	33					
Apr. 5-9	34					
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Apr. 19-23	36					
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MANA-04 ANATOMY TEACHING ELECTIVE IN GROSS ANATOMY

Prerequisites: Third year clerkships

This course has been designed to meet the needs of third and fourth year medical students and residents who desire an in depth Anatomical review of their chosen specialty area. They may elect advanced studies in three broad areas: Phase "A": Back and Limbs; Phase "B": Thorax Abdomen and Pelvis; and Phase "C": Head and Neck. Regardless of the region, each student will be expected to carry out a series of museum quality prosections as permanent additions to the departments teaching collection. The students will work under the general guidance of a faculty member and will also conduct clinical correlation discussions and formal demonstrations on their prosection.

Person in Charge	**:**	Sofía Jiménez, Ph. D.
Dates Offered	**:**	*(By arrangement)*
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	5 students
Meeting Place	**:**	Anatomy Department
Evaluation	**:**	At the completion of the work the students will be evaluated by an oral examination on their dissections.

MANA-05 ADVANCED NEUROANATOMY

This course has been designed to meet the needs of third and fourth year medical students as well as residents who desire an in depth neuroanatomical review of their chosen specialty area. They may elect advanced studies in three broad areas:

Phase A:	Neuroanatomy
Phase B:	Neurohistology
Phase C:	Neuropathology and Neuro-imaging with clinical correlations.

Depending on the individual student's specific interest and needs, clearly defined objectives can be set within any given sub-specialty. For example, a student interested in Neurosurgery may choose to broaden his/her knowledge of Neuroanatomy with emphasis in Neuropathology and Neuro-imaging. Students could be expected to carry out a series of museum quality prosection as permanent additions to the Department's teaching collection*. He/She will also review the literature in the specific subject. The students will work under the general guidance of a faculty member and will also conduct clinical correlation discussions, formal demonstrations on their prosection and review sessions to the first year medical students.

If the time of the elective coincides with the Neurosciences Course, MSI, students registered in the elective will be ask to teach. The Proctor will instruct the elective's students on what to ask and how to ask the students. They will do one and they will teach one in Proctor's presence. Their performance will be included in his/her grading on the elective.

Person in Charge	**:**	Dra. Sofia Jiménez, M. D.
Dates Offered	**:**	*(By arrangement)*
Course Duration	**:**	2 - 4 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	Anatomy Department
Evaluation	**:**	At the completion of the course, the students will be evaluated by an oral examination, a written report (ready for publication) and the quality of specimen preparation

*This dissection requirement depends on the availability of cadaveric specimens.

MANA-08 RESEARCH IN CELLULAR AND MOLECULAR BIOLOGY

Prerequisites: First two years of medical curriculum

This is an introductory course to scientific methodology and research in the basic biomedical sciences within the general areas of cellular and molecular biology. The main research focuses of the faculties of Department of Anatomy & Cell Biology are to study the structure function relation of neurotoxins from snake andsnail venoms and mechanism of apoptosis. The student will actively participate in individual resea topic one of the research labs in the Department. The student will work under the supervision of a faculty member. At the end of the course, the student should be able to:

1. Search for the scientific literature relevant to the area of interest;
2. Discuss the theory which serves as the basis for the project and the methodology employed;
3. Plan and perform experiments with an adequate degree of skillfully;
4. Analyze and interpret the results obtained;
5. Use the computer as a research tool.

Person in Charge	**:**	
Dates Offered	**:**	*(By arrangement)*
Course Duration	**:**	4-6 weeks
Enrollment per Session	**:**	1-2 per laboratory
Meeting Place	**:**	Departmental Research Labs
Evaluation	**:**	The Student will be evaluated by the mentor regarding the above mentioned objectives throughout the session. In addition, the student will submit a short report on the activities performed and give one oral presentation

MANA-11 SMALL ANIMAL MODEL & THROMBOSIS

Prerequisites: First year medical Physiology

Description

The course will involve review of a specific body of literature pertaining to a specific question. The student will the learn to design and carry out experiments that will attempt to answer the question set forth. The experiment will be written up in journal style and presented to the laboratory in seminar style.

General Educational Objectives:

To teach experimental design

Learning Activities:

Review of current literature experimental design, implementation and presentation

Person in Charge	**:**	
Dates Offered	**:**	*(By arrangement*)
Course Duration	**:**	6 weeks
Enrollment per Session	**:**	1-2 per laboratory
Meeting Place	**:**	Laboratory
Evaluation	**:**	The Student will be based on performance of the student throughout the session, a written summary of work completed and oral presentation.

DEPARTMENT OF PATHOLOGY

MPATH-29 INTRODUCTION TO IMMUNOHISTOCHEMISTRY AND IN SITU HYBRIDIZATION

Prerequisites: Having successfully completed a Surgical Pathology elective

Course Description:

This course will provide an in depth laboratory exposure in the fields of IHC, ISH, and advanced staining techniques to complement surgical pathology. The medical student will be educated on how to perform these tests and their purpose. The medical student will also develop understanding of the pathophysiologic basis of disease and their respective changes in tissues. Justification

When morphology and routine staining cannot provide the diagnosis in surgical pathology, pathologists turn to advanced staining techniques including Immunohistochemistry (IHC) and in situ hybridization (ISH). IHC detects the presence of critical marker proteins in tissue samples while ISH detects target RNA or DNA sequences. Both techniques are commonly used for difficult to diagnose cancer where the presence or absence of particular proteins or sequences helps pathologists make an accurate diagnosis and differentiate between diseases that look morphologically similar. Also IHC can help the direct patient treatment based on the absence or presence of specific receptors.

Competencies:

In order to understand and appreciate the material been taught, the student needs a basic understanding of the pathologic basis of disease.

Goal (s):

The Goal of this clerkship is to expose Medical Students to the fields of Immunochistohemistry and In Situ Hybridization.

General Objective (s):

The general objective students understand the purpose and benefits of special stains and molecular techniques in the practice of surgical pathology.

Specific Objectives:

1. To understand proper fixation and blocking techniques used for immunohistochemistry.
2. To describe the basic steps for performing direct or indirect immunostaining.
3. To list the biomarkers used for Breast, Cervical, Endometrial, and Bladder Cancer.

Learning Activities:

The learning process will occur through daily discussions of specific cases between the Student and the Faculty Member. The students will be directed to study and read about cell biology and pathologic basis of disease for the specific cases being discussed. The medical student will also participate in any research process ongoing in the laboratory.

Evaluation and Assessment:

Students will be evaluated on a daily basis. The evaluation will take into consideration the promptness, attitude, and disposition of the Medical Student. The student will be expected to demonstrate the acquired knowledge through verbal quizzes and case discussions. The student will also need to perform an oral case presentation incorporating the clinical and histological aspect with the molecular characteristic of the diagnosis of cancer.

Person in Charge	**:**	Miguel Noy, M.D. Laboratorio de Patología Dr. Noy Edificio Capital Center, Sótano Torre 1 Hato Rey, Puerto Rico (787) 751-1312
Dates Offered	**:**	Through-out the academic year, by arrangement
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	1
Meeting Place	**:**	Private office Pathology
Evaluation	**:**	The grading system will consist of 50% demonstration of knowledge and 50% on the overall attitude and behavior of the Medical Student during the clerkship.

DEPARTMENT OF PHARMACOLOGY

MPHAR-10 RESEARCH IN MOLECULAR PHARMACOLOGY AND TOXICOLOGY

Prerequisites: First two years of medical curriculum

This elective course has been designed to introduce students to a milieu of basic cellular and molecular biology techniques in the areas of pharmacology and toxicology. Students will conduct a short research project in the area of interest of the faculty member. Research topics include: the role of mitochondria in cancer and neurodegeration, DN repair and mutagenesis and signal transduction. The student will be trained in the following areas: search of pertinent scientific literature, design and performance of experiments, analysis, interpretation and writing of scientific data. The student will work under the supervision of faculty member and/or laboratory staff. After completion of the work, the student will make an oral presentation consisting of a summary of the results of his/her research work.

Person in Charge	**:**	Faculty of Pharmacology Department
Dates Offered	**:**	*(By arrangement*)
Course Duration	**:**	4-6 weeks
Enrollment per Session	**:**	1-6 students
Meeting Place	**:**	Pharmacology Department
Evaluation	**:**	The evaluation will be based on the performance of the student throughout the session and the oral presentation.

DEPARTMENT OF BIOCHEMISTRY

MBIO-01 RESEARCH IN BIOCHEMISTRY

Prerequisites: First year of the medical curriculum

Students will be assigned to different members of the faculty of the Department of Biochemistry to conduct research in the area of interest to the faculty member. The faculty will discuss the research problem with the student and will assign reading material. After reading the necessary articles closely related to the research problem the student will begin the research work. When the work is finished the student will present a summary and the results of his work to the faculty and participating students.

Person in Charge	**:**	Faculty of Biochemistry Department
Dates Offered	**:**	Summer (MS 1,2,3;All Year(MS4)
Course Duration	**:**	6 weeks
Enrollment per Session	**:**	6 students
Meeting Place	**:**	Biochemistry Department
Evaluation	**:**	Faculty will evaluate the student summary presentation. Supervising faculty will use this and additional data to evaluate the student.

DEPARTMENT OF PHYSIOLOGY

MPHYS-05 RESEARCH IN PHYSIOLOGY

This course encompasses a period of six-seven weeks during the summer, in which a medical student is totally immersed into an area of research in biomedical science, specifically in the field of physiology. The student is first acquainted with the different research projects available in the Department. He/She finally chooses the research area to work during the summer. All details related to the area are discussed with the professor in charge. The professor will design a program for the student in such a way that all the objectives of the course are covered. The student will be obliged to work a full time schedule of no less than 37.5 hours per week. The student will be supervised by the mentor and laboratory staff.

Each week a meeting between the student and mentor will take place to discuss the experimental results and the progress of the project. In addition, "journal club" type meetings with the department faculty will be planned in the students schedule during the six-seven weeks period.

Course Objective:

1. To initiate medical students in the area of biomedical research at an early stage of their career.
2. To teach the medical students the fundamental concepts involved in the preparation of a research project and its eventual presentation both in the oral and written format.
3. To train the students in scientific methodology and laboratory methods.
4. To familiarize the students with the methods that are used in bibliographical searches related to his/her specific research area.
5. To promote open discussions among the students and faculty on topics related to research.

Person in Charge	**:**	To be assigned by the Chief Department
Dates Offered	**:**	Summer
Course Duration	**:**	6-7 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	Department of Physiology
Evaluation	**:**	At the end of the course, the student will be required to present the results of the research project in a seminar presentation.

DEPARTMENT OF EMERGENCY MEDICINE

MEMED-03 EMERGENCY MEDICINE

Pre-requisites: Third year Clerkships, CPR

The objective of this course is to expose students to primary care in the emergency medicine field with emphasis on acute patient management issues such as differential diagnosis, laboratory and radiology testing in an acute care setting. This course will provide the students with an introduction to the field of Emergency Medicine, Emergency Medical Services (EMS), and the approach to the acutely ill or injured adult and pediatric patients.

General Educational Objectives:

1. Recognize and treat life threatening emergencies
2. Manage airway
3. Interpret EKG, CRX, ABG
4. Wound Management
5. Learn the art of treating patients with respect during their most vulnerable time, as well as caring for their medical conditions. General review of ACLS, ATLS and PALS
6. Learn to integrate knowledge and feel the sense of accomplishment that accompanies arriving at a provisional diagnosis and instituting a treatment plan. L
7. learn rapid problem-solving skills, rapid decision-making skills, and gain common procedural experience

Learning Activities: Patient rounds, Case discussions, Oral presentations

Person in Charge	**:**	Dr. Jorge Gago
Dates Offered	**:**	Thru the year by previous agreement
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1-2 students
Meeting Place	**:**	As per previous agreement at Ramon Ruiz Arnau University Hospital
Evaluation		Attendance: **60%** Rounds and Case discussion; **30%** Quiz: **10%**

MEMED-09 EMERGENCY MEDICINE ELECTIVE (Not Available)

Prerequisites: Third Year Clerkships

Course Overview:

Welcome to your rotation in Emergency Medicine. The faculty in the Department of Emergency Medicine is excited about the opportunity to provide you with a valuable clinical experience in which you will be evaluating undifferentiated patients that will involve some concepts from virtually all-medical specialties. The relatively young specialty of Emergency Medicine is rapidly growing, as is the need and demand for physicians trained in Emergency Medicine. We expect this rotation to both reinforce concepts you have already learned as well as introduce some new skills.

Description:

Students in the Emergency Medicine elective will be given primary care responsibility for Emergency Department patients under the supervision of Emergency Department physicians. Activities will include patient workups, written documentation of patient evaluations on Emergency Department charts, communication with faculty regarding patient care, and performance of a variety of procedures. Opportunity for transporting and caring for patient in the pre-hospital setting will be available. There will be one formal conference each week. The student will deliver a 15-20 minute oral presentation on any appropriate emergency medicine topic at one of these conferences.

Person in Charge	**:**	
Dates Offered	**:**	Academic Year (By arrangement)
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	1-2 students
Meeting Place	**:**	HIMA Hospital Caguas
Evaluation		The student will be evaluated by the staff and the department chief. The final grade will be based on the participants' clinical performance Participation in case discussions: 35% Case discussions: 40% Attendance: 15% Daily Rounds: 10%

General Educational Objectives:

1. The student will be able to identify rapidly and accurately the problem that brings the patient to the Emergency Department.
2. The student will identify the patient requiring immediate intervention and will participate in the immediate management of the patient.
3. The student will arrange for continuity of care following the initial acute phase of patient management.

DEPARTMENT OF FAMILY MEDICINE

MFMED-02 FAMILY MEDICINE PRECEPTORSHIP

Prerequisites: Clerkship of Family Medicine

The student will be assigned to a family physician preceptor. The medical student under direct supervision will participate in the actual practice of Family Medicine. This experience may take place in an office, community health center, or hospital setting.

Person in Charge	**:**	Eric González, M. D.
Dates Offered	**:**	Throughout the Year (By arrangement with the Department of Family Medicine)
Course Duration	**:**	3-4 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	At the Preceptor's Office to be Assigned

MFMED-11 PRIMARY CARE MEDICINE

Prerequisites: Have completed third level, Internal Medicine, Pediatric, and Family Medicine Course

The student will be assigned to a Primary Care Center. The medical student under direct supervision will participate in the management, diagnosis and health promotion of patients. The student will be involved in the utilization of the latest accepted preventive services protocols and the management of common primary problems.

Person in Charge	**:**	Eric González, M. D.
Dates Offered	**:**	Throughout the Year (By arrangement with the Department of Family Medicine)
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	3 students
Meeting Place	**:**	At Primary Care Center - to be Assigned

Objective:

The student will be exposed to different ambulatory experiences in a primary care practice. The Student:

1. Will participate working with a Primary Care Physician with ambulatory in a Primary Care Center.
2. Will make procedures with his patient under direct supervision.
3. Will participate in didactic activities offered in the Primary Care Center.
4. Will use established protocols and guides for the management of primary conditions and for the health maintenance of their patients.

Family Medicine Preceptorship and Primary Care Medicine must be coordinated with Mrs. Linnette Santana 787-798-3001 Ext. 2067

MFMED-41 INTERNATIONAL MEDICINE

Prerequisites: Being a student in good standing at Universidad Central del Caribe, School of Medicine, Complete immunization according to DCD requirements, Valid USA passport

Description:

Students are involved in rural patient care under preceptor supervision at Latin-American, including Guatemala, Peru, and Republica Dominicana among others. The rotation is designed to give students a cross-cultural medical immersion experience in a rural place on public health, epidemiology, health care financing, and health care reform as it is occurring in Latin-American. The International Clinical Electives Program is designed to provide students with an opportunity to enrich and diversify their medical education in a different physical a social setting.

General Educational Objectives:

1. To experience a medical system other than their own.
2. To gain knowledge of the importance of diseases that are common in Latin-American
3. To observe and develop existing clinical skills
4. To broaden public health knowledge\
5. To develop creativity in problem-solving
6. To deepen commitment to providing high quality medical services in underserved population
7. To provide opportunities to explore alternate career possibilities
8. To gain experience in aspects of medicine beyond the core curriculum
9. To develop a plan to deal with populations with medical problems facing different groups within another society, the financing of medical care, and the role of government in healthcare outside of the student's home country.
10. To develop sensitivity to diversity and to appreciate cultural differences

Learning Activities:

The duration of the International Clinical Elective Program is 2-4 weeks. Each student will be assigned a preceptor who will assess the student's performance and give him/her a written report or certificate upon completion of the rotation. This represent 100% of his/her grade. Some learning activities required for completion of this experience are: 1. Elicit medical history, 2. Perform physical examination under preceptor supervision and 3. Elaborate and implement a health education plan.

Person in Charge	**:**	José Vargas-Vidot, M.D.
Dates Offered	**:**	By Coordination with Preceptor
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	By Coordination with preceptor
Meeting Place	**:**	Iniciativa Comunitaria's Office
Evaluation	**:**	Standard Evaluation From (100%)

MFMED-57 INTERNATIONAL MEDICINE I & II

Pre-requisites: 3rd year completed

Description:

The International Medicine Elective is designed to provide students with an opportunity to enrich and diversify their medical education in a different physical, cultural, and social setting. All of the activities are aimed at improving the health status of the populations served as well as establishing partnerships with local health care providers and educators.

General Education Objectives:

Gain valuable experience and insight from service learning activities in international clinical settings.

Specific Objectives:

1. To gain international health exposure
2. To gain knowledge of the importance of diseases that are uncommon in a student's home country
3. To broaden public health knowledge
4. To develop creativity in problem-solving
5. To learn, develop and apply practical skills in non-traditional settings
6. To develop sensitivity to different health care delivery systems by working alongside local health care providers
7. To demonstrate effective team-building skills with colleagues from multiple medical disciplines
8. To deepen commitment to providing high quality medical services
9. To provide opportunities to explore alternate career possibilities
10. To gain experience in aspects of medicine beyond the core curriculum
11. To understand the relationship between medicine and society in another culture. This includes developing an understanding of medical ethics and law, the recognition of medical problems facing different groups within another society, the financing of medical care, and the role of government in healthcare outside of the student's home country
12. To introduce participants to cultures and lifestyles in remote rural areas

Learning Activities:

- Online research
- Clinical observations
- Written papers (case reports and/or case series)
- Weekly journal
- Power Point™ presentation
- Service learning through a community education project

Person in Charge	**:**	
Dates Offered	**:**	August through June
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	By Coordination with preceptor
Meeting Place	**:**	As per previous agreement
Evaluation	**:**	Pass or Fail 50% Weekly presentations 50% Weekly journal

DEPARTMENT OF INTERNAL MEDICINE (Not Available)

MIMED-10 CLINICAL GASTROENTEROLOGY

Prerequisites: Internal Medicine Clerkship

The purpose of the course is to acquaint the students with all the clinical aspects of gastrointestinal disease both at the in and outpatient level. The students are expected to participate in the management of gastrointestinal diseases. They are encourage to perform a complete history and physical examination with particular emphasis in the gastrointestinal system. Besides, they must formulate a differential diagnosis and a plan of treatment. Attendance to all endoscopic procedures is mandatory.

Person in Charge	:	Roberto Vendrell/Abdiel Cruz Gastroenterology Division
Dates Offered	:	Year round (*By arrangement*)
Course Duration	:	4 weeks
Enrollment per Session	:	1 student
Meeting Place	:	Gastroenterology Section in the *Third Floor of the University Hospital Dr. Ramón Ruiz Arnau.*
Evaluation	:	Evaluation will be the responsibility of the attending in charge, on the basis of knowledge, skills mastered and attitudes developed during the course. The evaluation may include an objective examination

MIMED-10 VAH CLINICAL GASTROENTEROLOGY

Prerequisite: Have successfully completed third year Internal Medicine Course.

This is an elective course geared to present in an updated manner, the physiology, pathophysiology, diagnosis and management of the gastrointestinal / liver diseases. During this elective course, the student will have the opportunity to be exposed to a large variety of gastrointestinal and hepatic diseases throughout the evaluation of patients in different settings, both hospitalized and ambulatory. The student will be under the direct supervision of staff Gastroenterologists. The student will also have the opportunity to observe a large variety of endoscopic procedures in a state of the art Gastroenterology Laboratory. In the Lab he will be able to correlate the history and physical findings of the patients with the video images of the actual findings in the GI tract, a real in vivo clinico pathological correlation. As part of this academic geared rotation, the student will participate in weekly multidisciplinary academic activities in which Radiology, Pathology and Surgery are also actively involved. The student has available online books and journals to complement their experience during the rotation. The goal of the rotation is that students learn about gastrointestinal / hepatic disorders and enjoy the process of learning.

Person in Charge	**:**	Jaime Martínez-Souss, M.D.
Alternate	**:**	José Martin-Ortiz, M.D.
Dates Offered:		Year round Academic Year: (*By arrangement*)
Course Duration	**:**	2 - 4 weeks
Enrollment per Session:		1 student
Meeting Place	**:**	*Gastroenterology Section – OPA Building* Veterans Administration Hospital 7:30 AM
Night Duties	**:**	No
Evaluation	**:**	The student will be evaluated by sponsors on the basis of their knowledge, skills and attitudes developed during the course.

MIMED-11 CLINICAL HEMATOLOGY AND ONCOLOGY

(Introduction To Clinical Diagnosis And Management)

Prerequisites: Internal Medicine Clerkship

The purpose of this elective is to expose the fourth year student to a diverse variety of clinical problems in the field of Hematology and Oncology. The student will progressively be assigned more responsibilities in the handling of patients as his/her mastering of the different skills is demonstrated. The rotation will include exposure and direct hands on experience with acutely ill patients in a hospital setting along with a dense exposure to the ambulatory diagnosis and management of patients with blood and malignant disorders. The rotation is organized using the inpatient facilities at HURRA. The outpatient facilities include the clinics in HURRA and offices in the San Pablo Medical Center. A particular emphasis on understanding the clinical evaluation and basis of therapeutic decisions for malignant disorders is made. In addition reviewing the laboratory application for the diagnosis of blood dyscrasias along with the physiologic basis of management of blood disorders is made. The student is expected to present a one hour seminar at the conclusion of the elective. Assistance to didactic Departamental activities is compulsory. Only one student can be accommodated per month.

Person in Charge	Robert F. Hunter, Juan Vázquez, M.D., J. Oppenheimer, M.D., Augusto Medina, M.D. Madeline García Soberal, M.D.
Dates Offered	Year round *(By arrangement*)
Course Duration	4 weeks
Enrollment per Session	1 per month
Meeting Place	*Hematology and Oncology Section*

MIMED-16VAH CLINICAL RHEUMATOLOGY

Prerequisites: Third Year Clerkships

Course Description:
The course aims towards gaining confidence in the evaluation of rheumatological problems, particularly in the performance of a comprehensive and precise examination, familiarity with the use of equipment, and enhancing patient interaction skills.

Goal:

Competency in clinical rheumatology in preparation for the first post graduate year.

Justification:

Elective Rheumatology Rotation

Competencies
The student will be able to develop an initial approach to rheumatology problems by performing a complete patient interview. Interpret different diagnostic tools and identify the possible differential diagnosis. Determine appropriate therapy and course of action. Interpret laboratory and ultrasound findings to optimize therapy.

General Objective (s):

Orderly and timely clinical assessment of the rheumatologic patient.

Specific Objectives:

Provide the student with a solid foundation in the diagnosis and management of rheumatic conditions.

Learning Activities:
The students will attend office hours under Dr. Martorell's supervision with the possibility to assist during procedures. The student must prepare a case presentation of a topic observed in the clinic and present it to the attending doctor before the end of the rotation. Write accurate, organized and legible progress notes and consults. Be timely. Wear appropriate attire. Be professional at all times.

Person in Charge	:	Dr. Edgar Martorell
Dates Offered	:	All academic year
Course Duration	:	2 weeks - 1 month
Enrollment per Session	:	1 student per elective period
Meeting Place	:	Suite 320 6735 Conroy Windermere Rd, Orlando, FL, 32835
Evaluation/Assessment		The student will be evaluated on the basis of knowledge, skills and attitudes developed during the course. The student will do a case presentation.
Grading System		Case presentation: 40% and Elective Evaluation form: 60% Honors, Pass or Fail

Approved by Curr C SOM
June 18, 2019
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MIMED-17 INFECTIOUS DISEASES (Not available)

Prerequisites: Internal Medicine Clerkship

The student will function, with guidance by a senior resident and attending physician, as consultant in Infectious Diseases. Also will participate in bedside consultative evaluation of patients and the

presentation of findings on daily teaching rounds. Student is required to employ standard textbooks, contemporary literature and laboratory data in an organized fashion, perform an adequate evaluation of patients and establish a good working diagnosis. Progress of patients will be assessed daily and recorded. Regular didactic teaching will be provided by residents and attending. Progress of the student during the elective will be monitored during daily teaching rounds by the attending faculty.

Person in Charge	**:**	Dr. Sol M. Carrillo
Dates Offered	**:**	Year round *(By arrangement*)
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	*Conference Room, Department of Internal Medicine*
Evaluation	**:**	Evaluation will be the responsibility of the attending in charge, on the basis of knowledge, skills mastered and attitudes developed during the course. The evaluation may include an objective exam, and/or seminar presentation of an assigned infectious diseases theme.

MIMED-186 MEDICAL INTENSIVE CARE UNIT (MICU)

Prerequisites: Internal Medicine Clerkship

Goals and Objectives

The goal of the MICU rotation is to provide the student with a suitable background in Critical Care Medicine. Students should acquire a sufficient knowledge base to participate in the care of critically ill patients. Fourth-year students who complete the rotation should have the ability to deal with simple and straightforward problems in Critical Care Medicine.

Person in Charge	**:**	
Dates Offered	**:**	November-January (By arrangement)
Course Duration	**:**	2-6 weeks
Enrollment per Session	**:**	2 (maximum)
Meeting Place	**:**	*Intensive Care Unit 3rd floor HURRA*
		Observation by residents and
Evaluation:		*Attending physicians*

Role of the Medical Students in the MICU

Medical students rotating through the MICU become an integral part of a multi-disciplinary team that includes an attending physician, medical residents, nurses, respiratory therapists and nutritionists. While the Attending physician has ultimate responsibility for the care rendered, each member of the medical team has important responsibilities. At our unit, direct patient care is provided by our residents, including the physical assessment of patients, the performance of procedures and the writing of all orders. The second or third-year resident also acts as a supervisor and teacher, and should assist the students in evaluating patients. The residents work closely with the Attending in coordinating and supervising the care rendered and in deciding who is admitted to and discharged from the MICU. All major patient care decisions should be discussed with the attending. All procedures by students should be supervised by the residents until the student demonstrates competence in performing a particular procedure.

Non-physician members of the MICU team are valuable resources and provide useful recommendations on a variety of patient care issues, including ventilator management, nutrition, pharmacology, psychosocial matters and ethical issues.

Rounds in the MICU

Pre-Rounds: The residents and students review any notable overnight events and familiarize themselves with the latest physical findings, laboratory results, culture results, X-rays and medications.

X-ray/Working Rounds*:* X-ray rounds followed by rounds with the MICU team to review each patient's status, assess all problems and generate a treatment plan for the day.

Sign-off afternoon rounds: Afternoon rounds are needed in critically ill patients to follow up on the morning plan and to review the events of the day. Potential problems that could occur overnight should be anticipated and discussed. During these rounds, the resident on night duty will meet with the daytime team in order to review the status and overnight plans for the patients on the MICU.

Case Presentations on Work Rounds

1. For new patients, standard case presentation: Pertinent history, physical examination, labs, electrocardiograms (EKGs), X-rays, special tests, etc.

2. For patients already in the MICU, review of the last 24 hours: Be aware of any changes in examination and be familiar with vital signs, intake and output, hemodynamic data, recent lab results, recent microbiology results, EKG, radiological studies and all of a patient's medications. In the MICU, details are important.

3. Discussion should be problem-oriented. Common problems encountered in the MICU include shock, sepsis, pneumonia, acute respiratory distress syndrome (ARDS), decompensated chronic obstructive pulmonary disease and respiratory failure, congestive heart failure or pulmonary edema, renal failure, gastrointestinal bleeding, thrombocytopenia, drug overdose and agitation/anxiety. Assessment and plan should be organized problem by problem.

4. Important issues for all MICU patients include:
   a. Invasive devices (dates of insertion and number of days):
      - ✓ Endotracheal tube
      - ✓ Feeding tube
      - ✓ Arterial line
      - ✓ Central venous catheter
      - ✓ Pulmonary artery (PA) catheter
      - ✓ Foley catheter

   b. Nutrition
   c. Deep-vein thrombosis (DVT) prophylaxis
   d. PUD prophylaxis
   e. Analgesia/ Sedation
   f. Delirium Prevention
   g. Family Involvement

Educational Goals Based on the ACGME General Competencies

Patient Care:

Students are expected to

- Become familiar with different modes of mechanical ventilation in patients with respiratory failure.

- Understand the appropriate use and misuse of these modes.
- Refine ability to interpret chest X-rays and EKGs

Medical Knowledge:

Students are expected to understand

- Left ventricular mechanics
- Control of cardiac output by the peripheral vessels
- Basic lung mechanics, particularly with respect to normal states, COPD, and restrictive lung diseases
- Acid-base physiology
- The differential diagnosis of, diagnostic approach to, and treatment of shock states, respiratory failure, acid base disorders and acute renal failure
- The manifestations of Multi-Organ System Failure

Practice-Based Learning and Improvement:

Students are expected to
- Apply the evolving clinical literature to improve patient care practices,
- Identify areas for improvement and implement strategies to enhance knowledge, judgment, skills, attitudes and processes of care
- Analyze and evaluate practice experiences and implement strategies to continually improve the quality of their clinical practice
- Develop and maintain a willingness to learn from failures and use failures to improve the system or processes of care

Interpersonal and Communication Skills:

Students are expected to
- develop interpersonal interactions and communication skills that enable them to establish and maintain professional relationships with patients, families, and other members of health care teams, and
- Interact with consultants and other physicians in a respectful, appropriate manner.
- Maintain comprehensive, timely, and legible medical records.

Professionalism:

Students are expected to
- Develop the learning skills necessary for a lifelong career through the combination of the application of the basic sciences in the critical care domain and the critical reading and thinking skills emphasized on rounds through the rotation.
- Demonstrate respect, compassion, integrity, and kindness in relationships with patients, families, and colleagues.
- Demonstrate sensitivity and responsiveness to gender, age, culture, religion, sexual preference, beliefs, socioeconomic status, behaviors and disabilities.
- Understand the modern incarnation of both patient confidentiality and informed consent.
- Develop the ability to formulate constructive feedback in response

Systems-Based Practice:

Students are expected to
- Appreciate how very different organizational cultures and structures can successfully provide high quality critical care. We anticipate that this will arise as a consequence of their ability to compare and contrast the experiences they have in other rotations.
- Develop their ability to utilize the entire system at their disposal to produce good outcomes for their patients.
- Understand the limitations and opportunities inherent in the ICU setting

- Collaborate with other members of the health care team (especially our nurses, nutritionists and respiratory therapists) to assist patients and their families in dealing effectively with the health care system and to improve systematic processes of care.

Medical Record Documentation

Students will have the opportunity to write full admission notes, daily progress notes,

procedure notes and completing discharge summaries. All entries made by students must be immediately countersigned by one of the MICU residents or the MICU attending. The progress note should describe significant events, significant symptoms, significant signs and relevant data. The note should delineate the MICU team's assessment and plans for each of the patient's problems.

Procedures in the MICU

Patients in the MICU often need mechanical ventilation and invasive monitoring. Students should have opportunity to learn and perform, under the supervision of the residents or Attending, procedures commonly needed in the ICU setting, including arterial blood sampling, orogastric tube insertion, central venous cannulation, airway management and endotracheal intubation. Proper technique for these procedures will be taught at the bedside.

Expected knowledge and competencies

- Interpret arterial blood gas and acid base disorders
- Interpret chest radiograph (proper identification of tubes/lines)
- Define shock states (distributive, hypovolemic, cardiogenic)
- Demonstrate consistent practice in infection control (hand washing)

MIMED-68 VAH NEUROLOGY

Prerequisite: Have completed third year in Medicine

The student works on patients with neurological diseases, under direct supervision by Neurology resident and Staff Neurologist in the only Neurology Ward in the island. He/she will have the opportunity to study basic concepts about Neurophysiology, Neuropathology and Neuroradiology. The students are exposed specially to patients with Cerebrovascular, Dementia, Movement Disorder, Epilepsy, Neuromuscular and Sleep Disorder Conditions. Emphasis is given to diagnosis, acute management and treatment modalities.

The Neurology Staff consists of 1 full time Board Certified and one part time neurologist, involved in research of cerebro-vascular diseases, sleep disorder, epilepsy and migraine. The Neurophysiology Laboratory is in charge of a Neurologist, certified by the American Board of Clinical Neurophysiology. We are involved in studies on EEG, evoked potentials and polysomnography. The Neurology Team participates in activities with the Radiology Staff where the student is exposed to CT Scan, MRI, MR - angiography and digital subtraction angiography studies. Also, we have an active interaction with Medicine, Rehabilitation Medicine, Psychiatry and Psychology Services.

Person in Charge	**:**	Ana Vidal, M.D.
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks(160 hours)
Enrollment per Session:		1 student
Meeting Place	**:**	Neurology Section, Outpatient Additional Building (OPA)
Night Duties	**:**	No
Evaluation	**:**	The student will be evaluated on the basis of knowledge, skills, attitudes development during the course, oral examination.

MIMED-92 VAH CORONARY CARE UNIT

Prerequisite: Have completed third year in Medicine.

The student will work on patients with coronary heart diseases and will learn from the different clinical variations that they present. He/she will learn to manage patients without complications as well as the most frequent emergencies and complications. The student will learn the fundamental of ECG interpretation in acute coronary patients. He/she will attend the teaching activities held at the Cardiovascular Section. The student will be exposed to state of the art equipment and cardiovascular diagnostic techniques, such as: continuous ECG monitoring, modules for automatic BP measurements, hemodynamic monitoring with cardiac output determinations, pulse oximetry and transcutaneous cardiac pacing. Bedside 2D Echo studies are performed as clinically indicated.

Person in Charge	**:**	José Escabí, M.D. Luis Rodríguez Ospina, M.D
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Coronary Care Unit Veterans Administration Hospital
Evaluation	**:**	Based on daily performance

MIMED-159 VAH CLINICAL CLERKSHIP IN MEDICINE

Prerequisite: Have completed third year in Medicine
***Dress Code: White Coat and Tie for Male Students**

The student will work as part of the clinical team assigned to General Internal Medicine Wards. Under direct supervision, he or she will perform comprehensive medical histories, complete physical exams as well as participate in the clinical decision making processes regarding the management of the assigned patients. The student will perform certain diagnostic and therapeutic procedures. Also, the student will attend all the daily educational activities of the Department of Medicine.

Person in Charge	**:**	José Acevedo-Valles, MD
Contact person	**:**	Vanessa Ruíz-Antunez, MS
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	Morning Reports Auditorium 2nd Floor Veterans Administration Hospital 7:00 AM
Night Duties	**:**	Yes, Two during the rotation
Evaluation	**:**	The students will be evaluated by the Faculty member on the basis of knowledge, skills and attitudes developed during the course.

MIMED-160 VAH NON INVASIVE CARDIOVASCULAR PROCEDURES

Prerequisite: Have completed third year Internal Medicine Course.

The purpose of this course is to familiarize the students with the non-invasive techniques used in the evaluation of cardiovascular disease. The student will observe the performance on non-invasive tests and participate in the analysis and interpretation of such tests. These include:

1. Echocardiographic studies including 2D, M-mode, Color Flow Doppler, Contrast Studies: Transesophageal Echocardiography: Stress Echo, Dobutamine Echo with state of the art equipment.
2. Exercise testing with standard Treadmill, GXT-Thallium/Persantine/Thalium and Dobutamine-MUGA/Stress Echo.
3. Basic electrocardiography, HI RES EGG and Holler EGG Studies.
   The students will attend all the teaching activities of the Cardiology Section.

Person in Charge	**:**	Luis Rodríguez-Ospina, M.D.
Alternate	**:**	José Escabí, M.D
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Cardiology Veterans Administration Hospital 7:30 AM
Night Duties	**:**	No
Evaluation	**:**	Based on daily performance

MIMED-161 VAH INFECTIOUS DISEASES AND PARASITOLOGY

Prerequisite: Have completed third year Internal Medicine Course.

The student is part of the Infectious Diseases Consult Team, composed of a resident, a Fellow and a Staff I.D. Faculty member. The student serves as a consultant with a minimum of four consults per week, having the responsibility for answering the consult and writing recommendations, always under a one-to-one supervision of the I.D. Fellow. The student presents the case therefore he/she should read about the problem and write the progress notes on his/her patients. The student is exposed to antibiotic use, their indications, contraindications, combinations and/or the diagnosis, management and follow-up of bacterial, mycotic and viral diseases, including HIV and AIDS. The student will become familiar with gram stains and their interpretation and have available the audiovisual library of the ID Training Program for in-house review. The student will participate in didactic activities including ID Clinics on Mondays and Tuesdays, ID Journal Club and VA/UDH Rounds on Thursdays, Case Discussion and ID Conferences on Fridays and monthly Pediatric ID Case Discussion.

Hospital	:	VA Caribbean Healthcare System
Person in Charge	:	Glenda M. González, MD
Alternate	:	Mérida S. Colón-Cabán, MD
Course Duration	:	4 weeks
Enrollment	:	1 student per 4-week period Student or Course Coordinator should call the office of the ID Training Program to verify availability of dates for rotation
Dates offered	:	Throughout the year, space permitting
Meeting Place	:	ID Section, OPA2, Room 2F213
Night Duties	:	None
Evaluation	:	Based on performance, evidence of reading, presentations, write-ups, follow-ups, interest and attendance. Preparation of a single topic review in written form of a topic of interest for the student. Topic to be selected at the beginning of the rotation and presented to the attending in charge of the rotation. Report is due the last week of the rotation.

MIMED-162 VAH DIAGNOSIS AND MANAGEMENT OF PULMONARY DISEASES

Prerequisite: Have completed third year in Medicine

For four weeks, the students will be part of the pulmonary disease consultation service. They will be part of the evaluation of patients with a myriad of respiratory diseases in the inpatient and outpatients setting. The weekly ambulatory clinic, medical and surgical wards, medical surgical and respiratory intensive care units will be the areas where patient exposure will take place. First hand experience in performance and interpretation of pulmonary function testing, pulmonary bronchoscopy, pleural biopsy will be obtained by the student. A seminar on any respiratory related theme is required at the end of the rotation and attendance to the weekly pulmonary diseases conference are also required.

Person in Charge	**:**	William Rodríguez, M.D.
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	Pulmonary Section-OPA Veterans Administration Hospital 8:00 AM
Night Duties	**:**	No
Evaluation	**:**	Daily rounds and evaluated by sponsors on the basis of knowledge, skills and attitudes developed during the course

MIMED-164 VAH GENERAL INTENSIVE CARE

Prerequisite: Have completed third level Internal Medicine Course**.**

The student will perform clinical histories and physical examinations in critically ill patients. He or she will participate in the diagnosis and treatment of such conditions that merit intensive care. He or she will be able to perform procedures under supervision, such as central vein catheterization, management of pulmonary venous catheters, management of mechanical ventilators, interpretation of electrocardiograms, pulse oxymetry, etc. The student will interact with consulting support services such as Radiology, Cardiology, Pulmonary, and Nephrology subspecialists, among others. They will attend the teaching activities of the Intensive Care Unit.

Person in Charge	**:**	Jesús Casal, M.D.
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student(by arrangement)
Meeting Place	**:**	Medical Intensive Care Unit, 1st floor "Southbed Tower" Hospital 7:00 AM
Night Duties	**:**	2 during the month
Evaluation	**:**	The student will be evaluated on the basis of knowledge, skills and attitudes developed during the course.

MIMED-165 VAH RENAL METABOLIC COURSE

Prerequisite: Have completed third year Internal Medicine Course

The student will attend rounds in the renal ward and will follow patients in the renal consult service at the VA Hospital (including cases in the medical/surgical intensive care units). The student will be exposed to a myriad of electrolyte/acid-base disturbances and acute/chronic renal failure patients. The student will also attend the weekly renal and kidney transplant clinic (1-2 case per session) and the journal club and conferences.

Person in Charge	**:**	Carlos Rosado, M.D.
Dates Offered	**:**	By arrangement
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	Building OPA 2, Nephrology Fellows Room 2E-227 Hospital 8:00am
Night Duties	**:**	No
Evaluation	**:**	The overall evaluation will follow the scheme used for medical interns, adapted for students.

MIMED-182 INTRODUCTION TO CLINICAL RESEARCH

Prerequisites: 1. Fourth year medical students
2. Prior meeting with the mentor to agree on preparatory work required for the elective.

Course Description:

The student will be assigned to the clinical research unit of the Department of Medicine of UCC. The elective will formally last four weeks. It is required that ample time is given prior to beginning the elective for the necessary preparatory work. (A minimum of 2 months in which the student will begin the preparatory work for the elective)

Rationale and Justification:

The goal of the elective course is to increase the number of minority physicians who will chose clinical research as an important component in their professional careers. The central focus of this activity will be sensitizing the student to the relevance of clinical research in the practice of medicine and to expose the student to the various skills required for this activity. The student will have formal instruction on issues of research problem formulation, methodology and methods of literature search for purposes of background information. The process of conducting the research project will be supplemented with classroom research seminars, journal clubs, and integration into the research meetings of the Retrovirus Research Center. As part of the experience, the student will receive formal instruction of the ethics of clinical research, requirements for the conduct of research on human being and the nature of the Institutional Review Boards.

The curriculum will be based in a pragmatic approach, where the fellow will construct his/her learning based on the integration between theory and practice. A mentor will be selected by the student to guide him/her through the experience.

Goal:

To provide medical students a first hand experience in the various phases relevant in the process of conducting clinical research.

Objectives:

First Phase (to be accomplished prior to the formal initiation of the elective)

1. To formulate a research problem in the field of clinical medicine using a hypothesis driven
2. approach.
3. Review scientific literature about the research problem
4. Formulate the research questions to be answered.
5. Review the content of the conferences on Basic Epidemiology, sample selection and introduction to statistics offered by the mirror image program of the RCMI.
6. (Web Based).

Second Phase (to be completed during the four week elective)

7. Under the guidance of the mentor, through consultation and frequent meetings:
8. Prepare a draft of the research proposal.
9. Implement the research project.
10 Evaluate the research data.

Third Phase (to occur after to the 4 week period, but before the end of the semester)

11. Prepare a draft manuscript.

Expectations:

12. In the process of accepting a student to the elective, a full discussion regarding the nature and feasibility of the research interests and the individual.
13. It is expected that the candidate will work with enthusiasm and intensity with the mentor in order to complete the project within the specified period of time.
14. At least one abstract or publication or presentation in a formal meeting will be expected at the end of the academic year.

Person in Charge	**:**	Robert Hunter-Mellado, MD, FACP
Dates Offered	**:**	Year round, by arrangement with mentor
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student per elective period
Meeting Place	**:**	Retrovirus Research Center (RRC), UCC
Night Duties	**:**	No
Evaluation/Assessment		The student will be evaluated on his/her ability to complete the proposed objectives of the elective
Grading System		Honors, Pass or Fail

MIMED-266VAH HOSPICE AND PALLIATIVE CARE ROTATION

Prerequisites: 1. Have completed third level, Internal Medicine, Pediatric, and Family Medicine Course

Course Description:

One month rotation at the Hospice Unit in which the student will perform weekly rounds participating from interdisciplinary meetings and direct patient care; the clinical approach to this population of patients include a comprehensive intervention with emphasis in pain and other symptom management. The medical student will be participating from other inpatient scenarios responding to consults in collaboration with the Palliative Consultation Team.

Patient Care:

Students must be able to provide patient-care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
Students are expected to:
o Develop a strong knowledge base of Palliative and Hospice Medicine, including a comprehensive understanding of the clinical problems and symptoms of advanced disease and effective strategies for management.

Goal:

To provide medical students a first-hand experience in the various phases relevant in the process of conducting clinical research.
Justification:

To pursue skills and knowledge in the Hospice and Palliative Medicine field

Medical Knowledge:

Student are expected to:

- Recognize and effectively utilize the role of the palliative care and hospice interdisciplinary teams and their individual members.
- Demonstrate an accurate and comprehensive understanding of psychological stressors and disorders experienced by patients and families facing advanced or life-threatening conditions, as well as appropriate clinical assessment and management, including the ability to assess, counsel, and support patients and families around the burdens of care giving and make appropriate referrals regarding fiscal issues and legal concerns.
- Describe and implement the appropriate strategies and instruments for assessing prognosis and disease trajectories, as well as strategies for effectively communicating these to patients and caregivers

Practice-based Learning and Improvement

Students are expected to:

- Maintain safe and competent hospice medical practice, including self-evaluation and continuous learning.
- Demonstrate effective approaches to quality and safety assurance in palliative medicine and hospice.

Interpersonal and Communication Skills
Students must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients' families, and professional associates.

Professionalism
Students must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

Goal (s):

1- To Identify and treat symptoms in terminal patients specially pain management
2- To learn how to collaborate in a interdisciplinary team
3- To improve communication skills with patients and family in pursuit of goals of care
4- To improve skills in the H&P assessment and documentation

General Objective (s):

- Develop and train residents in hospice and palliative care
- Teach and model communication and collaboration skills among providers of EOL care
- Develop and demonstrate clinical skills in palliative medicine and pain management
- Exemplify and foster professionalism
- Model advocacy for patients and their families
- Model and teach system based palliative care practices

Specific Objectives:

a. Recognize and effectively utilize the role of the palliative care and hospice interdisciplinary teams and their individual members.
b. Demonstrate an accurate and comprehensive understanding of psychological stressors and disorders experienced by patients and families facing advanced or life-threatening conditions, as well as appropriate clinical assessment and management, including the ability to assess, counsel, and support patients and families around the burdens of care giving and make appropriate referrals regarding fiscal issues and legal concerns.
c. Describe ethical and legal issues in hospice care and effective interdisciplinary approaches in the management of such issues.
d. Describe and implement the appropriate strategies and instruments for assessing prognosis and disease trajectories, as well as strategies for effectively communicating these to patients and caregivers.

Learning Activities: Weekly Ward Rounds, Weekly Interdiciplinary Rounds, Weekly Conferences
Post Test at the end of the Rotation

Person in Charge	**:**	Carlos Cestero MD
Dates Offered	**:**	All year round
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	1 student per elective period
Meeting Place	**:**	Palliative Care Office and CLC -3J Participate in Palliative care outpatient clinics Extended Care, VA Caribbean Healthcare System Ward 3J –CLC-3, South Bed Tower, VA Caribbean Healthcare System
Evaluation/Assessment		The student will be evaluated by the mentor regarding the above mentioned objectives through the rotation. Some of the tools that will be used include: pre and post-test, observation and interaction with patient, skills in the H&P making and documentation.
Grading System		Honors, Pass or Fail

Approved by Curr C SOM
August 20, 2015
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MIMED-269 INTERNAL MEDICINE ELECTIVE

Prerequisites: 4th year medical student at LCME medical school

Course Description:

The course aims towards: enhancing patient interaction skills. Identifies clinical information and data necessary to evaluate patients, describe signs and symptoms of the most common diseases and be familiar with the work in a private internal medicine medical clinic.

Goal:

Competency in general clinical aspects in preparation for the first post graduate year.

Justification:

Elective Internal Medicine Rotation.

Competencies:

Be able to perform a history and physical examination with diagnosis and treatment plan.

General Objectives:

Orderly and timely clinical assessment of the patient and asses for a management plan for patient conditions.

Specific Objectives:

Demonstrate skills to perform a complete and accurate physical examination appropriate to the setting.

Learning Activities:

Clinical patient contact, reading assignments, and presentations.

Person in Charge	**:**	Ricardo Abraham, M.D. Board Certified in Internal Medicine
Dates Offered	**:**	Determined by request
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student per elective period
Meeting Place	**:**	3125 W Alton Gloor Blvd. Brownsville, TX 78520
Evaluation/Assessment		The student will be evaluated by the mentor regarding the above mentioned objectives through the elective. Some of the tools that will be used include: pre and posttest, observation and interaction with patient, skills in the comprehensive History and Physical making and documentation of the patient.
Grading System		Honors, Pass or Fail

Approved by Curr C SOM
DATE: May 5, 2016
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MIMED-292 OUT PATIENT IM CLINICAL ELECTIVE

Prerequisites: 3rd year clerkship

Course Description:
Course enhances patient communication skills, treatment of choice, and follow-up plan for a precise examination and differential diagnosis. Research and thorough understanding of pharmacological mechanism of action are highlighted and tested. Daily assignments are given to reinforce human physiology and clinical management.

Goal:
Thorough history and physical exam of patients oriented to post-graduate medical education.

Justification:

Internal Medicine Elective

Competencies:

Students will have the opportunity of supervised patient evaluations, acute clinical problems, and gather complete history and physical examination with differential diagnosis and treatment options. Rotating student will be required to interpret laboratory results for acute diagnosis and course of action.

General Objectives:
Clinical assessment and plan for patient's complaint.

Specific Objectives:
Thorough history and physical examination with diagnosis and treatment of outpatient internal medicine patient management.

Learning Activities:
Students will attend office hours under Dr. John D. Nuschke's supervision with possible patient interviews for development of patient-physician relationship skills. Daily assignments will be given for teaching material and updated medical treatment. Acute clinical scenarios are made to evaluated student's next step management of an acutely ill patient. Write accurate, organized progress notes and be familiar with electronic health records. Wear appropriate attire. Unprofessionalism is not tolerated.

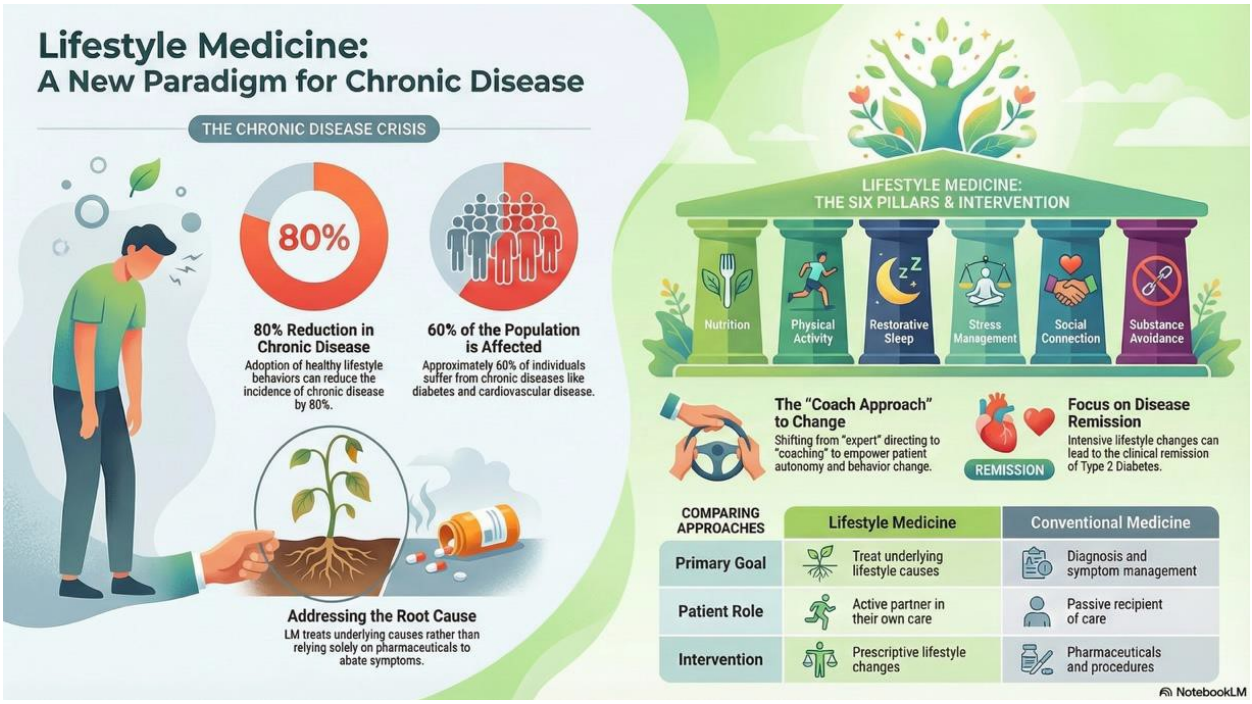
Person in Charge	:	John D. Nuschke, Jr., MD, FACP Board Certified in Internal Medicine, Fellow American College of Physicians jnuschke@aol.com
Dates Offered	:	All academic year
Course Duration	:	2 - 4 weeks
Enrollment per Session	:	1 student per elective period
Meeting Place	:	Lehigh Valley Internists / Suite 220, 798 Hausman Rd- / Allentown, PA 18104 610-530-2290 Fax 610-530-2287
Evaluation/Assessment		The student will be evaluated on the basis of knowledge, skills, and attitudes developed during the course. Evaluation criteria: acute clinical scenarios management, observation and interaction with patient, comprehensive History and Physical Exam skills, and patient's record.
Grading System		Honors, Pass or Fail

Approved by Curr C SOM
DATE: Dec 17, 2019
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MIMED-326 **LIFESTYLE MEDICINE ELECTIVE**

Prerequisites: n/a

Course Description:



This elective clerkship introduces students to Lifestyle Medicine as a contemporary, evidence-based, and competency-aligned approach to health that integrates prevention, clinical reasoning, community engagement, and human flourishing. The course is designed to support the developmental needs of undergraduate medical students while aligning with national and international medical education standards.

The elective is grounded in a salutogenic framework, emphasizing the Sense of Coherence, comprehensibility, manageability, and meaning as a transversal lens for understanding health behaviors, clinical decision-making, and sustainable lifestyle-based interventions. This perspective complements traditional pathogenic models by focusing on health-generating resources at the individual, community, and system levels.

Adapted from the AMESVIDA–IBLM theoretical curriculum and the Foundations of Lifestyle Medicine – Introductory Curriculum for Medical Students, the course integrates contemporary educational and clinical approaches, including:

Lifestyle Medicine as an LM-first strategy for prevention and chronic disease management

Salutogenesis and human flourishing as core health outcomes

Social, structural, cultural, and nutritional determinants of health

Evidence-informed nutrition education aligned with Undergraduate Medical Education (UME) foundational nutrition competencies

Behavior change science, therapeutic alliance, and patient-centered communication

Interprofessional, community-oriented, and systems-based practice

Reflective, narrative, and humanistic practices that support professional identity formation

Through a structured, adjustable two to four-week experience, students participate in asynchronous learning, guided discussions, case-based analysis, experiential observation, and reflective practice. Learning activities and expectations are adapted to the learner's stage, emphasizing foundational competency development rather than independent clinical responsibility.

Goal:
The goal of this elective clerkship is to introduce undergraduate medical students to Lifestyle Medicine as an evidence-based, preventive, and integrative approach to health, emphasizing health promotion, disease prevention, and human flourishing through lifestyle-based interventions. The elective aims to support early professional identity formation by fostering a salutogenic perspective, systems thinking, and foundational competencies relevant to modern medical practice.

Justification:
This proposed elective aligns with contemporary trends in undergraduate medical education by reinforcing competency-based learning, preventive care, and systems of thinking. Lifestyle Medicine provides a structured framework for students to integrate foundational biomedical knowledge with the behavioral, nutritional, social, and community determinants of health.

The elective is explicitly aligned with the Foundational Competencies for Undergraduate Medical Education (AAMC/AACOM/ACGME) and incorporates evidence-based nutrition education consistent with nationally endorsed UME nutrition competencies. By doing so, the course strengthens existing curricular goals without duplicating core content, offering students an applied, integrative learning experience. Grounded in a salutogenic framework, the elective complements traditional disease-centered models by emphasizing health generation, resilience, and professional well-being competencies that are increasingly recognized as essential for modern physicians.

This elective is designed to be developmentally appropriate, flexible, and scalable, making it suitable for clinical students while supporting the institution's mission in prevention, community engagement, and excellence in medical education.

Competences
This elective clerkship is intentionally aligned with the Foundational Competencies for Undergraduate Medical Education (UME), ensuring that learning objectives, activities, and assessments reinforce nationally recognized expectations for undergraduate medical training.

Lifestyle Medicine is positioned as an integrative thematic domain that strengthens core UME competencies, particularly in Medical Knowledge, Patient Care, Practice-Based Learning, Interpersonal and Communication Skills, Systems-Based Practice, and Professionalism.

Special emphasis is placed on nutrition education, aligned with UME nutrition competencies, by framing nutrition as a therapeutic, preventive, cultural, and systems-based intervention rather than a standalone topic. This approach supports competency-based medical education and prepares students to incorporate lifestyle-based strategies into diverse clinical and community settings.

- Medical Knowledge
  Application of evidence-based lifestyle and nutrition science to clinical and population scenarios.
- Patient Care and Procedural Skills
  Emphasis on health promotion, disease prevention, and lifestyle-based care planning.
- Practice-Based Learning and Improvement
  Reflective journaling, evidence appraisal, and formative feedback.
- Interpersonal and Communication Skills
  Patient-centered communication, motivational approaches, and interprofessional dialogue.
- Systems-Based Practice
  Integration of social, structural, nutritional, and community determinants of health.
- Professionalism
  Ethical reflection, self-care, well-being, and respect for cultural and contextual diversity.

Specific Alignment with UME Nutrition Competencies (Contextual Statement)
Nutrition education within this elective is explicitly aligned with the Foundational Competencies for Undergraduate Medical Education, particularly within the domains of Medical Knowledge, Patient Care, and Systems-Based Practice, as outlined in national UME guidance.

Students are introduced to nutrition as:

- a core component of evidence-informed medical knowledge,
- a therapeutic and preventive intervention integrated into patient-centered care, and
- a system-level determinant of health influenced by culture, access, food systems, and equity.

This alignment ensures that nutrition is not presented as an isolated topic, but as an essential, longitudinal competency consistent with contemporary expectations for undergraduate medical education.

General Objective (s)
By the end of the elective (2–4 weeks), students will be able to:

1. Explain, in written or oral format, the scientific foundations and clinical rationale of Lifestyle Medicine, referencing at least three peer-reviewed sources.
2. Analyze at least one clinical or community-based case using a lifestyle-focused framework that integrates biological, behavioral, and social determinants of health.
3. Apply the salutogenic model (Sense of Coherence: comprehensibility, manageability, meaning) to interpret a patient scenario and identify protective health resources.
4. Demonstrate, during discussion or written reflection, how Lifestyle Medicine aligns with at least three UME competency domains (Medical Knowledge, Patient Care, Systems-Based Practice, etc.).

Specific Objectives
Upon successful completion of the elective, students will be able to:

1. Identify and describe the six pillars of Lifestyle Medicine and summarize at least two evidence-based outcomes associated with each pillar.
2. Differentiate Lifestyle Medicine from conventional, integrative, functional, and naturopathic models using a structured comparison framework.
3. Develop one SMART lifestyle intervention plan for a simulated patient scenario, incorporating at least three pillars.
4. Conduct a structured behavioral assessment using stages of change and propose at least two motivational interviewing techniques appropriate to the patient's stage.
5. Create a brief written analysis (500–800 words) explaining the role of nutrition in chronic disease prevention, aligned with UME nutrition competencies.
6. Draft a FITT-based physical activity prescription appropriate for a hypothetical patient case.
7. Perform and interpret a focused lifestyle history component (sleep, stress, social connection, or substance use) using a structured tool.
8. Submit one reflective portfolio entry describing how Lifestyle Medicine principles may influence their future clinical practice between LM and other common medical approaches used today.

Learning Activities:

Learning activities during the elective may include:

- Asynchronous learning modules (recorded lectures, readings, curated resources)
- Guided small-group discussions and seminars
- Case-based learning (clinical and community scenarios)
- Observational experiences in Lifestyle Medicine–related clinical or community settings (virtual or onsite)
- Reflective journaling or learning portfolio activities
- Independent study with faculty mentorship

Activities are adapted to the learner's level (preclinical or clinical) and emphasize formative learning.

Course Content Summary by Unit
Unit 1: Foundations of Lifestyle Medicine & Salutogenesis

Content Focus:

- Epidemiology of chronic disease
- LM-first paradigm
- Six Pillars of Lifestyle Medicine
- Comparison with other medical models
- Salutogenesis and Sense of Coherence
- LM and UME competency alignment

Competency Emphasis:
Medical Knowledge, Systems-Based Practice, Professionalism

Unit 2 — Behavior Change Science & Motivational Interviewing

Content Focus:

- Stages of Change Model
- Coach vs Expert approach
- Motivational Interviewing techniques
- Self-efficacy and neuroplasticity
- SMART goal creation
- Therapeutic alliance

Competency Emphasis:
Interpersonal & Communication Skills
Practice-Based Learning

Unit 3 — Nutrition & Culinary Medicine

Content Focus:

- Dietary patterns and chronic disease
- Evidence supporting plant-predominant dietary models
- Fiber, inflammation, TMAO, AGEs
- Weight bias and equity in nutrition counseling
- Practical tools: label reading, dietary logs, fiber counting
- Culinary medicine applications

UME Nutrition Alignment:

- Nutrition as core medical knowledge
- Nutrition as therapeutic intervention
- Food systems and equity

Competency Emphasis:
Medical Knowledge
Patient Care
Systems-Based Practice

Unit 4 — Physical Activity Prescription
Content Focus:

- Mechanisms of exercise in chronic disease
- FITT prescription model
- Screening prior to exercise
- Exercise in cardiovascular disease and diabetes
- Non-insulin-dependent glucose uptake

Competency Emphasis:
Patient Care
Medical Knowledge

Unit 5 — Restorative Sleep

Content Focus:

- Sleep physiology
- Sleep apnea and cardiometabolic disease
- CBT-i principles
- Sleep history-taking
- Sleep and insulin resistance

Competency Emphasis:
Medical Knowledge
Patient Care

Unit 6 — Stress, Resilience & Positive Psychology

Content Focus:

- Allostatic load
- ACEs and chronic disease risk
- Stress physiology (HPA axis, inflammation)
- Mind-body interventions
- Cognitive behavioral tools
- Resilience and meaning

Salutogenic Integration:
Meaning and psychological coherence as health resources

Unit 7 — Social Connection & Health Outcomes

Content Focus:

- Loneliness and mortality
- Blue Zones model
- Social prescribing
- Burnout and belonging
- FITT model for social health

Competency Emphasis:
Systems-Based Practice
Professionalism

Unit 8 — Risky Substances & Multimodal Pain

Content Focus:

- Neurobiology of addiction
- Trauma and SUD
- Multimodal pain therapy
- Tobacco and cardiovascular disease
- Alcohol risk-benefit analysis

Competency Emphasis:
Medical Knowledge
Patient Care
Professionalism

Unit 9 — Lifestyle Medicine in Chronic Disease

Cardiovascular Disease

- Mechanisms of reversal
- Sodium and vascular health
- Mindfulness & CV outcomes

Type 2 Diabetes

- Remission science
- Dietary interventions vs pharmacology
- Exercise timing and glucose control

Cancer

- Lifestyle and incidence
- Epigenetics
- Precautionary principle

Competency Emphasis:
Clinical reasoning
Evidence appraisal
Systems-level thinking

STRUCTURAL NOTES FOR THE ELECTIVE (2–4 Weeks)

For a 2-week elective:

- Units 1–4 required
- Select 2–3 chronic disease applications

For a 4-week elective:

- All units covered
- Inclusion of experiential component
- Final integrative assignment

Person in Charge	:	Martha E. García-Osorio martha.garcia@uccaribe.edu 787-249-2015
Dates Offered	:	January to June and August to November
Course Duration	:	2-4 weeks
Enrollment per Session	:	4-8
Meeting Place	:	online synchronous and asynchronous, scheduled activities previously coordinated
Evaluation Assessment:		Student performance is assessed using multiple formative and summative methods, which may include: •Active participation and engagement in learning activities •Written case analysis or reflective assignments •Learning portfolio or reflective journal entries •Final integrative assignment or brief presentation The assessment focuses on competency development, reflective capacity, and the application of core concepts rather than technical mastery
Grading System		Evaluation for this elective will be reported as Pass / Fail in accordance with institutional policy. To receive a passing grade, students must demonstrate satisfactory participation, complete assigned activities, and achieve the elective's stated objectives.

Approved by Curr C SOM
DATE: February 17, 2026
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MIMED-329 ADDICTION MEDICINE AND CONTROLLED SUBSTANCES ELECTIVE

Prerequisites: Third Year Clerkships

Course Description:

During this four-week elective, students will work directly with Dr. Andrés Calvo and participate in the clinical evaluation and management of patients with substance-related disorders.

Students will learn to obtain a detailed and nonjudgmental substance-use history, including prescription medications, alcohol, opioids, stimulants, sedative-hypnotics, cannabis, nicotine, and other substances. Particular attention will be given to recognizing patterns of use, misuse, tolerance, physical dependence, withdrawal, substance use disorder, and polysubstance use and to distinguishing these concepts appropriately.

Students will become familiar with validated screening and assessment strategies and will participate in developing individualized treatment plans based on the patient's medical condition, substance-use history, psychiatric and psychosocial factors, readiness for treatment, and available resources.
The elective will also address the clinical responsibilities associated with prescribing controlled medications, including appropriate indications, risk assessment, documentation, informed consent, monitoring, recognition of aberrant medication-related behaviors, and strategies to reduce diversion, overdose, and other medication-related harm.

Clinical Exposure

Depending on the patient population encountered during the rotation, students may gain experience with:

- Opioid use disorder.
- Alcohol use disorder.
- Stimulant use disorders.
- Sedative, hypnotic, and anxiolytic use disorders.
- Cannabis use disorder.
- Nicotine use disorder.
- Polysubstance use.
- Prescription medication misuse.
- Substance intoxication and withdrawal syndromes.
- Chronic pain.
- Coexisting medical and psychiatric conditions.
- Substance-related medical complications.
- Overdose prevention.
- Relapse prevention and long-term recovery.
- Referral to behavioral, psychiatric, and community-based treatment resources.

Controlled Substance Prescribing and Monitoring

An important component of the elective will focus on the physician's responsibilities when prescribing medications with abuse or dependence potential.
Students will learn principles of:

- Appropriate indications for controlled medications.
- Risk-benefit assessment before initiating therapy.
- Review of medication and substance-use history.
- Safe prescribing and documentation.
- Prescription monitoring programs.
- Recognition of potentially dangerous medication combinations.
- Patient counseling regarding safe medication use and storage.
- Identification of potential misuse or diversion.
- Periodic reassessment of continued indications for therapy.

- Toxicology testing when clinically indicated.
- Safe tapering principles when appropriate.
- Overdose risk assessment and prevention.
- Ethical and regulatory responsibilities associated with controlled substances.

Competences

Upon completion of the elective, the student should be able to:

- Obtain a comprehensive, nonstigmatizing substance-use history.
- Perform an appropriate medical assessment of patients with suspected substance-related disorders.
- Recognize clinical manifestations of intoxication and withdrawal.
- Differentiate tolerance, physical dependence, misuse, and substance use disorder as per DSM-5TR criteria.
- Identify medical and psychiatric comorbidities commonly associated with substance use.
- Understand the neurobiological principles underlying addiction.
- Recognize risk factors for overdose and other substance-related complications.
- Understand the basic principles of medication treatment for substance use disorders.
- Recognize when inpatient or higher-level treatment may be required.
- Understand the principles of responsible prescribing of controlled substances.
- Recognize potential medication misuse and diversion.
- Understand the role of prescription monitoring and toxicology testing.
- Develop an individualized and multidisciplinary treatment plan
- Communicate effectively and without stigmatizing language with patients affected by substance use disorders

Understand the importance of continuity of care and long-term follow-up.

Goal:

- To provide a comprehensive introduction to Addiction Medicine.
- To understand the neurobiology and pathophysiology of substance use disorders.
- To develop an organized approach to patients presenting with substance use disorders.
- To improve interviewing skills related to alcohol, drugs, and controlled medications.
- To recognize intoxication, withdrawal, overdose risk, and substance-related medical complications.
- To understand evidence-based treatment strategies for substance use disorders.
- To introduce students to medication-based and behavioral approaches to addiction treatment.
- To develop responsible prescribing practices for controlled substances
- To prepare students for responsible management of controlled medications during residency and independent medical practice.
- To understand strategies for prevention of medication misuse, diversion, and overdose.
- To understand the importance of interdisciplinary care in Addiction Medicine.
- To reduce stigma and improve physician communication with patients affected by addiction.

Justification:

This four-week elective is designed to provide the fourth-year medical student with a structured clinical experience in Addiction Medicine and the appropriate medical use and management of controlled substances under the supervision of Andrés Calvo, M.D.

The rotation will expose students to the evaluation, diagnosis, treatment, and longitudinal management of patients with substance use disorders, while simultaneously emphasizing safe and responsible prescribing of controlled medications.

Students will develop an understanding of addiction as a chronic medical condition with biological, psychological, social, and spiritual components. The elective will emphasize evidence-based treatment, prevention of medication misuse, recognition of substance-related complications, harm reduction, appropriate monitoring, and multidisciplinary management.

An important objective of the rotation is to prepare future physicians—regardless of their eventual specialty—to prescribe controlled medications responsibly and to recognize patients who may be developing at-risk substance use.

General Objective (s):

During the four-week rotation, the student will:

- Participate in new patient evaluations and follow-up visits.
- Obtain detailed medical, psychiatric, medication, and substance-use histories.
- Perform appropriate physical examinations.
- Identify signs and symptoms of intoxication and withdrawal.
- Develop differential diagnoses for substance-related presentations.
- Participate in discussions regarding diagnostic and treatment strategies.
- Review relevant laboratory and toxicology findings.
- Learn appropriate risk stratification before prescribing controlled medications.
- Review controlled-substance medication histories when clinically appropriate.
- Participate in longitudinal follow-up of patients receiving treatment.
- Learn appropriate documentation related to controlled-substance prescribing.
- Participate in patient education regarding medication safety and overdose prevention.
- Review relevant evidence-based guidelines and medical literature.
- Demonstrate professionalism, confidentiality, empathy, and appropriate communication.

Specific Objectives:

Upon completion of the elective, the student should be able to:

- Obtain a comprehensive, nonstigmatizing substance-use history.
- Perform an appropriate medical assessment of patients with suspected substance-related disorders.
- Recognize clinical manifestations of intoxication and withdrawal.
- Differentiate tolerance, physical dependence, misuse, and substance use disorder as per DSM-5TR criteria.
- Identify medical and psychiatric comorbidities commonly associated with substance use.
- Understand the neurobiological principles underlying addiction.
- Recognize risk factors for overdose and other substance-related complications.
- Understand the basic principles of medication treatment for substance use disorders.
- Recognize when inpatient or higher-level treatment may be required.
- Understand the principles of responsible prescribing of controlled substances.
- Recognize potential medication misuse and diversion.
- Understand the role of prescription monitoring and toxicology testing.
- Develop an individualized and multidisciplinary treatment plan.
- Communicate effectively and without stigmatizing language with patients affected by substance use disorders.
- Understand the importance of continuity of care and long-term follow-up.

Learning Activities:

Clinical Addiction Medicine:
Students will participate in the evaluation of patients with suspected, at-risk, and established substance use disorders. Emphasis will be placed on history-taking, diagnosis, identification of medical complications, treatment planning, and longitudinal follow-up.

Medication Management:
Students will become familiar with evidence-based pharmacologic approaches used in Addiction Medicine and the principles governing initiation, monitoring, adjustment, and discontinuation of therapy.

Controlled Substance Stewardship:
Students will learn a systematic approach to safe prescribing, including risk assessment, documentation, prescription monitoring, medication reconciliation, patient education, and recognition of inappropriate or unsafe medication use.

Behavioral and Psychosocial Management:
Students will be introduced to motivational interviewing, behavioral interventions, relapse-prevention strategies, and the importance of psychiatric, psychological, family, social, and community resources.

Case-Based Learning:
Clinical encounters will be used to discuss ethical issues, challenging prescribing situations, polysubstance use, chronic pain, relapse, overdose prevention, and appropriate boundaries in the physician-patient relationship.

Four-Week Rotation Structure

Week 1 – Fundamentals of Addiction Medicine
Neurobiology of addiction, terminology, screening, substance-use history, diagnostic criteria, risk factors, stigma, and principles of patient evaluation.

Week 2 – Substance-Specific Disorders and Treatment
Evaluation and management of opioid, alcohol, stimulant, sedative-hypnotic, cannabis, nicotine, and polysubstance-related disorders, including intoxication and withdrawal syndromes.

Week 3 – Controlled Substances and Responsible Prescribing
Appropriate prescribing, risk assessment, prescription monitoring, toxicology testing, documentation, medication safety, identification of misuse and diversion, overdose prevention, and management of controlled medications in patients with chronic medical conditions.

Week 4 – Longitudinal Addiction Care and Clinical Integration
Treatment follow-up, relapse prevention, behavioral interventions, multidisciplinary care, harm reduction, management of comorbidities, ethical considerations, and integration of knowledge acquired throughout the rotation.

Person in Charge	Dr. Andrés E. Calvo-Díaz 787-637-0845
Dates Offered	Year-round, by arrangement and subject to the supervising physician's availabilty
Course Duration	4 weeks
Enrollment per Session	1 student per elective period
Meeting Place	CUMIC Clinic -Outpatient Addiction Medicine Services
Evaluation/Assessment	Student performance will be evaluated based on: • Attendance and punctuality. • Professionalism and ethical conduct. • Quality of patient interviews and substance-use histories. • Physical examination and clinical assessment skills. • Development of appropriate differential diagnoses. • Understanding of substance use disorders. • Recognition of intoxication, withdrawal, and overdose risk. • Understanding of evidence-based treatment principles. • Understanding of responsible controlled-substance prescribing. • Appropriate use and interpretation of monitoring strategies. • Communication skills and use of non-stigmatizing language. • Participation in clinical discussions. • Clinical progression throughout the four-week rotation. • Quality of the final clinical or academic presentation.
Grading System	This elective will be graded on a Honor/Pass/Fail basis. **Requirements for a Passing Grade**: To successfully pass this course, a student must demonstrate satisfactory performance across all areas of the rotation, reflecting a readiness to care for vulnerable populations: • Attendance: Requires consistent attendance as scheduled by the supervising physician. • Deliverables: Successful completion of the teaching project and the SOAPE clinical case write-up. • Professionalism: Demonstration of professional, highly empathetic, and respectful conduct at all times. • Satisfactory Evaluation: Achieving passing marks across the clinical evaluation rubric. Ultimately, a passing grade requires active, meaningful participation, satisfactory faculty evaluations, professional conduct, and the completion of all elective requirements. **Honors Designation**: Honors may be awarded to students who demonstrate exceptional clinical teaching performance, outstanding leadership within a collaborative team, exemplary professionalism, and superior project quality throughout the rotation.

1. **Clinical Teaching Performance (40%).** This component assesses the student's clinical acumen, patient education skills, and integration of core addiction medicine concepts into everyday practice:

- Quality of patient interviews and the ability to gather comprehensive, non-stigmatizing substance-use histories.
- Physical examination and clinical assessment skills.
- Development of appropriate, holistic differential diagnoses.
- Recognition of intoxication, withdrawal, and overdose risk.
- Understanding of evidence-based treatment principles and responsible controlled-substance prescribing.
- Appropriate use and interpretation of monitoring strategies (e.g., toxicology, prescription monitoring).
- Clinical progression and the practical application of knowledge throughout the four-week rotation

2. **Professionalism & Participation (25%)** This component evaluates the student's reliability, ethical conduct, and genuine engagement within the interdisciplinary clinical team:

- Consistent attendance and punctuality.
- Professionalism, ethical conduct, and strict maintenance of patient confidentiality.
- Active participation in clinical discussions and case-based learning.
- Communication skills, specifically highlighting empathy, active listening, and the consistent use of non-stigmatizing language with both patients and colleagues.

3. **Project and Presentation (25%)**

- Quality, accuracy, and delivery of a final clinical or academic presentation that demonstrates a deep, empathetic understanding of a specific topic within Addiction Medicine and its impact on patient populations.

4. **Clinical Case Write-up (10%)**

- Submission of a comprehensive clinical case note (utilizing the SOAPE format) that demonstrates the student's ability to thoroughly document a substance-use history, formulate a thoughtful assessment, and design an individualized, evidence-based treatment plan.

Approved by Curr C SOM
September 15, 2026

Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MOGYN-38 REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY

Prerequisites: Student must have completed Third Year clinical rotations including the Obstetrics and Gynecology clerkship.

Justification:

This course is designed to provide the fourth year medical student a subspecialty elective experience to complement the core Ob/Gyn clerkship.

Course Description:

Fourth year medical students will be exposed to different issues that affect the endocrine system and fertility. It will allow them to explore, first hand, the pathophysiology, diagnostic tools, assessment, pharmacologic agents and surgical procedures used to treat presenting reproductive endocrinology and infertility pathologies. Each student will be under the supervision and guidance of Dr. Bracero and will participate in the initial patient encounter, interview and management; including current treatments and specialized techniques. The students will be able to observe in-vitro fertilization (IVF) procedures including, but not restricted to: semen analysis and preparation, oocyte extraction, fertilization and embryo transfer. The students will also become familiar with ultrasound techniques to assess follicular maturation, oocyte extraction, embryo transfer, early pregnancy assessments. It is expected that the students will prepare a comprehensive case presentation, attend to the outpatient clinic and visit the operating room for surgical procedures.

Competencies:

- The student will be able to develop an initial approach to various reproductive endocrinology and infertility problems by performing a complete patient interview.
- Interpret different diagnostic tools and identify the possible differential diagnosis.
- Determine appropriate therapy and course of action.
- Interpret laboratory and ultrasound findings to optimize therapy.

Goal:

- To gain a broader understanding of the pathophysiology of reproductive endocrinology and infertility problems in both males and females.
- Describe the normal physiology of the hypothalamic-pituitary-ovarian axis, uterine system and their interaction regarding ovulation and implantation, as well as their relevance to different reproductive pathologies.
- Explore the initial patient approach, different assessments and treatment options available for each disorder.
- Get familiarized with assisted reproduction therapies such as ovulation induction, intra-uterine insemination and in-vitro fertilization (IVF), and explore the IVF laboratory.

General Objective (s):

- To broaden the student's medical knowledge in the field of reproductive endocrinology and infertility.
- To obtain a thorough history by practicing interviewing skills.
- To demonstrate professionalism and clinical patient contact.
- To develop a sense of clinical judgment.

Learning Activities:

The students will attend office hours under Dr. Bracero's supervision with the possibility to assist during surgical procedures. There will be time allotted to attend the IVF laboratory to learn the techniques involved in IVF procedure.

The student must prepare a case presentation of a topic observed in the clinic and present it to the Director before the end of the rotation.

Person in Charge	**:**	Nabal J. Bracero M.D., F.A.C.O.G.
Dates Offered	**:**	Determined by request
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	576 César González Avenue, Doral Bank Center Suite 505 San Juan, Puerto Rico. Tel: 787-767-2220
Evaluation		Case presentation Preceptor evaluation Literature review and discussion Daily performance with the staff will be evaluated with UCC SoM Clinical Clerkship Evaluation Form.
Grading System	**:**	Honor, Pass or Fail

Approved by Curr C SOM
DATE: June 15, 2017
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MOGYN-13 MATERNAL FETAL MEDICINE

Prerequisites: Third Year rotations.

Justification:

This elective is designed to serve as an extension of the 3rd year core rotation to offer students a mentorship experience in hospital based Maternal Fetal Medicine. Experience will be gained in Maternal Fetal Medicine patient management, which includes collaborative high-risk pregnancy management, pre-term labor, multiple gestations, perinatal procedures and consultations, and diagnostic ultrasound studies. Students will be working under the supervision of Michael Gallagher, M.D.

Course Description:

This 4 week elective rotation will provide the senior students with the opportunity to work on different aspects including rounding on in-patients each morning (high risk perinatal, triage, labor and delivery), ultrasound studies in Perinatal Diagnostic Center, and consultations.

There will be the opportunity to improve skills on obtaining focused medical histories, performing physical examinations, and developing differential diagnoses and appropriate management maternal-fetal conditions.

The overall goal is to acquire a working and fundamental knowledge of the theoretical basis of maternal-fetal medicine. Students will attend all educational activities.

The team consisting of the Maternal Fetal Medicine attending, and the on-service OB resident will monitor the performance and learning of the students.

Competencies:

1. Expand the basic skills attained in the 3rd year core OB/GYN clerkship.
2. Refine effective communication with OB/GYN patients.
3. Master the components of focused OB/GYN history and physical exam.
4. Acquire a working and fundamental knowledge of the theoretical basis of Maternal Fetal Medicine.
5. Become well versed in the health promotion of OB/GYN Maternal Fetal Medicine patients.
6. Attain a more profound respect for cultural diversity.

Goal:

Students are expected to advance their clinical skills in the areas of history taking, physical examination, differential diagnosis and management of Maternal Fetal Medicine patients.

General Objective (s):

1. Obtain and present patient history and physical exam findings in an organized manner.
2. Formulate a logical differential diagnosis, assessment and basic plan for patient's medical condition.
3. Function as independently as deemed appropriate by the attending faculty.
4. Gain confidence and expertise in fundamental knowledge of the theoretical basis of Maternal Fetal Medicine patient management which includes, but is not limited to:
   a. High-risk pregnancy management
   b. Pre-term labor
   c. Multiple gestations
   d. Perinatal procedures and consultations
   e. Diagnostic ultrasound studies

Learning Activities: Hospital Based Patient Evaluation, Case Discussions.

Person in Charge	**:**	Michael Gallagher, M.D.
Dates Offered	**:**	August – December, January – May
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Holy Cross Hospital, 1500 Forest Glen Road, Silver Spring, Maryland 20910
Evaluation		Elective Evaluation Form, Attendance, Case Presentation, Daily Performance.
Grading System	**:**	Honor, Pass or Fail

Approved by Curr C SOM
DATE: August 31, 2017
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MOGYN-63 OBSTETRICS AND GYNECOLOGY SUB-INTERNSHIP

Prerequisites: Have completed and approved third year Ob/Gyn Clerkship

Justification:
This course is designed to provide the fourth year medical student elective experience to complement the core Ob/Gyn clerkship.

Course Description:
This course will expose students to the basics of womens' reproductive health. Focusing on the indications for routine screenings as well as to the proper methodology implemented when diagnosing and treating of malignat processes in the reproductive female tract.

Competencies:
Promoting the health of the female reproductive tract.

Goal:

1. Master the Ob/Gyn patient interview and physical exam.

2. Gain a working knowledge of the most comon pathologies of the female reprodcutive tract.

3. Interpret diagnostic studies and be able to formulate a diferential diagnosis.

4. Familiarize with the anatomy and identification of important anatomical landmarks when a surgical approch is necessary.

General Objective (s):

Learn all the skills necessary to perform as a future PGY-1 Ob/Gyn resident.

S**pecific Objectives**
- Broaden medical knowledge of the female reproductive tract.
- Refine the approch and technique of the medical interview and patient case presentation.
- Learn diagnosis, management and follow-up of gynecologic cancers and their premalignant conditions
- Upholding to the highest standards of profesionalism and ethics when interacting with patients as well as with the members of the medical community.

Learning Activities: Paper discusion, acitive participation and performance at office setting. Actively observe surgeries.

Person in Charge	**:**	Pedro Escobar-Rodríguez, MD, MHL, FACOG, FACS 787-727-1000 X4301
Dates Offered	**:**	
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	252 San Jorge St, San Juan, PR, 00914
Evaluation		Daily Performance
Grading System	**:**	Honor, Pass or Fail

Approved by Curr C SOM
DATE: May 7, 2019
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

DEPARTMENT OF PEDIATRICS (Not Available)

MPED-01 GENERAL PEDIATRICS

Prerequisites: Approved Introduction to Pediatrics and General Pediatrics (Clinical Clerkship).
(3rd and 4th year medical students).

The student will recognize the signs, symptoms and current management of the most common diseases of children, seen in a general pediatrics hospital, and will get acquainted with the importance of the continuity of care in an ambulatory service.

Person in Charge	:	Attending physician, according to monthly program, HURRA
Dates Offered	:	Year round
Course Duration	:	4 weeks
Enrollment per Session	:	1 student
Meeting Place	:	University Hospital Dr. Ramón Ruiz Arnau, Bayamón
Evaluation		Case presentation, topic discussion

MPED-02 PEDIATRIC INTENSIVE CARE

Pre-requisites: Third Year Rotations

Students will learn to utilize physiologic-based, organ system derived approach to patient problems. Students are given the responsibility for patient care under the direct supervision of the PICU faculty. Educational goals will be met through discussions on teaching rounds, didactic presentations on aspects of pediatric critical care medicine, and self-directed study on individual patients. The student is expected to improve skills of obtaining histories, performing physical examinations of all new admissions.

General Educational Objectives:

To develop quick appropriate response to emergencies.
To develop and foster critical thinking pathways with emphasis on the importance of ABC's of resuscitation.
Learn basic mechanical ventilator management and administration of routine respiratory medications.

Person in Charge	:	Gilberto Puig, M.D.
Dates Offered	:	Year round
Course Duration	:	2-4 weeks
Enrollment per Session	:	1 student
Meeting Place	:	By Arrangement Bayamón San Jorge Children's Hospital, Santurce
Evaluation		Daily oral presentation) 60% Case presentation 20% Written exam: 10% Attendance: 10%

MPED-50 PEDIATRIC RHEUMATOLOGY

Pre-requisites: Third year rotations

Description:

Student elective in pediatric rheumatology is typically one month in length, and has a strong outpatient, team-based clinical care focus, though inpatient management is also important. The trainee will also see patients at San Jorge Children's Hospital the Puerto Rico Children's Hospital and the Preceptor's Office. No more than two students may be on a clinical elective simultaneously. During the elective, primary teaching is done by the attending rheumatology; Also, clinical and/or epidemiology research can be developed.

General Educational Objectives:

1. Develop skills and habits of a meticulous approach to the pediatric history and physical examination, with a concentration on the musculoskeletal examination.
2. Understand the clinical presentation, pathophysiology, diagnosis and treatment of common pediatric rheumatology disease (i.e., juvenile rheumatoid arthritis, dermatomyositis, scleroderma, Kawasaki's disease, Lupus and rheumatic diseases.
3. Develop skills of literature review on pertinent topics
4. Understand the significance and limitations of laboratory studies for rheumatic diseases.
5. Demonstrate acumen in developing and evaluating differential diagnoses for children with systemic complaints such as unexplained fever, rash, and arthralgia
6. Review basic texts and literature on the subject and develop a working differential diagnosis

Learning Activities

1. See consults: patients will be assigned to students during the day by the faculty attending.
2. Perform initial history and physical examination.
3. Review basic texts and literature on the subject and develop a working differential diagnosis
4. Perform daily physical exam and write notes on patients assigned.
5. Check results of current laboratory and diagnostic studies on these patients.
6. Participate in the pediatrics' rheumatology research laboratory
7. Present patient information at daily section rounds.
8. Prepare a talk on rheumatic disease in children for presentation to the faculty and staff

Person in Charge	**:**	Dra. Ana Quintero	
Dates Offered	**:**	Throughout the year in previous agreement with faculty	
Course Duration	**:**	4 weeks	
Enrollment per Session	**:**	1-2 students	
Meeting Place	**:**	As per previous agreement	
Evaluation		Case presentation:	40%
		Elective Evaluation form:	60%

MPED-93 MEDICAL GENETICS

Prerequisites: 4th year medical students

Justification:

Medical genetics is one of the most rapidly advancing fields of medicine; molecular genetics is now integral to all aspects of biomedical science.

Every physician who practices in the twenty-first century will require a basic knowledge of the principles of human genetics and their application to a wide variety of clinical problems.
Medical genetics is both a basic biomedical science and a clinical specialty. Teaching medical genetics must span the entire undergraduate medical school curriculum and continue into the post graduate years as well.

Medical genetics has achieved a recognized role as a core discipline that deals with human variability and human heredity and at the same time, has developed approaches that allow new insight into many diseases and promise to provide far more in the near future.

Genetics is a diverse subject, concerned with variation and heredity in all living organisms. Human genetics is the science of variation and heredity in human beings, and medical genetics deals with human genetic variation of medical significance.

Medical genetics is undergoing a dramatic metamorphosis due in part to molecular biology. Molecular characterization of the human genetics, its mutations, and the nature of their protein products certainly provide a deeper understanding of diseases.

Course Description:

The course is an 8 weeks rotation in clinical/medical genetics. Rotation will include medical genetics clinics at San Jorge Children's hospital, rotations at the Clinical Research Center with involvement in clinical research including clinical trials. Topics will be assigned to the student in order to be develop. Pre and Post- clinic discussion of topics including but not limited to the disorders evaluated at clinic that day. Students will also accompany the geneticist to answer consults at pediatric Intensive Care Unit.

Goal (s): GENERAL GOAL AND SPECIFIC OBJECTIVES OF THE COURSE

The major goal of the Medical/ Clinical Genetics is to prepare medical students to recognize the role of genetic factors in health and disease. This requires knowledge of the molecular structure, function, and transmission of genes and understanding of interactions among genes and between genes and the environment as well as exposure to patient with genetic and metabolic disorders.
General Objective (s) /TOPICS

1. What genes are, how they are organized and controlled, what they do, and how they segregate.
2. The nature of mutations and premutations and how they contribute to human variability and to disease.
3. The patterns of inheritance characteristic of autosomal dominant, autosomal recessive, X-linked dominant, and X-linked recessive traits. To draw and interpret family pedigrees.
4. Factors that affect variable expressivity and incomplete penetrance.
5. The basis of mitochondrial diseases and the expected pattern of inheritance.
6. How genes are organized into chromosomes.
7. The clinical manifestations of common numeric, structural, and mosaic chromosomal anomalies.
8. Clinical approach to polymorphisms, gene linkage analysis and mapping in medicine.
9. The principles of multifactorial inheritance.
10. How to recognized and classify congenital anomalies and the approach to diagnosis.
11. The role of clinical genetics in the pathogenesis of cancer (neoplasm).
12. Molecular and cytogenetic diagnostic techniques and how they are applied to genetic disorders.
13. Puerto Rican genetics: Most frequent genetic and metabolic disorders in Puerto Rican population disorders

Learning Activities:

Shadowing at genetic clinics, shadowing at intra-hospital genetics consults. Participation in research coordination and management aspects at the Clinical Research Center. Topics will be assigned to students and will be expected to develop them including academics literature reviews and state-of-the-art diagnosis and management.

Course Coordinator	**:**	Alberto Santiago Cornier, MD, PhD
Course Dates	**:**	TBA
Course Duration	**:**	4 and 8 weeks rotations
Enrollment per Session	**:**	1 student
Meeting Location	**:**	Clinical Research Center, San Jorge Children's Hospital
Learning Activities	**:**	Daily Rounds, Case discussions
Evaluation	**:**	50% attendance, 20% assigned topics/works, 20% clinical competence, 10% professionalism/ethics
Grading System	**:**	90-100- A, 80-89-B, 75-79-C, 75 and under- Failure

Approved by Curr C SOM
October 17, 2013

MPED-109 SUB-INTERNSHIP IN PEDIATRICS

Pre-requisites: Third Year

Description:

The pediatric sub-internship is a broadly based experience, which allows students to assume primary responsibility for pediatric patients under the direct supervision of a certified pediatrician. Students will be able to participate on an inpatient pediatrics service team with an advanced degree of independence and responsibility in preparation for their R-1 year.

General Educational Objectives:

- Students will be able to participate on an inpatient pediatrics service team with an advanced degree of independence and responsibility in preparation for their R-1 year.
- Students will be able to perform an initial assessment of patients under consideration for admission to the pediatrics service.
- Students will be able to implement diagnostic and therapeutic plans taking into account evidence-based information and patient preferences.
- Student will develop interviewing and physical examination skills
- Student will apply the pathophysiology to the most common pediatric problems
- Formulate diagnostic and treatment plans
- Perform commonly used procedures under supervision

5. Understand the physical and psychosocial growth and development of the pediatric patient
6. Understanding the influence of family, community and society on the pediatric patient during health and disease
7. Understanding the importance of and strategies for health promotion and disease prevention

Course Coordinator	:	Dr. Vielka Cintrón, Director Graduate Medical Education Dr. Kahy Caraballo, Sub-Director Graduate Medical Education jsanchez@prwch.com
Contact Person	:	Sa. Marieli Soto-Coord de Edu Méd Graduada Sarai Guzman-Cruz
Course Dates	:	All year except June, July and December
Course Duration	:	2-4 weeks
Enrollment per Session	:	2 students
Meeting Location	:	PR Children's Hospital
Learning Activities	:	Daily Rounds, Case discussions
Evaluation	:	Elective Evaluation Form

DEPARTMENT OF PSYCHIATRY

MPSY-01 VAH PSYCHIATRIC JUNIOR INTERNSHIP

Prerequisite: Have completed third level Psychiatric Course.

The student will participate in the complete work up of patient and family. He/she will be assigned to current activities and seminars offered to psychiatric residents while in this rotation.

Person in Charge	**:**	Khris Lampon, M.D.
Alternate		Ms. Verónica Díaz-Merced
Residency Coordinator	**:**	Ms. Migdalia Carrasquillo-Parrilla
Dates Offered	**:**	Throughout the Year
Course Duration	**:**	4 weeks(160 hours)
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Various according to selection of Veterans Administration Hospital
Night Duties		At least on call / call per week
Evaluation		The student will be evaluated in knowledge, skills, and attitudes through their clinical performance. Also written exam or its equivalent.

MPSY-27 VAH PSYCHIATRIC EMERGENCIES

Prerequisite: Have completed third year Medicine

This course offers the student the opportunity to evaluate patients suffering a psychiatric emergency, as well as to initiate prompt and intermediate therapies.

Person in Charge	**:**	Khris Lampon, M.D.
Alternate		Ms. Verónica Díaz-Merced
Residency Coordinator	**:**	Ms. Migdalia Carrasquillo-Parrilla
Dates Offered	**:**	Throughout the Year
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Various according to selection of Veterans Administration Hospital 7:00 A.M
Night Duties		One call per week
Evaluation		The student will be evaluated in knowledge, skills and attitudes through their clinical performance. Also written exam or its equivalent

MPSY-58 VAH ALCOHOL DEPENDENCE

Prerequisite: Have completed third level Psychiatry**.**

This course is designed to familiarize the student with the ethiology, diagnosis antreatment of drug dependency.

Person in Charge	**:**	Khris Lampon, M.D.
Alternate		Ms. Verónica Díaz-Merced
Residency Coordinator	**:**	Ms. Migdalia Carrasquillo-Parrilla
Dates Offered	**:**	Throughout the Year
Course Duration	**:**	2 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Alcohol Dependence Treatment Program, one morning a week in Department of Psychiatry Veterans Administration Hospital 7:30 AM – 4:00 PM
Night Duties		No
Evaluation		Pre and post test, mid-term, self evaluation.

MPSY-59-VAH INTRODUCTION TO DRUG DEPENDENCE

Prerequisite: Have completed third level Psychiatry.

The student will be exposed to the technique of evaluating and managing patients with dependency and addiction to substances.

Person in Charge	**:**	Khris Lampon, M.D.
Alternate		Ms. Verónica Díaz-Merced
Residency Coordinator	**:**	Ms. Migdalia Carrasquillo-Parrilla
Dates Offered	**:**	By arrangement
Course Duration	**:**	2 to 4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	San Juan Veterans Administration Hospital 8:00 AM
Night Duties		2 to 4 weeks
Evaluation		Classroom interest, attendance and participation 50%.

DEPARTMENT OF SURGERY

MSURG-01 HURRA GENERAL SURGERY

Prerequisites: General Surgery Course

Students will be involved in a hands one approach to the practice of surgery. The clerk will be responsible for the patient history and physical examination, clinical follow ups, emergency room consultations, operating room and ward management of patients in a direct supervised environment. The clerk will be assigned to attending surgeons. He/she will have access to his/her private and no-private patients. He/she will discuss selected cases with the Universidad Central del Caribe Chief.

Person in Charge	**:**	Ricardo Rosario, M. D.
Dates Offered	**:**	Year round
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Department of Surgery, University Hospital Dr. Ramón Ruiz Arnau
Evaluation		Clinical Clerkship Evaluation Form

MSURG-02 ORTHOPEDIC SURGERY

Prequisites: Third Year of Medicine

The main emphasis of the 2-4 weeks elective is to provide the student with a sound basis in the approach to physical examination. These skills are best acquired in the orthopedic outpatient office where the student would spend the majority of his or her rotation. During the rotation the student would be in a position to work as a junior intern. The student would also accompany the faculty to the Office and be in attendance during the initial history, physical exam, and review of radiographs. The student would have the opportunity to assist in the operating room. A variety of weekly rounds are available, in which the student should be involved along with the others members of the multidisciplinary team.

General Educational Objectives:

1. To learn the basic regarding fracture treatment and be able to accurately assess musculoskeletal injuries in adults.
2. To recognize orthopedic problems that may require surgery, and be able to prepare the patient for referral.
3. To develop sufficient proficiency in cast application and removal (short arm and short leg casts).
4. To participate in orthopedic clinics, rounds, and specialty clinics, and to attend the orthopedic clinics.
5. Develop or participate a small clinical research projects.
6. Provide teacher training for future faculty members
7. Improve self-discipline and a sense of professionalism

Learning Activities:

Person in Charge	**:**	Pedro Tort, MD
Dates Offered	**:**	Throughout the Academic Year (Except July)
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	2 students
Meeting Place	**:**	Preceptor Office
Evaluation		Standard Evaluation Form 75% Case presentation/mini-lecture 25%

Rev. 03/24/15

MSURG-75 CLINICAL UROLOGY

Prerequisites : Third-year General Surgery Clerkship must be completed and approved.

I. Justification:

This course is designed to provide the fourth-year medical student a subspecialty elective experience to complement the core General Surgery clerkship. Students will be working under the supervision of urology residents and department assistants: Dr. Gabriel Miranda, Dr. Alex Acosta, Dr. José Fournier, Dr. Jesus Nieves, and Dr. Ceciliana De Andino.

II. Course Description:

Full-time clerkship of 2-4-week duration offered by the Urology Department for up two students during each rotation. Students will be able to participate in all aspects of general urology, functioning as integral members with the urology resident staff. They will be assigned to perform primary urologic consultations on patients from other services and will participate in the evaluation and management of urology service patients. The course aims to familiarize the student with the symptoms and physical findings of most of the urologic conditions. They will also acquire basic knowledge such as interpretation and performance of minor urologic procedures. Besides, the students will be acquainted with the diagnosis, classification, and treatment of the most common conditions in the genitourinary tract. Additionally, this course consists of the evaluation of patients at emergency, ambulatory and hospital settings, which will provide the students with the opportunity to be exposed to these scenarios.

III. Competencies

- Medical knowledge
- Professionalism
- Patient care
- Interpersonal and communication skills

Goal (s):

The faculty will strive to:

1. Present in-depth experience of the clinic and operating suite and in- hospital components of urologic surgery.
2. Present a direct experience in close association with the senior staff and urology residents in areas such as clinics, inpatient management, and operating room.
3. Provide the student the opportunity for supervised development of operating skills, in the operating rooms as well as in the emergency room.

General Objective (s):

At the end of the rotation, the student will be able to:

1. Describe the basic treatments and management regarding the most common urologic conditions.
2. Identify the most common urologic conditions.

I would write the general objectives like this and would add some other:

At the end of the rotation, the student will be able to:

1. Identify and explain the most common urologic conditions.
2. Describe and differentiate the basic treatments and management regarding the most common urologic conditions.
3. Work efficiently as a member of a resident staff in a clinical setting.
4. Perform competently and tactfully primary urologic consultations on patients.
5. Assist effectively in the evaluation and management of urology service patients.
6. Conduct successful minor urologic procedures on patients.
7. Critically assess, analyze, interpret and evaluate patients presenting urologic related symptoms in a variety of clinical settings.

Learning Activities:

1. Accompany urology residents and staff physicians in their day to day to gain the insights of urologic conditions management, treatment, and workup and experience the doctor-patient relationship before surgery.
2. Witness and participate in the discussion between the doctor and the patient regarding the surgical and non-surgical alternatives available for treatment.
   Scrub in on surgical cases to participate and gain direct operative experience..
3. Participate in morning and evening rounds of hospitalized patients with the opportunity to discuss and document patient's insights and collaborate directly with the daily process.
4. Work as an acting intern in the clinic and emergency room by performing a physical assessment, laboratory and radiographic analysis, and assisting in patient management.
5. Perform initial work-up of patients to recommend diagnostic studies and adequate therapeutic plan.
6. Accurately perform surgical and clinical procedures.

Learning Resources:

1. Anatomy for Surgeons: The Head and Neck, by Hollinshead, 3rd Edition
2. Oral and Maxillofacial Trauma, by Fonseca and Walker
3. Management of Infections of the Oral and Maxillofacial Region, by Topanzian and Goldberg
4. Neural Blockade in Pain Management, by Cousins and Bridenbaugh, 2nd Edition

Person in Charge	**:**	Dr. Gabriel Miranda, Section Chief of Urology Service gjmirandar@gmail.com
Dates Offered	**:**	Year-round (except July)
Enrollment per Session	**:**	2 student
Meeting Place	**:**	Urology Dept. VA, By arrangement
Evaluation		Clerkship Evaluation Form, daily work, and presentation.
Grading System	**:**	Course grade will be calculated according to the following grading system: Honor, Pass or Fail

Approved by Curr C
SOM

MSURG-85 PEDIATRICS PLASTIC SURGERY ELECTIVE

Prerequisites : Third Year Clerkship

The objective of the fourth year elective clinical clerkship in Plastic Surgery will be to provide the student an opportunity to experience the field of Plastic Surgery in a brief two week introductory rotation. The course format offers the individual student assignment to experience operating room surgery, office, planning, and clinic outpatient surgery as the practice of those individuals unfold on a daily basis. Additionally the student will participate in a weekly Plastic Surgery teaching conference and a weekly divisional teaching rounds at which time the student will see the inpatients of the Plastic Surgery service. Case material will vary from week to week. Daily learning activities described below. Student should report to the faculty in charge on the first day.

Person in Charge	**:**	Robert Lee Walton Jr., M.D.
Dates Offered	**:**	Throughout the year (By arrangement)
Course Duration	**:**	2 weeks
Enrollment per Session	**:**	1-2 student
Meeting Place	**:**	San Jorge Children's Hospital
Evaluation		The student and the preceptor will both submit evaluations of the rotation and review of the evaluation will be available. The student will be expected to be regular in the attendance and participation in the activities of the Plastic Surgery Elective during de course of the rotation assignment. Clinical Evaluation form. Practical examination including interpretation of clinical findings, and laboratory studies. Case discussions. Attendance

Goal (s):

The faculty will strive to:

1. Present in-depth experience of the office and operating suite and in- hospital components of a broadly based practice of plastic and reconstructive surgery of the hand, maxillofacial surgery, and trauma surgery, including burns.
2. Present a direct experience in a close association with the senior staff in all of the above areas.
3. Provide the student with the opportunity for supervised development of operating skills, both in the operating room as well as in theemergency room.
4. Guide student, by weekly review, through assigned reading.

General Objective (s):

At the end of the rotation, the student will be able to:

1. Obtain a broad exposure to a wide range of surgical pathology, both soft tissue and cutaneous as well as reconstructive problems, both benign and malignant.
2. Exposure cleft palate surgery, surgery for cleft lip and palate, and an opportunity to experience the entire range of the plastic surgery.
3. Receive specific personal instruction in the development of suturing techniques as well as increased understanding of the healing surgical wound and the factors involved in successful wound healing.
4. Receive instruction in writing postoperative orders under the tutelage of the senior staff and house staff.
5. Gain experience with the management of burns and skin grafting of full thickness losses, and late reconstruction after healing.

Learning Activities:

1. Accompany the staff physicians in their office-based practice to gain the insights applied in patient selection and to gain an in-depth experience of the doctor-patient relationship prior to surgery.
2. The opportunity to understand what surgical alternatives are discussed with the patient as well as the depth of understanding that is developed in the office on the part of the patient is considered.
3. The student will have the opportunity to scrub on all surgical cases and gain direct operative experience and participation. In this vein the student will, many times, be first assistant on major plastic surgical cases.
4. Participate in morning and evening rounds of hospitalized patients.
5. Work as an acting intern in clinic and emergency room by performing physical assessment, laboratory and radiographic analysis, and assisting in patient management.
6. Perform initial work-up of patients and recommend diagnostic studies and therapeutic plan.
7. Assist in surgical and clinical procedures.
8. Observe and demonstrate accurate performance.

Learning Resources:

5. Anatomy for Surgeons: The Head and Neck, by Hollinshead, 3rd Edition
6. Oral and Maxillofacial Trauma, by Fonseca and Walker
7. Management of Infections of the Oral and Maxillofacial Region, by Topanzian and Goldberg
8. Neural Blockade in Pain Management, by Cousins and Bridenbaugh, 2nd Edition

MSURG-178 RESEARCH IN OPHTHALMOLOGY & GENETIC EYE DISEASE

Prerequisites: Basic Genetics (College Level)
Competencies: Basic Genetics and Ophthalmology

Justification:

There is a need for clinical studies and research in genetic eye diseases in ophthalmology that lead to publications and papers in Puerto Rico.

Description:

Students will spend a minimum 4 to 6 weeks researching genetic eye diseases. All information gathered must be evidence-based medicine including at least two publications from the current year. Based on information gathered students must write three papers for evaluation: 1) A Case Report. 2) A Case Series, and 3) A Prospective Study.

Goals:

Clinical Research, Learn how to write papers (Case Report, Case Series, Retrospective and Prospective study, and clinical studies), and publish papers in peer reviewed journals.

General Educational Objectives:

Learn the appropriate way to research and conduct clinical studies, while at the same time learning about genetic eye diseases and their impact on our population.

Specific Objectives:

1. Learn how to do evidence-based research
2. Learn to write a Case Presentation
3. Learn to write a Case Series
4. Learn how to do a Prospective Study

Learning Activities:

- Weekly discussion of selected genetic eye disease including but not limited to: etiology and pathogenesis, statistics, evolution, complications, comorbidities, treatment options, and recent studies.
- Online research
- Clinical observation
- Written Papers (Case Report and Case Series)

Person in Charge	**:**	Natalio J. Izquierdo, M.D. njuan@msn.com
Dates Offered	**:**	August Through June
Course Duration	**:**	4-8 weeks minimum
Enrollment per Session	**:**	1 student
Meeting Place	**:**	369 De Diego, Suite 310 San Juan, PR 00922 / Internet Meeting
Evaluation Assessment	**:**	Case Report Case Series Prospective Study
Grading System	**:**	Honor, Pass or Fail 75% Research Project 25% Case Discussion

MSURG- 197 FUNDAMENTALS OF OCULOPASTICS AND OCULAR ONCOLOGY

Pre-Requisites: Having successfully completed a Clinical Ophthalmology Elective

Description:

Oculoplastics is an important Ophthalmic Subspecialty, having recognized fellowships since 1969. Knowledge of Oculoplastics surgery is essential for the proper practice of Ophthalmology. This course will provide in depth clinical and surgical exposure in the fields of Oculoplastic Surgery and Ocular Oncology. The Medical Student will be educated on how to perform a clinical evaluation in these patients and will develop understanding of the clinicopathological basis of the diseases affecting them. In order to understand and appreciate the material been taught, the student needs a basic understanding of facial anatomy and of Ophthalmology.

General Education Objectives:

The Goal of this clerkship is to expose Medical Students to the fields of Oculoplastic Surgery and Ocular Oncology.

Specific Objectives: 1. V. The specific objectives are:

1. To understand anatomy of the head and periocular region.
2. To understand and recognize simple and complex diseases that can occur in the eyelids, orbit, and lacrimal systems.
3. To observe the clinical and surgical care of patients undergoing Oculoplastic Surgery and Ocular Oncology.
4. To participate in the clinical and surgical care of patients undergoing Oculoplastic Surgery and Ocular Oncology.

VII. Learning Activities:

Students will be evaluated on a daily basis. The evaluation will take into consideration the promptness, attitude, and disposition of the Medical Student. Their behavior in the office will be observed and the interaction between the Student and the Ancillary Staff will be noted. The student will be expected to demonstrate the acquired knowledge through verbal quizzes and case discussions.

Person in Charge	**:**	Noel Pérez Soto, MD
Dates Offered	**:**	By arrangement throughout academic year except July and December
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Office of Noel Perez, MD. 150 Ave de Diego Suite 701, San Juan Health Centre, Santurce PR 00907
Evaluation Assessment	**:**	Case Report Case Series Prospective Study
Grading System	**:**	Pass or Fail

Approved by Curr C SOM
October 17, 2013

MSURG-125VAH CLINICAL OPHTHALMOLOGY

Pre-requisite: Have completed and approved third year Internal Medicine and Pediatrics.

This course consists of clinical demonstrations on the various methods used to examine the eye and the presentation, at the outpatient clinics and hospital, of patients suffering from eye diseases. The student will be able to observe procedures and surgical techniques used at Operating Rooms and examine patients at Outpatient Department Clinics under faculty supervision.

Person in Charge	**:**	Carmen Henn, MD
Dates Offered	**:**	Academic Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	2 student
Meeting Place	**:**	Veteran's Administration- Dr. Henn's Office 7:00 AM Night Duties : No
Grading System	**:**	Daily work, skills and attitudes

MSURG- 204 NEUROLOGICAL SURGERY ACTIVE INTERNSHIP

Pre-Requisites: Successful completion of 3rd year medical school, surgical clerkship, and a genuine interest in neurosurgery.

Description:

The Surgical Subspecialty clerkship is a four-week elective that is divided on weekly rotations on various neurosurgical fields. These will include weekly periods on vascular and endovascular neurosurgery, pediatric neurosurgery, oncologic neurosurgery, spine neurosurgery, general neurosurgery and the neurological intensive care unit at the HIMA Hospital in Caguas. The student will have the opportunity to attend clinics, perform morning rounds and observe surgeries in the operating room. The student will be in direct supervision of the attending neurological surgeons Dr. Sosa, Dr. Toledo, Dr. Almodóvar, Dr. Pastrana and neurointensivist Dr. Rodríguez-Vega.

General Education Objectives:

1. To introduce the student to the principles and practice of neurosurgery. This course will provide an in-depth introduction to the surgical treatment of disorders of the nervous system.
2. Interact with patients and surgical team members in a courteous and professional manner.
3. Assess patients' surgical risk for the types of procedures in the specialty.
4. Interpret imaging and other diagnostic studies in the specialty and use them to suggest treatment for common diagnoses
5. Describe in general terms the technical approach to common procedures in the subspecialty
6. Provide appropriate postoperative assessment, and plans for follow up after surgery.

Specific Objectives:

1. To allow the student to experience the work load and responsibilities that a 1st year neurosurgical resident will have.
2. Students will be expected to participate in the daily activities of the service including work rounds, morning report and other conferences.

3. Perform daily patient evaluations in the neurosurgery clinic and describe significant findings with the attending.
4. The student will have the opportunity to observe in the operating room and in circumstances, serve as assistants to the surgeon.
5. The student will be able to discuss with the attending physician a spectrum of at least three possible differential diagnoses for each patient.
6. Daily patient history, neurological physical examinations and notes are mandatory and will be observed by the attending physician. It is expected that the student improves skill level as the elective progresses.
7. Evaluate patients at the Neurosurgical Intensive Care Unit and discuss with the attending physicians plan of treatment.
8. Present 2 formal case presentations in a group discussion by the end of the rotation.

Person in Charge :	Iván Sosa MD
Dates Offered:	Course offered most of the year. A previous approval by the Neurosurgery department is required.
Course Duration:	4 weeks
Enrollment per Session:	1 student
Meeting Place:	Menonita Hospital Caguas Neurosurgery Division
Evaluation Assessment:	There will be assigned reading that the student must complete during the rotation. Oral quizzes performed by the medical staff. The student will be graded on their participation, willingness to take responsibility as a member of the surgical team, and professional appearance and manner.
Grading System:	Pass or Fail

Approved by Curr C SOM
September 4, 2014

MSURG- 89VAH SURGICAL CRITICAL CARE

Pre-Requisites: General Surgery Rotation

Description:

The student will be offered a 4 week rotation at the Surgical Intensive Care Unit at the VA Caribbean Health Care System. This unit provides perioperative critical care to patients of many surgical specialties including: general surgery, vascular, thoracic, cardiac, neurologic, orthopedics, ENT. The student will have the opportunity to work with and be supervised directly by the critical care attending staff (2 surgical critical care, 4 pulmonary critical care). Expected to be part of the ICU team and to participate in ICU rounds, presenting and managing first hand (with assistance) a few ICU patients. And must be involved and learn ICU procedures. The student is expected to take pm call once a week.

General Objectives:

a. Learn and understand the pathophysiology of multiple organ systems in the critically ill surgical patient.
b. Learn to evaluate and manage a critically ill surgical patient
c. Become an active participant in a critical care multidisciplinary team

Specific Objectives:

a. Become familiar with the basic principles of resuscitation of the critically ill patient.
b. Become familiar with the physiology, management and outcome of multiple organ dysfunctions. (Application of cardiovascular, respiratory and renal physiology)
c. Exposure to ethical dilemmas and level of support decisions in patient care.
d. Exposure to procedures (peripheral and central intravenous access, arterial lines, chest tube placement, wound debridement, etc.) and pertinent radiological evaluations (CXR, CT chest /abdomen / pelvis, etc.).
e. Become familiar with the evaluation (physical exam/history/physiologic data gathering/laboratory /imaging), management, oral presentation and medical documentation of the surgical critical care patient.

Justification:

Expand the UCC fourth year medical student curriculum, providing a unique opportunity to learn how to evaluate and manage critically ill unstable and stable adult patients in their perioperative care at the VA Surgical Intensive Care Unit. The students will have the opportunity to learn how to evaluate and manage patients in critical condition, with multiple organ dysfunction and challenging the usual order of evaluation and management taught in the standard medical education curriculum: requiring a rapid physiologic assessment and invasive action as a first step in saving a patient's life.

Competences:

Learn how to evaluate and manage critically ill patients as whole and including all organ systems, preventive bundles

Goal(s):

Evaluate and manage with supervision critically ill patients as part of a multidisciplinary team

Learning Activities:

a. Participation in Morning rounds, case presentations, critical care multidisciplinary committee and family meetings
b. Basic critical care lectures
c. Core curriculum article discussion

Person in Charge :	Yvonne Baerga-Varela, MD FACS
Dates Offered:	Year round- by prior approval
Course Duration:	4 weeks
Enrollment per Session:	3 students
Meeting Place:	Surgical Intensive Care (SICU) at the VA Caribbean Health Care System (10 Casia St. San Juan, PR)
Evaluation Assessment:	The attending staff (clerkship chair and/or other attendings they worked with) will evaluate the student based on their: a. Day-to-day performance b. Final ten-minute presentation on an interesting topic of their choice c. Final Critical Care case presentation
Grading System:	Pass or Fail

Approved by Curr C SOM
May 19, 2016
Prof. Zilka Ríos

Associate Dean for Academic Affairs SOM

MSURG- 39VAH GENERAL SURGERY SUBINTERNSHIP

Pre-Requisites: Third Year clinical rotations including Internal Medicine and Surgical Clerkship

Description:

Fourth year medical students will be offered the opportunity to rotate at the Veteran Affairs Hospital General Surgery Service in order to learn and understand the evaluation, care, and management of surgical patients in hospital as well as in the outpatient clinics. During the four weeks, the student will be able to interact with VAH surgical staff and residents in order to demonstrate his or her ability to assume responsibility as a member of the surgical team, by showing reliability and willingness to participate and to first and foremost help their patients.

Justification:

This course is designed to familiarize the fourth year medical student with the practice of General Surgery. Furthermore, it aims to prepare surgically oriented students for residency while encouraging their inclination and enhancing their clinical and surgical skills

General Objectives:

a. To develop the skill of proper perioperative evaluation and assessment of surgical patients.
b. To further enhance the student's ability to comprehensively manage patients in the surgical scenario.

Specific Objectives:

a. Under appropriate, strict supervision, the student should take individual responsibility of up to four patients per weeks, so as to take a medical history and perform a physical examination with the first 24 hours following admission.
b. The student should learn diagnostic algorithms, which diagnostic tools to employ, and their implication for indication and/or contraindications for surgical management.
c. The student will be exposed to the pre, intra, and post-operative management of surgical patients and should attend all operative procedures on his/her assigned patients whenever possible.
d. The student will also provide daily care to his/her assigned patients while admitted to the Surgical Ward.
e. The student should learn proper daily patient and brief post-operative note taking.
f. The student should master the abdominal exam as it pertains to acute illness within the peritoneal cavity.
g. The student should also be able to understand and carefully perform bedside procedures such as Foley catheter, nasogastric tube, chest tube and central line placement, as well as wound care and minor surgical procedures.

Competences:

The student should be able to adequately perform history taking and physical examination in a surgical patient in order to establish a diagnosis, its management and perioperative care.

Goal(s):

To have a comprehensive overview of the core general surgery areas, with emphasis on the clinical knowledge that every surgeon should acquire.

Learning Activities:

Attendance to all morning rounds, clinical tumor board and didactic activities is mandatory. Didactics are held every Wednesday at 4:30 p.m. at RCM Medical School 6th floor, Physiology Amphitheater. Tumor board is held Tuesdays at 3:00 p.m. in RCM Medical School Room #340.

Person in Charge :	Dr. Carlos Ramírez-Tánchez
Dates Offered:	Throughout the year
Course Duration:	4 weeks
Enrollment per Session:	1 student
Meeting Place:	Veterans Administration Hospital: 2J Surgical Ward, 6:00 a.m.
Evaluation Assessment:	Oral presentation. Daily performance with the VAH Staff will be evaluated with UCC SoM Clinical Clerkship Evaluation Form.
Grading System:	Honors, Pass or Fail

Approved by Curr C SOM
June 16, 2016
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MSURG- 39 GENERAL SURGERY SUBINTERNSHIP

Pre-Requisites: Student must have completed Third Year clinical rotations including the Internal Medicine and Surgical clerkships.

Description:
Fourth year medical students will be offered the opportunity to rotate at Hospital HIMA San Pablo Bayamón in order to learn the initial evaluation, care and management of patients. During the rotation, the medical student will become familiarized with the admission process, physician's orders and daily care of hospitalized patients. The student will also have the opportunity to interact with surgical staff and surgeons in order to demonstrate his teamwork and leadership capabilities as well as his responsibility and readiness in patient management.

Justification:

This course is designed to provide the fourth year medical student inpatient and outpatient experience in the field of general surgery. It will also expose the surgically oriented student in the diagnosis, preoperative and postoperative management of patients.

General Objectives:

a. To develop the skill of proper perioperative evaluation and assessment of surgical patients.
b. The student will articulate an appropriate differential diagnosis for patients with acute and chronic general surgical conditions.
c. The student will develop and participate in the implementation of appropriate patient management plans.
d. To appreciate less common disease processes and the role of surgery.
e. To further enhance the student's ability to comprehensively manage patients in the surgical scenario and emergency department.
f. Interpretation of clinical data (X-rays, lab results, etc.)
g. Performance of procedural techniques under supervision.
h. The student should learn diagnostic algorithms, which diagnostic tools to employ, and their implication for indication and/or contraindications for surgical management.

Competences:

The student has to be prepared to take patient's history, and perform oriented physical examinations in order to establish differential diagnoses and final diagnosis. He/ She should demonstrate a professional appearance and courteous behavior in the workplace.

Goal(s):

To expose fourth year students to the whole spectrum of general surgery, focusing on the clinical knowledge and management of patients.

Learning Activities:

Attendance to all morning rounds and preoperative patient evaluation. Weekly case presentations for assigned patients.

Person in Charge :	Dr. Emilio Pérez De León
Dates Offered:	Throughout the year
Course Duration:	4 weeks
Enrollment per Session:	1 student
Meeting Place:	Centro Quirúrgico at Hospital HIMA San Pablo Bayamón, 6:30am
Evaluation Assessment:	Oral presentation and daily attendance. Daily performance with the staff will be evaluated with UCC SoM Clinical Clerkship Evaluation Form.
Grading System:	Honors, Pass or Fail

Approved by Curr C SOM
September 15, 2016
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MSURG- 235 CLINICAL RETINOLOGY & OPHTHALMOLOGY

Pre-Requisites: Have completed and approved third-year Internal Medicine and Pediatrics.

Description:

This course consists of clinical demonstrations on the various methods used to examine the eye and the presentation, at the outpatient clinics and hospital, of patients suffering from eye diseases. The student will be able to observe procedures and surgical techniques used at Operating Rooms and examine patients at Outpatient Department Clinics under faculty supervision.

Justification:

This course is designed to provide the fourth-year medical student a subspecialty elective experience to complement the core General Ophthalmology field.

General Objectives:

Give exposure to the medical students to the fields of Retinology Surgery and Ophthalmology.

Specific Objectives

a. To understand the anatomy of the head and periocular region.
b. To understand and recognize simple and complex diseases that can occur in the vitreous body of the eye & the retina.
c. To observe the clinical and surgical care of patients undergoing Retinal Surgery.
d. To participate in the clinical and surgical care of patients undergoing Retinal Surgery.
e. Perform initial work-up of patients and recommend diagnostic studies and therapeutic plans.
f. Assist in surgical and clinical procedures.
g. Observe and demonstrate accurate performance.

Learning Activities

Students will be evaluated daily on their promptness, attitude, and disposition. Their behavior in the office will be observed, and the interaction between the student and the staff will be evaluated. The student will be expected to demonstrate the acquired knowledge through verbal quizzes and case discussions.

Competences:
Medical knowledge, Professionalism, Patient care, Interpersonal, communication, surgical skills.

Goal(s):

Clinical and surgical learning experiences inside the field of Retinology and Ophthalmology

Person in Charge :	Dr. Stephanie Vale Dykyj stephanie.vale1@upr.edu
Dates Offered:	Throughout the year
Course Duration:	3-4 weeks
Enrollment per Session:	1 student
Meeting Place:	Puerto Rico Eye Institute Llc. 105 Shopping Court Valle Tolima, Caguas, Puerto Rico, 00727
Evaluation Assessment:	Daily work, skills, attitudes, prospective studies
Grading System:	Honors, Pass or Fail

Approved by Curr C SOM
September 1, 2020
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

MSURG-278 CLINICAL TEACHING, LEADERSHIP, AND SURGICAL

Pre-Requisites:

1- completion of all clinical clerkships
2-Obtained an A as final grade in the surgery clerkship
3-Updated documentation for the SJ VA Medical Center

Description:

This four-week elective introduces fourth-year medical students to the principles and practice of clinical teaching and medical education. Students participate in supervised bedside teaching, near-peer instruction, learner assessment, feedback delivery, and educational leadership activities while developing skills essential for future resident-teachers and physician educators.

Specific Objectives:

Upon completion of this elective, students will be able to:

1. Describe principles of adult learning theory and clinical teaching.
2. Demonstrate effective bedside and small-group teaching techniques.
3. Utilize teaching models such as the One-Minute Preceptor and SNAPPS.
4. Provide constructive formative feedback to junior learners.
5. Facilitate clinical reasoning and case-based discussions.
6. Demonstrate professionalism in educational and clinical settings.
7. Develop learning objectives and educational activities.
8. Participate in near-peer mentorship and supervision of junior students.
9. Create and present a scholarly educational project or teaching session.
10. Reflect on personal strengths and areas for growth as a future physician educator.

Justification:

This elective prepares fourth-year medical students for future roles as resident physicians and clinical educators. Through supervised teaching experiences, students develop skills in bedside teaching, feedback delivery, mentorship, and educational leadership. The course provides foundational training in medical education while fostering interest in academic medicine and lifelong learning.

Competences:

Upon completion of this elective, the student will be able to:

1. Demonstrate effective bedside and small-group teaching skills.
2. Apply principles of adult learning in clinical education.
3. Provide constructive learner-centered feedback.
4. Facilitate clinical reasoning discussions.
5. Demonstrate professionalism and leadership in educational settings.
6. Function effectively as a near-peer mentor and educator.
7. Reflect on personal growth as a future physician educator.

Goal(s):

To prepare fourth-year medical students to function effectively as future resident-teachers and physician educators through supervised experiences in clinical teaching, mentorship, feedback delivery, and educational leadership.

By the end of this elective, students will demonstrate foundational competency in clinical teaching, learner assessment, feedback delivery, mentorship, and educational leadership while functioning as supervised near-peer educators in clinical settings.

Learning Activities:

- Bedside teaching with faculty supervision
- Near-peer teaching of junior medical students
- Small-group case discussions
- Clinical reasoning exercises
- Workshops: Simulation and role-playing
- Observation of clinical teaching during rounds
- Reflective writing exercises
- Teaching session development
- Final presentation

Person in Charge :	Carlos Ramírez Tánchez MD FACS César Luque Fontanez MD FACS José Sorrentino Brunisholz MD FACS
Dates Offered:	Throughout the Academic Year
Course Duration:	4 weeks
Enrollment per Session:	1 student
Meeting Place:	1- UCCSOM main campus 2-San Juan VA Med Center

Evaluation Assessment:	**Component**	**Weight**
	• Clinical teaching performance	40%
	• Professionalism & participation	25%
	• Teaching project and presentation	25%
	• Reflective portfolio and assignment	10%

Grading System: This elective will be graded on a Pass/Fail basis.

Students must demonstrate satisfactory performance in the following areas:

- Requires attendance
- Completion of assignments
- Professionalism
- Satisfactory evaluation
- Successful completion of teaching project

A passing grade requires active participation, satisfactory faculty evaluations, professional conduct, and completion of all elective requirements.

Honors awarded for exceptional teaching, leadership, professionalism, and project quality.

Honors Criteria:

Students may receive an Honors designation upon demonstrating outstanding performance throughout the elective. Honors will be awarded based on:

- Exceptional clinical teaching skills
- Consistently outstanding professionalism and leadership
- Superior participation and engagement in educational activities
- Excellent faculty and learner evaluations
- High-quality capstone educational project and presentation
- Demonstrated initiative, mentorship, and commitment to medical education

The final Honors designation will be determined by the course director based on overall performance and achievement of elective objectives.

Approved by Curr C SOM
June 5, 2026
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

PHYSICAL MEDICINE AND REHABILITATION DEPARTMENT

MPMR-24 VAH INTRODUCTION TO CLINICAL PHYSIATRY

Surgery

Prerequisite: Have completed third level Internal Medicine,Pediatric, and Radiology courses.

Course Description:

The student will be exposed to the clinical aspects of Physical/Rehabilitation Medicine. He/she will be able to take medical histories, perform physical examinations to patients and under supervision by a faculty member or a resident, develop differential diagnosis and treatment plans for musculoskeletal, rheumatological and neurological conditions. In addition, he/she will be exposed to Electrodiagnostic Principles, Sports Medicine, Exercise Physiology, Cardiac Rehabilitation, Amputee Rehabilitation, Pain Rehabilitation including exposure to Interventional Pain, and TBI/Stroke Rehabilitation. The student will participate in all academic activities held by the Section.

Person in Charge	**:**	David A. Soto-Quijano, M.D.
Contact Person	**:**	Sa. Esther López Medina
Dates Offered	**:**	Throughout the Year
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	To be Coordinated
Meeting Place	**:**	Rehabilitation Medicine Services #C-121 Veterans Administration Hospital 8:00 AM
Night Duties		No
Evaluation		Oral presentation will be required Evaluation will be done by the supervising attending physician(s). This will be based on: 1. Attendance and professionalism: **25%** 2. Clinical skills: **25%** 3. Team involvement: **25%** 4. Case presentation and academic participation**: 25%**

General Educational Objectives: Understand the comprehensive approach and care, coordinated team work and cost effective provision of rehabilitation services

MPMR-25 INTRODUCTION TO IN-PATIENT REHABILITATION

Prerequisites: Have completed third level Internal Medicine, Surgery and Radiology Courses

Course Description:

In this rotation, the student would be exposed to the clinical aspects of Physical Medicine and Rehabilitation. He/she will assume the role of a resident for 2-4 patients and be able to take medical histories, perform in-patient admissions, and perform physical examination to patients, all under the supervision of a faculty member or resident. In addition, the student will be able to participate of interdisciplinary rounds and meetings, dynamics particular of a rehabilitation team. As part of the rotation, involvement in academic activities will be required in conjunction with other residents. The student will be exposed to acute post-surgical rehabilitation, Stroke Rehabilitation, TBI Rehabilitation, Cardiac Rehabilitation, Spinal Cord Injuries, Geriatric Rehabilitation, In-patient Consultation and others.

Person in Charge	**:**	David A. Soto-Quijano, M.D.
Contact Person	**:**	Sa. Esther López Medina
Dates Offered	**:**	Throughout the Year
Course Duration	**:**	4 weeks
Enrollment per Session	**:**	2 student
Meeting Place	**:**	Physical Medicine and Rehabilitation Service, First Floor, C-121, SJ Veterans Administration Hospital 8:00 AM
Evaluation		Oral presentation will be required. Evaluation will be done by the supervising attending physician(s). This will be based on: 1. Attendance and professionalism: **25%** 2. Clinical skills: **25%** 3. Team involvement: **25%** 4. Case presentation and academic participation**: 25%**

General Educational Objectives:

Understand the comprehensive approach and care, coordinated team work and cost effective provision of rehabilitation services.

DEPARTMENT OF RADIOLOGY

MRAD-77 INTRODUCTION TO RADIATION ONCOLOGY

Prerequisites: Completed Core Rotations; MSIV

Course Description:

The object of this clinical course is to introduce medical students to current radiation therapy techniques used in the management of patients with malignant disease. Emphasis will be placed on the use of external beam, intracavitary, and interstitial radiation in the treatment of malignant disease. The student will be assigned to work with various staff members within the Radiation Oncology Department, observing inpatient and outpatient care as it is given. The student will gain clinical experience in the diagnosis and management of common malignancies frequently encountered in medical practice. Physical diagnosis will be stressed, including complete head and neck examinations and indirect laryngoscopy. The interpretation and clinical correlation of appropriate radiographs, radionuclide scans, and CT scans as applied to radiation treatment planning will be discussed.

General Objective (s):

The student will gain clinical experience in the diagnosis and management of common malignancies frequently encountered in medical practice by attending morning rounds and participating in treatment planning with the faculty.

Specific Objectives

Describe the pathologies, incidence and diagnosis of the most common types of cancer.

1. Explains the benefit of current radiation therapy techniques used in the management of patients with malignant disease.
2. List at least one role for the use of the external beam, intracavitary, and interstitial radiation in the treatment of malignant disease.

Learning Activities

1. Participation on morning rounds which include case presentations of patients seen by students. Participation in treatment planning conferences (tumor boards) which include interaction with all the oncologic specialties such as surgical, medical, gyneocologic, breast, head and neck and pediatric oncology teams.

Evaluation and Assessment

Case Presentations - will be evaluated by different attending verbally through discussion.
Professionalism - Student arrives in timely manner with adequate dress code and attitude throughout the rotation period

Person in Charge	:	Dr. Carlos M. Chevere M.D. Assistant Professor
Dates Offered	:	By arrangement
Course Duration	:	2-4 weeks
Enrollment per Session	:	1 student
Meeting Place	:	Radiation Oncology Department (Basement) at HIMA San Pablo, Caguas e-mail: carloschevere@gmail.com Phone: (787) 653-3434, Ext. 7712
Evaluation		Pass or Fail

MRAD-89 DIAGNOSTIC RADIOLOGY ELECTIVES

Prerequisites: Basic Radiology course

Background and Justification:

This clinical elective is aim to exposed medical students to a program of instructed approach relevant to the field of radiology. Student will receive individual mentorship, observing and participating in all imaging procedures performed in the department. The rotation includes experience in general film interpretation, fluoroscopy, diagnostic ultrasound, computer tomography, MRI, ER radiology, breast imaging, neuroradiology, body, vascular/interventional and MSK radiology.

Competencies:

- Medical Knowledge
- Professionalism
- Patient care
- Interpersonal and Communication Skills

Goal (s):

- To provide a broader understanding of the principles of radiology and a familiarity with the many diagnostic techniques available, their values and limitations, and how they may best be used in the management of the patient.
- To train the student in the basic skills of image interpretation with emphasis on, but not limited to, the brain, neck, chest, abdomen, pelvis and extremities.

General Objective (s):

The elective is organized to provide a compehensive overview of the practice and application of modern diagnostic radiology. The role of the radiologic subspecialties in diagnosis and treatment in both out-patient and in-patient settings.

Specific Objectives:

Experience a concentrated example of the practice of a particular area of radiology from film interpretation to applications to clinical medicine by daily interaction with practicing radiology faculty.

Learning Activities:

Student will attend tumor board conferences and correleate imaging studies with pathological findings.

Evaluation and Assessment:

The student will be evaluated on the basis of knowledge, Judgment and attitudes developed during the course. At the end of the elective, the student prepares a written and oral case presentation.

Person in Charge	**:**	Eduardo Acosta, M.D.
Dates Offered	**:**	Throughout the academic year (By arrangements)
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Veteran's Hospital

MRAD-92 INTRODUCTION TO RADIATION ONCOLOGY AND CLINICAL HEMATOLOGY AND ONCOLOGY

Prerequisites: Complete Clinical Rotations; MSIII

Justification:

To pursue skills and knowledge in the Radiation Oncology and Clinical Hematology and Oncology field.

Course Description:

The object of this clinical course is to introduce medical students to current radiation therapy techniques used in the management of patients with malignant diseases. Emphasis will be placed on the use of external beam, intracavitary, and interstitial radiation in the treatment of malignant disease. The student will be assigned to work with various staff members within the Radiation Oncology Department, observing inpatient and outpatient care as it is given. The student will gain clinical experience in the diagnosis and management of common malignancies frequently encountered in medical practice. Physical diagnosis will be stressed. The interpretation and clinical correlation of appropriate radiographs, and CT scans as applied to radiation treatment planning will be discussed.

Also, the purpose of this elective is to expose the fourth year medical student to a diverse variety of clinical problems in the field of Hematology and Oncology. The student will progressively be assigned responsibilities in the handling of patients as his/her mastering of the different skills is demonstrated. The rotation will include exposure to acutely ill patients in a hospital setting along with a dense exposure to the ambulatory diagnosis and management of patients with blood and malignant disorders. The rotation is organized using the inpatient facilities at Auxilio Mutuo Hospital. A particular emphasis on understanding the clinical evaluation and basis of therapeutic decisions for malignant disorders will be made. In addition,

reviewing the laboratory application for the diagnosis of blood dyscrasias along with the physiologic basis of management of blood disorders will be done on a daily basis.

Competencies:

The student will be able to develop an initial approach to oncology problems by performing patient interviews. Interpret different diagnostic tools and identify the possible differential diagnosis. Determine appropriate therapy and course of action. Interpret laboratory and ultrasound findings to optimize therapy.

Goal (s):

The Goal of this clerkship is to expose Medical Students to the fields of Radiation Oncology and Clinical Hematology and Oncology.

General Objective (s):

The student will gain clinical experience in the diagnosis and management of common malignancies frequently encountered in medical practice by participating in the treatment planning with the faculty.

Specific Objectives:

1. Explain the benefit of current radiation therapy techniques used in the management of patients with malignant diseases.2. Understand the role for the use of the external beam, intracavitary, and interstitial radiation in the treatment of malignant diseases.
2. Describe the pathologies, incidences and, diagnosis of the most common types of cancer.

Learning Activities:

Participation on morning rounds and treatment planning conferences (tumor boards) which include interaction with all the oncologic specialties such as surgical, medical, gyneocologic, breast, head and neck and pediatric oncology teams.

Evaluation and Assessment:

Case Presentations will be evaluated by different attendings by verbal thorough discussion. Students professionalism would also be assed: arrives in timely manner with adequate dress code and attitude throughout the rotation period.

Person in Charge	**:**	Dr. Fernando Cabanillas y el Dr. Roberto Santiago
Dates Offered	**:**	By arrangements
Course Duration	**:**	2-8 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Auxilio Mutuo Hospital
Grading System	**:**	Honor, Pass or Fail

Approved by Curr C SOM
June 30, 2020
Prof. Zilka Ríos
Associate Dean for Academic Affairs SOM

DEANSHIP IN MEDICINE

MDEAN-01 STUDENT AS TEACHER

Prerequisites: Third Year of Medicine

This elective is designed to train students to become competent teacher. Student teachers can assist in obtaining better academic performance from learners. Principles of learning theory, effective teaching techniques and evaluation of performance, including effective methods of giving feedback to trainees, are presented in didactic sessions. There is emphasis upon how to teach clinical skills effectively. This theory is put into practice by the participant in the elective, who serves as an instructor for freshman, sophomore and junior students in physical diagnosis and interviewing, and an evaluator of their performance during standardized patient examinations. By serving as teacher and evaluator the participant enhances his/her own clinical skills.

Person in Charge	**:**	Dr. José M. Rivera-Martínez
Dates Offered	**:**	Throughout the Academic Year (Except July) **Strictly by appointment.**
Course Duration	**:**	2-4 weeks
Enrollment per Session	**:**	2 students unless otherwise appointed by the person in charge
Meeting Place	**:**	Multidisciplinary Clinical Skills Training Center (MdCSTC)
Evaluation	**:**	The participant is evaluated on the basis of attendance at all required activities, review of recorded performance-based examinations, and feedback from the supervisor/ faculty and the students who have been taught clinical skills by the participant.

General Educational Objectives:

1. Expose student to the teaching environment
2. Improve student's teaching skills knowledge and attitudes toward teaching
3. Teach students how to provide effective feedback to students
4. Improve organizational skills of students
5. Develop positive relationships among students
6. Provide teacher training for future faculty members
7. Improve self discipline and sense of professionalism
8. Improve clinical judgment

Grading System:

Participation and Clinical (subjective) evaluations	75%
Case Presentation - Mini Lecture	25%

RESEARCH

MERE-01 RESEARCH ELECTIVE

Pre-Requisites: Have already completed all the requirements of third year and had already demonstrated to have taken USMLE Clinical Skills 2 examination.

Description:

Typically involve a student working with a faculty member that has an on-going research or one that is interested in starting a research project student who want to receive credit for research electives must meet with the Medical Electives Coordinator and the UCC research faculty advisor before beginning the research project. Submit the final project and have a meeting with research faculty advisor at the institution.

Obtain an M4 Research Elective Proposal form. The student should discuss the form with the sponsor of the research and then complete the research form. The student will be part of a research team, which include principal investigator (preceptor), co-investigators and auxiliary personnel. Duties will be according to the assignment position within the research team, which may include participation in the study design, review of literature, data recording, sampling and presentation and or publishing final work.

General Education Objectives:

Research electives are available to well-qualified students who have established solid academic success as well as good clinical evaluations. Research electives should be complementary to the overall medical school experience.

Specific Objectives:

1. Identify a research faculty research mentor and proposed project.
2. Obtain regulatory approval for the project, as appropriate. In most cases this will include writing and submitting a protocol to the IRB.
3. Present findings to the assigned research faculty assign within the institution. Submit a final product to the resident research office. This may be an abstract, a poster presentation, the draft of a paper, or a publication.
4. Research electives in the M4 year at UCC can be designed to receive two or, four, or eight weeks of credit.
5. The work load demand in the designed rotation should be appropriate for the number of hours of credit proposed.

Dates Offered	**:**	All year long
Course Duration	**:**	2 -4 weeks
Enrollment per Session	**:**	1 student
Meeting Place	**:**	Depends on the research facility
Evaluation		Pass or Fail