



Universidad Central del Caribe



# SENIOR ELECTIVES CATALOG



**2022-23**

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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-Fail** basis. Outstanding performance is recorded as **Honors** for the purposes of future recommendations for professional opportunities.

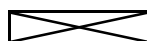
### V. **MALPRACTICE COVERAGE**

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.

# ELECTIVES DATES FOR REGISTRATION



			2 Week	3 Week	4 Week	5 Week	6 Week
Aug. 1-5	1						
Aug. 8-12	2						
Aug. 15-19	3						
Aug. 22-26	4						
Aug. 29- Sept 2	5						
Sept. 5-9	6						
Sept. 12-16	7						
Sept. 19-23	8						
Sept. 26-30	9						
Oct. 3-7	10						
Oct. 10-14	11						
Oct. 17-21	12						
Oct. 24-28	13						
Oct 31-Nov. 4	14						
Nov. 7-11	15						
Nov. 14-18	16						
Nov. 21-25	17						
Nov. 28-Dec. 2	18						
Dec. 5-9	19						
Dec. 12-16	20						
Dec. 19-23	X	<b>CHRISTMAS RECESS</b> (Dec 19, 2022-Jan 6, 2023)					
Dec. 26-30	X						
Jan. 2-6	X						
Jan. 9-13	21						
Jan. 16-20	22						
Jan. 23-27	23						
Jan. 30-Feb. 3	24						
Feb. 6-10	25						
Feb. 13-17	26						
Feb. 20-24	27						
Feb. 27-Mar. 3	28						
Mar. 6-10	29	<b>Selected Topics &amp; Bioethics IV</b>					
Mar. 13-17	30						
Mar. 20-24	31						
Mar. 27-31	32						
Apr. 3-7	33						
Apr. 10-14	34						
Apr. 17-21	35						
Apr. 24-28	36						
May 1-5	37						
May 8-12	38						
May 15-19	39						
May 22-26	40						



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**Virtual**

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## DEPARTMENT OF ANATOMY AND CELL BIOLOGY

### 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.

<b>Person in Charge</b>	:	Sofía Jiménez, Ph. D.
<b>Dates Offered</b>	:	<i>(By arrangement)</i>
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	5 students
<b>Meeting Place</b>	:	Anatomy Department
<b>Evaluation</b>	:	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 asked 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.

<b>Person in Charge</b>	:	Dra. Sofia Jiménez, M. D.
<b>Dates Offered</b>	:	<i>(By arrangement)</i>
<b>Course Duration</b>	:	2 - 4 weeks
<b>Enrollment per Session</b>	:	2 students
<b>Meeting Place</b>	:	Anatomy Department
<b>Evaluation</b>	:	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 and snail venoms and mechanism of apoptosis. The student will actively participate in individual research 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.

<b>Person in Charge</b>	:	
<b>Dates Offered</b>	:	<i>(By arrangement)</i>
<b>Course Duration</b>	:	4-6 weeks
<b>Enrollment per Session</b>	:	1-2 per laboratory
<b>Meeting Place</b>	:	Departmental Research Labs
<b>Evaluation</b>	:	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 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

<b>Person in Charge</b>	:	
<b>Dates Offered</b>	:	<i>(By arrangement)</i>
<b>Course Duration</b>	:	6 weeks
<b>Enrollment per Session</b>	:	1-2 per laboratory
<b>Meeting Place</b>	:	Laboratory
<b>Evaluation</b>	:	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 Immunochistochemistry 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.

<b>Person in Charge</b>	:	Miguel Noy, M.D. Laboratorio de Patología Dr. Noy Edificio Capital Center, Sótano Torre 1 Hato Rey, Puerto Rico (787) 751-1312
<b>Dates Offered</b>	:	Through-out the academic year, by arrangement
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	1
<b>Meeting Place</b>	:	Private office Pathology
<b>Evaluation</b>	:	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 neurodegeneration, 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.

<b>Person in Charge</b>	:	Faculty of Pharmacology Department
<b>Dates Offered</b>	:	<i>(By arrangement)</i>
<b>Course Duration</b>	:	4-6 weeks
<b>Enrollment per Session</b>	:	1-6 students
<b>Meeting Place</b>	:	Pharmacology Department
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	Faculty of Biochemistry Department
<b>Dates Offered</b>	:	Summer (MS 1,2,3;All Year(MS4)
<b>Course Duration</b>	:	6 weeks
<b>Enrollment per Session</b>	:	6 students
<b>Meeting Place</b>	:	Biochemistry Department
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	To be assigned by the Chief Department
<b>Dates Offered</b>	:	Summer
<b>Course Duration</b>	:	6-7 weeks
<b>Enrollment per Session</b>	:	2 students
<b>Meeting Place</b>	:	Department of Physiology
<b>Evaluation</b>	:	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

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



## MEMED-09

## EMERGENCY MEDICINE ELECTIVE

**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.

<b>Person in Charge</b>	:	
<b>Dates Offered</b>	:	Academic Year (By arrangement)
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	1-2 students
<b>Meeting Place</b>	:	HIMA Hospital Caguas
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	Eric González, M. D.
<b>Dates Offered</b>	:	Throughout the Year (By arrangement with the Department of Family Medicine)
<b>Course Duration</b>	:	3-4 weeks
<b>Enrollment per Session</b>	:	2 students
<b>Meeting Place</b>	:	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.

<b>Person in Charge</b>	:	Eric González, M. D.
<b>Dates Offered</b>	:	Throughout the Year (By arrangement with the Department of Family Medicine)
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	3 students
<b>Meeting Place</b>	:	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.

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

**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 :**

<b>Dates Offered</b>	:	August through June
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	By Coordination with preceptor
<b>Meeting Place</b>	:	As per previous agreement
<b>Evaluation</b>	:	Pass or Fail
		50% Weekly presentations
		50% Weekly journal

## **MFMED-71 PRIMARY PREVENTION, THE SYSTEMIC RESPONSE TO PANDEMIC**

**Prerequisites:** Successful completion of Year 3

### **Justification:**

## **NOT AVAILABLE AT THIS MOMENT**

ain responsibility of the academic with teaching opportunities that need to be addressed in such a manner that patient management can be converted into community and population health care teaching opportunities. In order to address these needs, the health care workers have to recognize the science behind the tenets of evidence based public health science. Understanding the evidence behind the decision process prepares the healthcare worker to organize, participate and educate the general public on the correct response in the approach to treatment of any condition.

The university community, in following its mission and vision, decided that this situation is an opportunity to make a difference in the healthcare of our community and to teach the future HCP the knowledge and skills needed in the approach to population health science.

Our students will have the opportunity to participate in all stages of planning and delivering the health care needed. The final objective is to transform this crisis into an inter-professional, interdisciplinary program that gives our students the opportunity to develop knowledge and skills of public health during a situation that has modified and caused hardships for the community.

We aim to integrate the student body of the UCC to this effort and transform it into a teaching experience that illustrates the scientific method applied to public health

### **Course Description:**

This one to two week or (forty to eighty-hour) elective course will follow a designed curriculum collected from lectures in public health, the scientific method applied to community health, the immunologic response, and the principles and design of vaccines. The elective aims to provide medical students a partial and independent learning experience relevant to the field of public health. Student will be assigned independent readings, online modules with some on-line scenarios. The rotation will help students incorporate evidence-based strategies for public health services, while experiencing the science, diversity and evolution of vaccines as a primary prevention strategy. Additionally, weekly vaccination clinics will be held to practice the skills and knowledge acquired.

### **General Objectives:**

The vaccination clinics against COVID-19 offers the opportunity for our students to complete the following academic objectives:

#### **Patient care:**

- Apply clinical skills in
  - focused history
  - health education
  - informed consent
  - vaccination
- Limited physical examination (vital signs)
- Criteria for admission and discharge from observation area
- Vaccine management and content (custody, temperature monitoring, etc. )

**Medical Knowledge:**

- Application of theoretical concepts for the management of health strategies for the control of a pandemic (public health and community health).
- Analysis of scientific and clinical information on COVID-19
- Introduction to concepts of infection control, management of personal protective equipment
- Development of primary prevention strategies.

**Practice based learning and improvement:**

Developing leadership skills and teaming

The vaccination process: keep; scheduling; safety; and practice. (3rd & 4th year)

- Risk assessment and stratification in organizing the immunization clinics scheduling and appointment
- Organizing the human resources, streamlining the process.

**Communication and interpersonal skills:**

- Teaching and interaction with peers and students in different levels of training (*students as teacher*)
- Developing cultural appropriate COVID-19 & vaccination materials by age group. (English and Spanish)
- Developing skills to make problem specific interviews.
- Teaming / interprofessional

**Professionalism:**

- Volunteer Community Service
- Respectfully addressing concerns of the patients.

**System-based learning**

Introduction to concepts of billing and health insurance coverage.

Understanding and applying systematic approach to vaccination during special circumstances.

Developing and applying leadership skills.

- Applying basic public health theoretical concepts and strategies in the management during a pandemic
- Applying peer teaching skills (*students as teacher*)
- Analysis and discussion scientific and clinical research on COVID-19
- Application of clinical skills in the areas of clinical history, health education, informed consent, vaccination, vitals intake and observation area **discharge process**
- Introduction to concepts of infection control and proper use of Personal Protective Equipment  
Introduction to billing **concepts**
- Induction in the vaccination process from theoretical workshops to the practical execution of vaccination (3rd & 4th year)
- Understanding the stratification of risk and phasing in the vaccination strategies to manage risk in the process. (appointment, post vaccination observation guidelines and participant education)  
Induction in the vaccination process from theoretical workshops to the practical execution of vaccination (3rd & 4th year)
- Developing cultural appropriate educational materials about COVID-19 and the vaccine (in Spanish and English)
- Management of available resources to attain a more efficient process in delivering services, while emphasizing personal and community security.
- Development of communication and interview skills
- Teaming / interprofessional

## Development of primary prevention strategies

<b>Person in Charge</b>	:	Dr. Harry Mercado
<b>Dates Offered</b>	:	By arrangement
<b>Course Duration</b>	:	1-2 weeks or 40 to 80 hours longitudinal
<b>Enrollment per Session</b>	:	By arrangement
<b>Meeting Place</b>	:	Vaccination Center/Virtual Zoom Meeting
<b>Grading System</b>	:	Honor, Pass or Fail

## MFMED-72 SENSIBILITY AND COMPETENCE IN LGBTQ HEALTH AND CLINICAL PRACTICE

**Prerequisites:** Successful completion of Year 3

Prerequisites:

The course is designed as an elective for medical students in the senior year of their undergraduate medical program. For medical students to participate, they **MUST**:

- Be officially promoted and registered in their fourth year (MS4). The course aligns with the rules and regulations that apply to fourth-year electives as per Universidad Central del Caribe School of Medicine academic procedures and requirements.
- Register and complete all conferences in the Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting. **This is a web-based coursework that students can complete at their own time and expense.**

**Duration:**

There are two pathways to this elective:

**❑ Partial Experience (2 non-directed elective weeks):**

- ❑ Students complete the Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting and its requirements in its entirety.
- ❑ Students receive a certificate upon completion of the program.

**❑ Full Experience (4 weeks):**

- ❑ Students complete the Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting and its requirements in its entirety.
- ❑ Students receive a certificate upon completion of the program.
- ❑ Students **MUST** complete a stipulated amount of hours of clinical exposure at Centro Ararat or any other pre-approved clinic with a significant LGBTQ patient population.
- ❑ Students **Must** complete all required group discussions and evaluations provided by the course faculty.

### COVID-19 Alternative

*Suppose the ongoing pandemic limits the possibility of in-person clinical participation. In that case, the **Full Experience** will evaluate students by scheduling required discussion group sessions to discuss clinical scenarios similar to Problems in Evidenced Based Medicine as well as an OSCE-type final evaluation and any other activity prepared by the faculty. Students must attend and participate in all scheduled group discussion sessions and assessments to ensure integration and understanding of the information discussed in the conferences and fulfill the elective requirements.*

Number of Students per Rotation:

**❑ Partial Experience (2 weeks)**

- ❑ Any student who completes the Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting in its entirety AND
- ❑ Receives a certificate upon completion of the program.

**❑ Full Experience (4 weeks)**

- ❑ A select number of students will be accepted in the course. The number is determined by the space allocations at Centro Ararat or any other pre-approved clinic for students to complete their clinical component OR the capacity in which faculty and preceptors can evaluate students in discussion group sessions and OSCE.



## Meeting Place:

- ☐ In person
  - ☐ Clinical Practice would be performed at Centro Ararat or any other pre-approved clinic with a significant LGBTQ patient population.
- ☐ Virtual
  - ☐ The Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting is **currently being recorded to be available online by January 2021**. When it becomes fully available, students can register and complete all the required conferences at their own time and expense. **In the case of the Full Experience, the conferences must be completed prior to clinical rotation, group discussions and OSCE evaluation.**
  - ☐ Required group discussion sessions and OSCE will be scheduled in a fixed set of days or week to be completed during the second half (March-May) of the Spring semester.

### COVID-19 Alternative

*Suppose the ongoing pandemic limits the possibility of in-person clinical participation. In that case, the Full Experience will be completely virtual*

## I. Justification

Obtained from Perceptions, Attitudes, and Competencies of Medical Professionals, Faculty, and Students Regarding Education and Training on LGBTQ Health in Puerto Rico.

“During the past decade, there has been a significant amount of civil rights progress for the Lesbian, Gay, Bisexual, Transsexual, and Queer (LGBTQ) community. In 2011, the US Military Service ended the “Don’t Ask, Don’t Tell” policy allowing gay men and women to serve openly. In 2015, the Supreme Court of the United States eliminated all nation-wide ban on same-sex marriage, allowing couples of the same sex to enjoy the same civil rights and liberties as their heterosexual counterparts. The progressive stance in solidarity with the LGBTQ community from many sectors, including the medical profession, has led to an increased awareness of the need to address the issues that affect this marginalized and vulnerable population. Research suggests that LGBTQ individuals experience disparities when accessing health care. The Health of Lesbian, Gay, Bisexual, and Transgender People report by the National Institutes of Health (NIH) states that “... barriers to accessing health care, many of which can be traced to stigma and its consequences.” A significant portion of our current state of inequality can be attributed to a lack of knowledge and understanding of the health idiosyncrasies of LGBTQ patients. A pilot study that surveyed six hundred and fifty-eight medical students in the New England region of the United States found that a large majority (~93%) felt comfortable caring for “sexual and gender minorities.” However, 76.7% of the surveyed participants felt unapt to care for this patient population, and many addressed not being sufficiently educated and trained by their medical education institutions (Zelin NS, et al. 2018). In another study by Boston University Medical School, medical students were questioned about their competence in trans and intersex health topics. Coincidentally, students who identified as LGBTQ demonstrated a better understanding of the subject versus their non-LGBTQ classmates. We can correctly assume that self-identified LGBTQ medical students bring a wealth of experience working with trans and inters sex populations before medical school attendance, evidencing that exposure to LGBTQ-specific coursework and clinical training serves as a promising approach to closing the knowledge gap.

**Our current medical education curricula do not provide training physicians with the necessary skills to adequately address and serve the LGBTQ patient population.** In a 2011 study, deans or similarly appointed officials from medical schools in the United States and Canada found that the median amount of time spent educating their students on LGBTQ-related topics was five hours throughout the average four-year programs (Obedin-Maliver J, et al. 2011). To improve their education, many academic medical institutions have begun to reevaluate their curriculum to align them with the objectives of diversity and inclusion by the Association of American Medical

Colleges (AAMC). Two years ago, Harvard Medical School released a three-year plan that encompasses curriculum revision, faculty training and recruitment, and collaborative efforts:

“... so that all students and faculty clinicians can become exceptionally well equipped to provide high-quality, holistic health care for sexual and gender minority patients of all ages.”

There is an estimated 5-10% of US citizens who identify themselves as LGBTQ (Grant JM, et al. 2010). As our society becomes more acceptable to the LGBTQ community, we can expect an increased number of individuals to “come out” (a term used to define the act of publicly acknowledging his/her own gender identity, orientation, and expression). Consequently, these individuals would be more likely to have a more active role in society, such as seeking health care. Thus, there will be a more considerable need to attend to this patient population, and health professionals should be prepared to engage with them in health care settings.”

## II. Course Description

This course is a fourth-year clinical elective for senior medical students and it can fulfill non-directed elective course graduation requirements. The educational experience will introduce students to topics related to the LGBTQ+ community, such as gender identity, sexual orientation, cultural sensitivity, LGBTQ health, etc. Multidisciplinary theoretical and clinical experience will train students to engage with a diverse population of patients who may identify as lesbian, gay, bisexual, transgender, queer, intersex, or asexual (LGBTQIA+). There are two components: theoretical and clinical practice (only relevant to students in the **Full Experience** track). The theoretical feature includes over 21 hours of exposure in LGBTQ topics provided by the Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting.

### *Preliminary Course Listing*

Duración	Tema
1 hora	Introducción: Sensibilidad y competencia en el servicio de salud LGBTTTQ
1 hora	Discrimen, Fobias y violencia en la comunidad LGBTTTQ
1 hora	Determinantes sociales de la salud y política pública
1 hora	Aspectos Legales
1 hora	Sensibilidad Cultural y adiestramiento al Personal Administrativo y de recepción

Please see attachments of “Diseno Curricular” and “Programa Certificacion” for more details.

1 hora	Panel de la comunidad: David e Ivanna Fred
2 horas	Discusión de casos en tiempo real
1 hora	La Salud Mental de las personas LGBTTQ
1 hora	El duelo en la comunidad LGBT
1 hora	Uso problemático de sustancias y txs
1 hora	Desarrollo de Identidades de genero diversas
1 hora	Intersexualidad
1 hora	Aspectos sociales y de familia
2 horas	Parafilias, poliamor y salud sexual
1 hora	Población LGBTTQ de adultos mayores y Diversidad funcional
1.5 horas	Discusión de casos
2 horas	Manejo de salud para una comunidad diversa. Evaluación y Prevención
1 hora	Necesidades médicas y Tx médico de las personas LGBTTQ y Enfoque Interdisciplinario
1 hora	Cirugías
1 hora	Evaluación de la Salud Oral
Discusión de casos, Actividades, Evaluación con paciente LGBTQ estandarizado.	
Pasantía	PENDING
Prueba final	PENDING

Please see attachments of “Diseño Curricular” and “Programa Certificacion” for more details

Students are expected to gain the perspective and necessary skills to address LGBTQ+ patients with confidence and sensibility towards their health idiosyncrasy and needs. They will also be immersed in the importance of health promotion and advocacy for this vulnerable population. The backbone of this course is sourced from the AAMC report: **“Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals who are LGBT, Gender Nonconforming, or Born with DSD: A Resource for Medical Educators,”** with particular attention to the competencies detailed below (see competencies).

## II. Competencies

Obtained from: *“Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD.” (To be used as a guide to provide the most comprehensive experience. The course may not include all competencies.)*

Patient Care	<p><b><i>Gather essential and accurate information about patients and their conditions through history taking, physical examination, and the use of laboratory data, imaging, and other tests by:</i></b></p> <ol style="list-style-type: none"> <li>1. Sensitively and effectively eliciting relevant information about sex anatomy, sex development, sexual behavior, sexual history, sexual orientation, sexual identity, and gender identity from all patients in a developmentally appropriate manner.</li> <li>2. Performing a complete and accurate physical exam with sensitivity to issues specific to the individuals described above at stages across the lifespan. This includes knowing when particulars of the exam are essential and when they may be unnecessarily traumatizing (as may be the case, for example, with repeated genital exams by multiple providers).</li> </ol> <p><b><i>Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment by:</i></b></p> <ol style="list-style-type: none"> <li>3. Describing the special health care needs and available options for quality care for transgender patients and for patients born with DSD (e.g., specialist counseling, pubertal suppression, elective and nonelective hormone therapies, elective and nonelective surgeries, etc.).</li> </ol> <p><b><i>Counsel and educate patients and their families to empower them to participate in their care and enable shared decision-making by:</i></b></p> <ol style="list-style-type: none"> <li>4. Assessing unique needs and tailoring the physical exam and counseling and treatment recommendations to any of the individuals described above, taking into account any special needs, impairments, or disabilities.</li> <li>5. Recognizing the unique health risks and challenges often encountered by the individuals described above, as well as their resources, and tailoring health messages and counseling efforts to boost resilience and reduce high-risk behaviors.</li> </ol> <p><b><i>Provide health care services to patients, families, and communities aimed at preventing health problems or maintaining health by:</i></b></p> <ol style="list-style-type: none"> <li>6. Providing effective primary care and anticipatory guidance by utilizing screening tests, preventive interventions, and health care maintenance for the populations described above (e.g., screening all individuals for inter-partner violence and abuse; assessing suicide risk in all youth who are gender nonconforming and/or identify as gay, lesbian, bisexual and/or transgender; and conducting screenings for transgender patients as appropriate to each patient's anatomical, physiological, and behavioral histories).</li> </ol>
Knowledge for Practice	<p><b><i>Apply established and emerging biophysical scientific principles fundamental to health care for patients and populations by:</i></b></p> <ol style="list-style-type: none"> <li>1. Defining and describing the differences among: sex and gender; gender expression and gender identity; gender discordance, gender nonconformity, and gender dysphoria; and sexual orientation, sexual identity, and sexual behavior.</li> <li>2. Understanding typical (male and female) sex development and knowing the main etiologies of atypical sex development.</li> </ol>

	<p>3. Understanding and explaining how stages of physical and identity development across the lifespan affect the above-described populations and how health care needs and clinical practice are affected by these processes.</p> <p><b><i>Apply principles of social-behavioral sciences to the provision of patient care, including assessment of the impact of psychosocial and cultural influences on health, disease, care seeking, care compliance, and barriers to and attitudes toward care by:</i></b></p> <p>4. Understanding and describing historical, political, institutional, and sociocultural factors that may underlie health care disparities experienced by the populations described above.</p> <p><b><i>Demonstrate an investigatory and analytic approach to clinical situations by:</i></b></p> <p>5. Recognizing the gaps in scientific knowledge (e.g., efficacy of various interventions for DSD in childhood; efficacy of various interventions for gender dysphoria in childhood) and identifying various harmful practices (e.g., historical practice of using “reparative” therapy to attempt to change sexual orientation; withholding hormone therapy from transgender individuals) that perpetuate the health disparities for patients in the populations described above.</p>
<b>Practice-Based Learning and Improvement</b>	<p><b><i>Identify strengths, deficiencies, and limits in one’s knowledge and expertise by:</i></b></p> <p>1. Critically recognizing, assessing, and developing strategies to mitigate the inherent power imbalance between physician and patient or between physician and parent/guardian, and recognizing how this imbalance may negatively affect the clinical encounter and health care outcomes for the individuals described above.</p> <p>2. Demonstrating the ability to elicit feedback from the individuals described above about their experience in health care systems and with practitioners, and identifying opportunities to incorporate this feedback as a means to improve care (e.g., modification of intake forms, providing access to single-stall, gender-neutral bathrooms, etc.).</p> <p><b><i>Locate, appraise, and assimilate evidence from scientific studies related to patients’ health problems by:</i></b></p> <p>3. Identifying important clinical questions as they emerge in the context of caring for the individuals described above, and using technology to find evidence from scientific studies in the literature and/or existing clinical guidelines to inform clinical decision making and improve health outcomes.</p>

<b>Interpersonal and Communication Skills</b>	<p><b><i>Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds by:</i></b></p> <ol style="list-style-type: none"> <li>1. Developing rapport with all individuals (patient, families, and/or members of the health care team) regardless of others' gender identities, gender expressions, body types, sexual identities, or sexual orientations, to promote respectful and affirming interpersonal exchanges, including by staying current with evolving terminology.</li> <li>2. Recognizing and respecting the sensitivity of certain clinical information pertaining to the care of the patient populations described above, and involving the patient (or the guardian of a pediatric patient) in the decision of when and how to communicate such information to others.</li> </ol> <p><b><i>Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions by:</i></b></p> <ol style="list-style-type: none"> <li>3. Understanding that implicit (i.e., automatic or unconscious) bias and assumptions about sexuality, gender, and sex anatomy may adversely affect verbal, nonverbal, and/or written communication strategies involved in patient care, and engaging in effective corrective self-reflection processes to mitigate those effects.</li> <li>4. Identifying communication patterns in the health care setting that may adversely affect care of the described populations, and learning to effectively address those situations in order to protect patients from the harmful effects of implicit bias or acts of discrimination.</li> </ol>
<b>Professionalism</b>	<p><b>Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation by:</b></p> <ol style="list-style-type: none"> <li>1. Recognizing and sensitively addressing all patients' and families' healing traditions and beliefs, including health-related beliefs, and understanding how these might shape reactions to diverse forms of sexuality, sexual behavior, sexual orientation, gender identity, gender expression, and sex development.</li> </ol> <p><b>Demonstrate respect for patient privacy and autonomy by:</b></p> <ol style="list-style-type: none"> <li>2. Recognizing the unique aspects of confidentiality regarding gender, sex, and sexuality issues, especially for the patients described above, across the developmental spectrum, and by employing appropriate consent and assent practices.</li> </ol> <p><b>Demonstrate accountability to patients, society, and the profession by:</b></p> <ol style="list-style-type: none"> <li>3. Accepting shared responsibility for eliminating disparities, overt bias (e.g., discrimination), and developing policies and procedures that respect all patients' rights to self-determination.</li> <li>4. Understanding and addressing the special challenges faced by health professionals who identify with one or more of the populations described above in order to advance a health care environment that promotes the use of policies that eliminate disparities (e.g., employee nondiscrimination policies, comprehensive domestic partner benefits, etc.).</li> </ol>

<b>System-Based Practice</b>	<p><b>Advocate for quality patient care and optimal patient care systems by:</b></p> <ol style="list-style-type: none"> <li>1. Explaining and demonstrating how to navigate the special legal and policy issues (e.g., insurance limitations, lack of partner benefits, visitation and nondiscrimination policies, discrimination against children of same-sex parents, school bullying policies) encountered by the populations described above.</li> </ol> <p><b>Coordinate patient care within the health care system relevant to one's clinical specialty by:</b></p> <ol style="list-style-type: none"> <li>2. Identifying and appropriately using special resources available to support the health of the individuals described above (e.g., targeted smoking cessation programs, substance abuse treatment, and psychological support).</li> <li>3. Identifying and partnering with community resources that provide support to the individuals described above (e.g., treatment centers, care providers, community activists, support groups, legal advocates) to help eliminate bias from health care and address community needs.</li> </ol> <p><b>Participate in identifying system errors and implementing potential systems solutions by:</b></p> <ol style="list-style-type: none"> <li>4. Explaining how homophobia, transphobia, heterosexism, and sexism affect health care inequalities, costs, and outcomes.</li> <li>5. Describing strategies that can be used to enact reform within existing health care institutions to improve care to the populations described above, such as forming an LGBT support network, revising outdated nondiscrimination and employee benefits policies, developing dedicated care teams to work with patients who were born with DSD, etc.</li> </ol> <p><b>Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care by:</b></p> <ol style="list-style-type: none"> <li>6. Demonstrating the ability to perform an appropriate risk/benefit analysis for interventions where evidence-based practice is lacking, such as when assisting families with children born with some forms of DSD, families with prepubertal gender nonconforming children, or families with pubertal gender nonconforming adolescents.</li> </ol>
<b>Interprofessional Collaboration</b>	<p><b>Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust by:</b></p> <ol style="list-style-type: none"> <li>1. Valuing the importance of interprofessional communication and collaboration in providing culturally competent, patient-centered care to the individuals described above and participating effectively as a member of an interdisciplinary health care team.</li> </ol>
<b>Personal and Professional Development</b>	<p><b>Practice flexibility and maturity in adjusting to change with the capacity to alter one's behavior by:</b></p> <ol style="list-style-type: none"> <li>1. Critically recognizing, assessing, and developing strategies to mitigate one's own implicit (i.e., automatic or unconscious) biases in providing care to the individuals described above and recognizing the contribution of bias to increased iatrogenic risk and health disparities.</li> </ol>

#### IV. Goal (s)

**Obtained from: "Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD"**

1. "Increase health care professionals' awareness and knowledge of health risk and potential resiliency of people who may be LGBT, gender nonconforming, and/or born with DSD."
2. "Train students to provide high-quality, patient-centered care to patients who are LGBT, gender nonconforming, and/or born with DSD."
3. "Inspire students to be advocates for the health of these populations."

## **V. General Objectives**

***Obtained from: "Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD"***

1. "To educate the reader (ie. student) about people who may be LGBT, gender nonconforming, and/or born with DSD and about the role of academic medicine in supporting these populations."
2. "To instruct medical schools on the importance of evaluating their cultural climates and on how to implement curricular changes and assess the effectiveness of curricula as they relate to people who may be LGBT, gender nonconforming, and/or born with DSD."
3. To provide a framework to facilitate the assessment of new curricula."

## **VI. Specific Objectives**

***Obtained from: "Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD."***

(To be used as a guide to provide the most comprehensive experience. The course may not include all competencies.)



<b>Patient Care</b>	<ol style="list-style-type: none"> <li>1. Sensitively and effectively eliciting relevant information about sex anatomy, sex development, sexual behavior, sexual history, sexual orientation, sexual identity, and gender identity from all patients in a developmentally appropriate manner.</li> <li>2. Performing a complete and accurate physical exam with sensitivity to issues specific to the individuals described above at stages across the lifespan. This includes knowing when particulars of the exam are essential and when they may be unnecessarily traumatizing (as may be the case, for example, with repeated genital exams by multiple providers).</li> <li>3. Describing the special health care needs and available options for quality care for transgender patients and for patients born with DSD (e.g., specialist counseling, pubertal suppression, elective and nonelective hormone therapies, elective and nonelective surgeries, etc.).</li> <li>4. Assessing unique needs and tailoring the physical exam and counseling and treatment recommendations to any of the individuals described above, taking into account any special needs, impairments, or disabilities.</li> <li>5. Recognizing the unique health risks and challenges often encountered by the individuals described above, as well as their resources, and tailoring health messages and counseling efforts to boost resilience and reduce high-risk behaviors.</li> <li>6. Providing effective primary care and anticipatory guidance by utilizing screening tests, preventive interventions, and health care maintenance for the populations described above (e.g., screening all individuals for inter-partner violence and abuse; assessing suicide risk in all youth who are gender nonconforming and/or identify as gay, lesbian, bisexual and/or transgender; and conducting screenings for transgender patients as appropriate to each patient's anatomical, physiological, and behavioral histories).</li> </ol>
<b>Knowledge for Practice</b>	<ol style="list-style-type: none"> <li>1. Defining and describing the differences among: sex and gender; gender expression and gender identity; gender discordance, gender nonconformity, and gender dysphoria; and sexual orientation, sexual identity, and sexual behavior.</li> <li>2. Understanding typical (male and female) sex development and knowing the main etiologies of atypical sex development.</li> <li>3. Understanding and explaining how stages of physical and identity development across the lifespan affect the above-described populations and how health care needs and clinical practice are affected by these processes.</li> <li>4. Understanding and describing historical, political, institutional, and sociocultural factors that may underlie health care disparities experienced by the populations described above.</li> <li>5. Recognizing the gaps in scientific knowledge (e.g., efficacy of various interventions for DSD in childhood; efficacy of various interventions for gender dysphoria in childhood) and identifying various harmful practices (e.g., historical practice of using "reparative" therapy to attempt to change sexual orientation; withholding hormone therapy from transgender individuals) that perpetuate the health disparities for patients in the populations described above.</li> </ol>
<b>Practice-Based Learning and Improvement</b>	<ol style="list-style-type: none"> <li>1. Critically recognizing, assessing, and developing strategies to mitigate the inherent power imbalance between physician and patient or between physician and parent/guardian, and recognizing how this imbalance may negatively affect the clinical encounter and health care outcomes for the individuals described above.</li> </ol>

	<ol style="list-style-type: none"> <li>Demonstrating the ability to elicit feedback from the individuals described above about their experience in health care systems and with practitioners, and identifying opportunities to incorporate this feedback as a means to improve care (e.g., modification of intake forms, providing access to single-stall, gender-neutral bathrooms, etc.).</li> <li>Identifying important clinical questions as they emerge in the context of caring for the individuals described above, and using technology to find evidence from scientific studies in the literature and/or existing clinical guidelines to inform clinical decision making and improve health outcomes.</li> </ol>
<b>Interpersonal and Communication Skills</b>	<ol style="list-style-type: none"> <li>Developing rapport with all individuals (patient, families, and/or members of the health care team) regardless of others' gender identities, gender expressions, body types, sexual identities, or sexual orientations, to promote respectful and affirming interpersonal exchanges, including by staying current with evolving terminology.</li> <li>Recognizing and respecting the sensitivity of certain clinical information pertaining to the care of the patient populations described above, and involving the patient (or the guardian of a pediatric patient) in the decision of when and how to communicate such information to others.</li> <li>Understanding that implicit (i.e., automatic or unconscious) bias and assumptions about sexuality, gender, and sex anatomy may adversely affect verbal, nonverbal, and/or written communication strategies involved in patient care, and engaging in effective corrective self-reflection processes to mitigate those effects.</li> <li>Identifying communication patterns in the health care setting that may adversely affect care of the described populations, and learning to effectively address those situations in order to protect patients from the harmful effects of implicit bias or acts of discrimination.</li> </ol>
<b>Professionalism</b>	<ol style="list-style-type: none"> <li>Recognizing and sensitively addressing all patients' and families' healing traditions and beliefs, including health-related beliefs, and understanding how these might shape reactions to diverse forms of sexuality, sexual behavior, sexual orientation, gender identity, gender expression, and sex development.</li> <li>Recognizing the unique aspects of confidentiality regarding gender, sex, and sexuality issues, especially for the patients described above, across the developmental spectrum, and by employing appropriate consent and assent practices.</li> <li>Accepting shared responsibility for eliminating disparities, overt bias (e.g., discrimination), and developing policies and procedures that respect all patients' rights to self-determination.</li> <li>Understanding and addressing the special challenges faced by health professionals who identify with one or more of the populations described above in order to advance a health care environment that promotes the use of policies that eliminate disparities (e.g., employee nondiscrimination policies, comprehensive domestic partner benefits, etc.).</li> </ol>
<b>System-Based Practice</b>	<ol style="list-style-type: none"> <li>Explaining and demonstrating how to navigate the special legal and policy issues (e.g., insurance limitations, lack of partner benefits, visitation and nondiscrimination policies, discrimination against children of same-sex parents, school bullying policies) encountered by the populations described above.</li> <li>Identifying and appropriately using special resources available to support the health of the individuals described above (e.g., targeted smoking cessation</li> </ol>

	<p>programs, substance abuse treatment, and psychological support).</p> <p>3. Identifying and partnering with community resources that provide support to the individuals described above (e.g., treatment centers, care providers, community activists, support groups, legal advocates) to help eliminate bias from health care and address community needs.</p> <p>4. Explaining how homophobia, transphobia, heterosexism, and sexism affect health care inequalities, costs, and outcomes.</p> <p>5. Describing strategies that can be used to enact reform within existing health care institutions to improve care to the populations described above, such as forming an LGBT support network, revising outdated nondiscrimination and employee benefits policies, developing dedicated care teams to work with patients who were born with DSD, etc.</p> <p>6. Demonstrating the ability to perform an appropriate risk/benefit analysis for interventions where evidence-based practice is lacking, such as when assisting families with children born with some forms of DSD, families with prepubertal gender nonconforming children, or families with pubertal gender nonconforming adolescents.</p>
<b>Interprofessional Collaboration</b>	<p><b>Work with other health professionals to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust by:</b></p> <p>1. Valuing the importance of interprofessional communication and collaboration in providing culturally competent, patient-centered care to the individuals described above and participating effectively as a member of an interdisciplinary health care team.</p>
<b>Personal and Professional Development</b>	<p>1. Critically recognizing, assessing, and developing strategies to mitigate one's own implicit (i.e., automatic or unconscious) biases in providing care to the individuals described above and recognizing the contribution of bias to increased iatrogenic risk and health disparities.</p>

## VII. Learning Activities (also see 'Duration' section)

- ☐ Sensibilidad y Competencia en Salud LGBTTTQ program by CPI Healthcare Training & Consulting conferences (virtual) - 21+ hours of exposure in LGBTQ topics.
- ☐ Discussion Groups - Students will discuss topics covered in lectures in the form of clinical cases and share ideas to promote knowledge integration into clinical practice.
- ☐ Exposure to clinical setting ( Full Experience ) at Centro Ararat or any other pre-approved clinic with a significant LGBTQ patient population.

### **COVID-19 Alternative**

*Suppose the ongoing pandemic limits the possibility of in-person clinical participation. In that case, the Full Experience will evaluate students by scheduling required discussion group sessions to discuss clinical scenarios similar to Problems in Evidenced Based Medicine as well as an OSCE-type final evaluation and any other activity prepared by the faculty. Students must attend and participate in all scheduled group discussion sessions and assessments to ensure integration and understanding of the information discussed in the conferences and fulfill the elective requirements.*

## VIII. Evaluation and Assessment

### ☐ Partial Experience (2 weeks):

- ☐ Students complete the Sensibilidad y Competencia en Salud LGBTTQ program by CPI Healthcare Training & Consulting in its entirety.
- ☐ Students receive a certificate upon completion of the program.

### ☐ Full Experience (4 weeks):

- ☐ Students complete the Sensibilidad y Competencia en Salud LGBTTQ program by CPI Healthcare Training & Consulting in its entirety.
- ☐ Students receive a certificate upon completion of the program.
- ☐ Students **Must** complete a stipulated amount of hours of clinical exposure at Centro Ararat or any other pre-approved clinic with a significant LGBTQ patient population.
- ☐ Students **Must** complete all required group discussions, activities and evaluations provided by the course faculty.

## IX. Grading System

Pass or Fail. Students who successfully complete all requirements and the course will receive a certification in “*Sensibility and Competence in LGBTQ Health and Clinical Practice.*”

## X. References

- *Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born with DSD*

<b>Person in Charge</b>	:	Dr. Lisa Miranda, Psy D.
<b>Dates Offered</b>	:	Spring semester of fourth year in medical school
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	
<b>Meeting Place</b>	:	Online / Clinical Facility (TBA)
<b>Grading System</b>	:	Honor, Pass or Fail

## DEPARTMENT OF INTERNAL MEDICINE

### 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 encouraged 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.

<b>Person in Charge</b>	:	Roberto Vendrell/Abdiel Cruz Gastroenterology Division
<b>Dates Offered</b>	:	Year round ( <i>By arrangement</i> )
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Gastroenterology Section in the <i>Third Floor of the University Hospital Dr. Ramón Ruiz Arnau</i> .
<b>Evaluation</b>	:	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 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 heart 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 audiovisual materials books and journals to complement their experience during the rotation. The goal of the rotation is that students learn about gastrointestinal disorders and enjoy the process of learning.

<b>Person in Charge</b>	:	Jaime Martínez-Souss, M.D.
<b>Alternate</b>	:	María Dueño, M.D.
<b>Dates Offered:</b>		Year round Academic Year: <i>(By arrangement)</i>
<b>Course Duration</b>	:	2 - 4 weeks
<b>Enrollment per Session:</b>		1 student
<b>Meeting Place</b>	:	<i>Gastroenterology Section – OPA Building</i> Veterans Administration Hospital 7:30 AM
<b>Night Duties</b>	:	No
<b>Evaluation</b>	:	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 Departmental activities is compulsory. Only one student can be accommodated per month.

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

## 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.

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

Approved by

Curr C  
SOM  
June 18, 2019  
*Prof. Zilka Reis*

Associate Dean for Academic Affairs SOM

## **MIMED-17                      INFECTIOUS DISEASES**

**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.

<b>Person in Charge</b>	:	Dr. Sol M. Carrillo
<b>Dates Offered</b>	:	Year round ( <i>By arrangement</i> )
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	<i>Conference Room, Department of Internal Medicine</i>
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	Juan A. Ruiz-Ramos, MD
<b>Dates Offered</b>	:	November-January ( <i>By arrangement</i> )
<b>Course Duration</b>	:	2-6 weeks
<b>Enrollment per Session</b>	:	2 (maximum)
<b>Meeting Place</b>	:	<i>Intensive Care Unit 3rd floor HURRA</i>
<b>Evaluation:</b>		<i>Observation by residents and Attending physicians</i>

### **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.

<b>Person in Charge</b>	:	Ana Vidal, M.D.
<b>Dates Offered</b>	:	Academic Year
<b>Course Duration</b>	:	4 weeks(160 hours)
<b>Enrollment per Session:</b>	:	1 student
<b>Meeting Place</b>	:	Neurology Section, Outpatient Additional Building (OPA)
<b>Night Duties</b>	:	No
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	José Escabí, M.D. Luis Rodríguez Ospina, M.D
<b>Dates Offered</b>	:	Academic Year
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Coronary Care Unit Veterans Administration Hospital
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	José Acevedo-Valles, MD
<b>Contact person</b>	:	Vanessa Ruíz-Antunez, MS
<b>Dates Offered</b>	:	Academic Year
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	2 students
<b>Meeting Place</b>	:	Morning Reports Auditorium 2nd Floor Veterans Administration Hospital 7:00 AM
<b>Night Duties</b>	:	Yes, Two during the rotation
<b>Evaluation</b>	:	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.

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

<b>Hospital</b>	: VA Caribbean Healthcare System
<b>Person in Charge</b>	: Glenda M. González, MD
<b>Alternate</b>	: Mérida S. Colón-Cabán, MD
<b>Course Duration</b>	: 4 weeks
<b>Enrollment</b>	: 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
<b>Dates offered</b>	: Throughout the year, space permitting
<b>Meeting Place</b>	: ID Section, OPA2, Room 2F213
<b>Night Duties</b>	: None
<b>Evaluation</b>	: 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.

<b>Person in Charge</b>	: William Rodríguez, M.D.
<b>Dates Offered</b>	: Academic Year
<b>Course Duration</b>	: 4 weeks
<b>Enrollment per Session</b>	: 2 students
<b>Meeting Place</b>	: Pulmonary Section-OPA Veterans Administration Hospital 8:00 AM
<b>Night Duties</b>	: No
<b>Evaluation</b>	: 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.

<b>Person in Charge</b>	:	Jesús Casal, M.D.
<b>Dates Offered</b>	:	Academic Year
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	1 student(by arrangement)
<b>Meeting Place</b>	:	Medical Intensive Care Unit, 1st floor "Southbed Tower" Hospital 7:00 AM
<b>Night Duties</b>	:	2 during the month
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	Héctor Cordova, M.D.
<b>Dates Offered</b>	:	By arrangement
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	2 students
<b>Meeting Place</b>	:	Renal Section Office #609 Administration Hospital 8:00 AM
<b>Night Duties</b>	:	No
<b>Evaluation</b>	:	The overall evaluation will follow the scheme used for medical interns, adapted for students.

- 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.

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

**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 Interdisciplinary Rounds, Weekly Conferences  
Post Test at the end of the Rotation

<b>Person in Charge</b>	: Carlos Cestero MD
<b>Dates Offered</b>	: All year round
<b>Course Duration</b>	: 2-4 weeks
<b>Enrollment per Session</b>	: 1 student per elective period
<b>Meeting Place</b>	: Extended Care, VA Caribbean Healthcare System Ward 3J –CLC-3, South Bed Tower, VA Caribbean Healthcare System
<b>Evaluation/Assessment</b>	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.
<b>Grading System</b>	Honors, Pass or Fail

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

## MIMED-268

## CLINICAL NEUROLOGY ELECTIVE

Prerequisites: 4th year medical student at LCME medical school

### Course Description:

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

### Justification:

Elective Neurology Rotation

### Competencies:

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

### Goal (s):

Competency in clinical neurology in preparation for the first post graduate year

### General Objective (s):

Orderly and timely clinical assessment of the neurologic patient

### Specific Objectives:

To describe major topographic features of the brain and explain the localization and diagnosis of neurological lesions.

### Learning Activities:

Clinical patient contact, reading assignments, and presentations

### Evaluation and 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 post-test, observation and interaction with patient, skills in the H&P making and documentation neurologic patient.

<b>Person in Charge</b>	: Carl Salvatti, MD, F.A.C.P, F.A.A.N, Board Certified in Neurology
<b>Dates Offered</b>	: Determined by Request
<b>Course Duration</b>	: 2-4 weeks
<b>Enrollment per Session</b>	: 2 students
<b>Meeting Place</b>	: Boca Raton Regional Hospital or Neurology office : 13445 S Military trail, Delray Beach, Fl, 33445
<b>Evaluation/Assessment</b>	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.
<b>Grading System</b>	Honors, Pass or Fail

Approved by Curr C SOM  
October 29, 2015  
*Prof. Zilka Rios*  
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.

<b>Person in Charge</b>	: Ricardo Abraham, M.D. Board Certified in Internal Medicine
<b>Dates Offered</b>	: Determined by request
<b>Course Duration</b>	: 4 weeks
<b>Enrollment per Session</b>	: 1 student per elective period
<b>Meeting Place</b>	: 3125 W Alton Gloor Blvd. Brownsville, TX 78520
<b>Evaluation/Assessment</b>	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.
<b>Grading System</b>	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 evaluate 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.

Approved by Curr C SOM

<b>Person in Charge</b>	:	John D. Nuschke, Jr., MD, FACP Board Certified in Internal Medicine, Fellow American College of Physicians <a href="mailto:jnuschke@aol.com">jnuschke@aol.com</a>
<b>Dates Offered</b>	:	All academic year
<b>Course Duration</b>	:	2 - 4 weeks
<b>Enrollment per Session</b>	:	1 student per elective period
<b>Meeting Place</b>	:	Lehigh Valley Internists / Suite 220, 798 Hausman Rd- / Allentown, PA 18104 610-530-2290 Fax 610-530-2287
<b>Evaluation/Assessment</b>		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.
<b>Grading System</b>		Honors, Pass or Fail

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

## MIMED-35

## PULMONARY MEDICINE

**Prerequisites:** Completed all third level requirements for promotion to 4th

### **Course Description:**

This is a four-week rotation in which the fourth-year medical student will be exposed to the ambulatory management of the most common pulmonary disorders, including but not limited to: pulmonary hypertension (unique service in PR); Interstitial Disease Clinic; Sleep Disorder Clinic; Chronic and Acute Pulmonary Conditions. The medical student will be exposed to the practice in the inpatient as well as the outpatient setting including diagnostic bronchoscopy, lung biopsies, thoracentesis, central line placement, etc. Student can also participate in sleep disorder clinics and pulmonary function laboratory. The student will also be exposed to the other accessory services provided in the comprehensive clinics i.e., Clinical Psychologist (sleep disorders); dental hygienist (dental ferules for sleep disorders), Rheumatology (patient with connective tissue disorders). Exposure and opportunity to participate clinical research trials that are active at the time of rotation. (Requires consent by researchers).

### **Goal:**

Develop competency in clinical pneumology in preparation for the first post graduate year.

### **Justification:**

Exposure to the clinical experience in pneumology, both ambulatory and inpatient care (consults). The student will be exposed to different setting and the most common disorders managed by the Pneumology specialist.

### **Competencies:**

**Patient Care-** Develop clinical skills in; history taking, physical examination, health education and informed consent, in the clinic's patients.

**Medical Knowledge-** Learn about most common Pneumology conditions, such as, COPD, Bronchial Asthma, Connective Tissue Disorders, etc. affecting the pulmonary system.

**Practice based Learning-** Learn the basics of teamwork and stratification of risk in management of pulmonary patients. Develop skills and knowledge in risk assessment.

**Communication and interpersonal skills-** learn the importance of teamwork and the proper interaction with other professionals. Proper and appropriate communication with patients and other members of the team.

**System based learning-** Apply proper guidelines in diagnosis and management of patients with pulmonary conditions.

**Professionalism-** respectful interaction with patients and other professionals. Respecting and complying with the institutional rules and schedules

### **General Objectives:**

Orderly clinical assessment and management of the pneumology patient.

### **Specific Objectives:**

To describe major features of the lung and the diagnosis of lung disorders and lesions. To learn the proper management of the pulmonary disorders and lesions.

**Learning Activities:**

Clinical patient contact, assignments, and participation in educational diagnostic procedures and educational activities.

<b>Person in Charge</b>	:	Dr. Alvaro Aranda
<b>Dates Offered</b>	:	Calendar Year
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	
<b>Meeting Place</b>	:	Miramar Plaza Building Suite 1240 101 San Patricio Avenue, Guaynabo, PR Meeting time 8:00 AM
<b>Evaluation and Assessment:</b>		The student will be evaluated by the coordinator or other faculty participating in the daily rounds. Skills knowledge and attitudes demonstrated during the elective course. Supervisors will be observant of interaction with patient, skills in the H&P, participation in diagnostic procedures (when appropriate).
<b>Grading System</b>		Honors, Pass or Fail

Approved by Curr C SOM  
DATE: April 6, 2022  
Prof. Zilka Ríos  
Associate Dean for Academic Affairs SOM



## DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

### 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.

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

<b>Person in Charge</b>	: Michael Gallagher, M.D.
<b>Dates Offered</b>	: August – December, January – May
<b>Course Duration</b>	: 4 weeks
<b>Enrollment per Session</b>	: 1 student
<b>Meeting Place</b>	: Holy Cross Hospital, 1500 Forest Glen Road, Silver Spring, Maryland 20910
<b>Evaluation</b>	: Elective Evaluation Form, Attendance, Case Presentation, Daily Performance.
<b>Grading System</b>	: 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 women's reproductive health. Focusing on the indications for routine screenings as well as to the proper methodology implemented when diagnosing and treating of malignant 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 common pathologies of the female reproductive tract.
3. Interpret diagnostic studies and be able to formulate a differential diagnosis.
4. Familiarize with the anatomy and identification of important anatomical landmarks when a surgical approach is necessary.

### General Objective (s):

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

### Specific Objectives

- Broaden medical knowledge of the female reproductive tract.
- Refine the approach 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 professionalism and ethics when interacting with patients as well as with the members of the medical community.

**Learning Activities:** Paper discussion, active participation and performance at office setting. Actively observe surgeries.

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

### 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.

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

<b>Person in Charge</b>	:	Gilberto Puig, M.D.
<b>Dates Offered</b>	:	Year round
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	By Arrangement Bayamón San Jorge Children's Hospital, Santurce
<b>Evaluation</b>	:	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

<b>Person in Charge</b>	:	Dra. Ana Quintero
<b>Dates Offered</b>	:	Throughout the year in previous agreement with faculty
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	1-2 students
<b>Meeting Place</b>	:	As per previous agreement
<b>Evaluation</b>		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.

<b>Course Coordinator</b>	:	Alberto Santiago Cornier, MD, PhD
<b>Course Dates</b>	:	TBA
<b>Course Duration</b>	:	4 and 8 weeks rotations
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Location</b>	:	Clinical Research Center, San Jorge Children's Hospital
<b>Learning Activities</b>	:	Daily Rounds, Case discussions
<b>Evaluation</b>	:	50% attendance, 20% assigned topics/works, 20% clinical competence, 10% professionalism/ethics
<b>Grading System</b>	:	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
- Understand the physical and psychosocial growth and development of the pediatric patient
- Understanding the influence of family, community and society on the pediatric patient during health and disease
- Understanding the importance of and strategies for health promotion and disease prevention

<b>Course Coordinator</b>	:	Dr. Vielka Cintrón, Director Graduate Medical Education Dr. Kahy Caraballo, Sub-Director Graduate Medical Education <a href="mailto:jsanchez@prwch.com">jsanchez@prwch.com</a>
<b>Course Dates</b>	:	All year except June, July and December
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	2 students
<b>Meeting Location</b>	:	PR Children's Hospital
<b>Learning Activities</b>	:	Daily Rounds, Case discussions
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	Ana I. Torres, M.D.
<b>Alternate</b>	:	Ms. Marta M. Ríos
<b>Dates Offered</b>	:	Throughout the Year
<b>Course Duration</b>	:	4 weeks(160 hours)
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Various according to selection of Veterans Administration Hospital
<b>Night Duties</b>	:	At least on call / call per week
<b>Evaluation</b>	:	The student will be evaluated in knowledge, skills, and attitudes through their clinical performance. Also written exam or its equivalent.

### MPSY-15

### PSYCHIATRY ELECTIVE IN ADULT / ADOLESCENT

**Prerequisites:** Third year

The Elective will be for fourth year (MS-IV) medical students with a duration of 4 weeks. The student should have completed his/her Psychiatric Clerkship without any deficiencies. The student is required to participate actively in all the processes of patient management, including Evaluation, Diagnosis, Designing Treatment Plan all interdisciplinary team meetings as well as family therapy and group therapy.

Our objectives are that the student will learn the basics of Evaluation, Diagnosis and Treatment in the Psychiatric Hospital. The Elective is intended to familiarize the student with basic topics of either Adolescents or Adult Psychiatry through this direct experience.

<b>Person in Charge</b>	:	Dr. William Almodovar-Medical Director
<b>Dates Offered</b>	:	During Academic Year
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Hospital Panamericano
<b>Evaluation</b>	:	The attending psychiatrist of the assigned unit will be in charge of the evaluation of the student, from his performance, including clinical skills, knowledge, attitudes for learning, responsibilities, assistance. The student will answer an oral examination of general psychiatry prepared and administered by Dra. Arlene Martínez Nieto (Who to contact: Administration Offices, First Hospital Panamericano). Tel. (787-739-5555 Ext. 440)

**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.

<b>Person in Charge</b>	:	Ana Torres, M.D.
<b>Alternate</b>	:	Ms. Marta M. Ríos
<b>Dates Offered</b>	:	Throughout the Year
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Various according to selection of Veterans Administration Hospital 7:00 A.M
<b>Night Duties</b>	:	One call per week
<b>Evaluation</b>	:	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 and treatment of drug dependency.

<b>Person in Charge</b>	:	Ana I. Torres, M.D.
<b>Dates Offered</b>	:	Throughout the Year
<b>Course Duration</b>	:	2 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Alcohol Dependence Treatment Program, one morning a week in Department of Psychiatry Veterans Administration Hospital 7:30 AM – 4:00 PM
<b>Night Duties</b>	:	No
<b>Evaluation</b>	:	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.

<b>Person in Charge</b>	:	Ana I. Torres, M.D.
<b>Dates Offered</b>	:	By arrangement
<b>Course Duration</b>	:	2 to 4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	San Juan Veterans Administration Hospital 8:00 AM
<b>Night Duties</b>	:	2 to 4 weeks
<b>Evaluation</b>	:	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 on 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.

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

### MSURG-02

### ORTHOPEDIC SURGERY

**Prerequisites:** 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:

<b>Person in Charge</b>	: Pedro Tort, MD
<b>Dates Offered</b>	: Throughout the Academic Year (Except July)
<b>Course Duration</b>	: 2-4 weeks
<b>Enrollment per Session</b>	: 2 students
<b>Meeting Place</b>	: Preceptor Office
<b>Evaluation</b>	: 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. Cecilia De Andino.

### **II. Course Description:**

Full-time clerkship of 2-4-week duration offered by the Urology Department for up to 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, 2<sup>nd</sup> Edition

<b>Person in Charge</b>	: Dr. Gabriel Miranda, Section Chief of Urology Service <a href="mailto:gjmirandar@gmail.com">gjmirandar@gmail.com</a>
<b>Dates Offered</b>	: Year-round (except July)
<b>Enrollment per Session</b>	: 2 student
<b>Meeting Place</b>	: Urology Dept. VA, By arrangement
<b>Evaluation</b>	: Clerkship Evaluation Form, daily work, and presentation.
<b>Grading System</b>	: 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.

<b>Person in Charge</b>	: Robert Lee Walton Jr., M.D.
<b>Dates Offered</b>	: Throughout the year (By arrangement)
<b>Course Duration</b>	: 2 weeks
<b>Enrollment per Session</b>	: 1-2 student
<b>Meeting Place</b>	: San Jorge Children's Hospital
<b>Evaluation</b>	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 the 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 the emergency 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, 2<sup>nd</sup> 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)

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

**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.

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

<b>Person in Charge</b>	:	Carmen Henn, MD
<b>Dates Offered</b>	:	Academic Year
<b>Course Duration</b>	:	4 weeks
<b>Enrollment per Session</b>	:	2 student
<b>Meeting Place</b>	:	Veteran's Administration- Dr. Henn's Office 7:00 AM Night Duties : No
<b>Grading System</b>	:	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.

<b>Person in Charge :</b>	Iván Sosa MD
<b>Dates Offered:</b>	Course offered most of the year. A previous approval by the HIMA Neurosurgery department is required.
<b>Course Duration:</b>	4 weeks
<b>Enrollment per Session:</b>	1 student
<b>Meeting Place:</b>	HIMA Caguas Hospital Neurosurgery Division
<b>Evaluation Assessment:</b>	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.
<b>Grading System:</b>	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 6<sup>th</sup> floor, Physiology Amphitheater. Tumor board is held Tuesdays at 3:00 p.m. in RCM Medical School Room #340.

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

- To develop the skill of proper perioperative evaluation and assessment of surgical patients.
- The student will articulate an appropriate differential diagnosis for patients with acute and chronic general surgical conditions.
- The student will develop and participate in the implementation of appropriate patient management plans.
- To appreciate less common disease processes and the role of surgery.
- To further enhance the student's ability to comprehensively manage patients in the surgical scenario and emergency department.
- Interpretation of clinical data (X-rays, lab results, etc.)
- Performance of procedural techniques under supervision.
- 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.

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

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

**MSURG- 33**

**INTRODUCTION TO ANESTHESIOLOGY**

**Pre-Requisites:** Have completed and approved 3rd year of medicine

**Description:**

This course will cover the basic aspect of anesthesia specialty and the application of acquired skills and knowledge in the care of critically ill patients. The student will learn basic knowledge of pre-operative evaluation, intraoperative and pos-operative care of surgical patients. He/she will learn basic knowledge of anesthetic agents, different techniques used in Anesthesiology, airway management skills and resuscitation techniques. Demonstration and practical exercises in the Operating room will be used for this purpose.

**Justification:**

This course is to familiarize the fourth year medical student with the practice of Anesthesiology. Furthermore, it aims to prepare anesthesiology oriented students for residency while encouraging their inclination and enhancing their clinical and patient care skills.

**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.

**General Objective (s)**

- a. Learn and understand the pathophysiology of multiple organ system in the critically ill surgical patient
- b. Learn to evaluate and manage a surgical patient.

**Specific Objectives**

- a. Pre-operative evaluation, intraoperative and postoperative care
- b. Basic induction pharmacology
- c. Manage airway
- d. Interpret EKG, ABG
- e. Learn rapid problem-solving skills rapid decision-making skills, and gain procedural experience.

**Competences:**

Be able to perform a complete pre-operative evaluation (history and physical exam) on a surgical patient

**Goal(s):**

To have a comprehensive overview of Anesthesiology specialty with emphasis on pre, intra and postoperative care.

**Learning Activities:**

- a. Participate in morning rounds, case presentation, anesthesiology meetings
- b. Basic anesthesiology lectures

<b>Person in Charge :</b>	Dr. David Castrodad
<b>Dates Offered:</b>	Throughout the year
<b>Course Duration:</b>	2-4 weeks
<b>Enrollment per Session:</b>	1 student
<b>Meeting Place:</b>	Operating room Hospital Pavia Hato Rey at 7:00am
<b>Evaluation Assessment:</b>	50% attendance 20% case presentation, 30% Clinical evaluation form
<b>Grading System:</b>	Honor, Pass or Fail

Approved by Curr C SOM  
June 30, 2020  
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

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

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

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

## **PHYSICAL MEDICINE AND REHABILITATION DEPARTMENT**

### **MPMR-01 PHYSICAL MEDICINE AND REHABILITATION**

#### **Description:**

The student will take thorough medical histories, perform physical examinations and learn about the treatment options that doctors will provide to the patients. By assisting the doctors, the student will be participating in the treatment discussions and the proper care of the patients and learn to diagnose conditions and illnesses and the proper standard of care to treat them. The course will include all related PMR areas including Sports Medicine, Electrodiagnostic Principles, Exercise Physiology, Amputee Rehabilitation, Pain Rehabilitation, Interventional Pain, Stroke Rehabilitation and Physical Therapy. The diverse patient population will ensure the exposure to a wide variety of treatments of musculoskeletal, rheumatological and neurological conditions.

#### **Justification:**

To be exposed to the clinical aspects of Physical Medicine and Rehabilitation(PMR) to gain hands-on experience in an outpatient setting under the supervision of Dr. Alejandro Pérez and Dr. Juan Jirau. Both doctors have extensive years of practice and will teach the student about the insights of Sports Medicine, Electrodiagnostic Principles, Exercise Physiology and Pain Rehabilitation.

#### **Competences:**

Medical knowledge, Patient care and procedural skills, Interpersonal and communication skills, Practice-based learning and improvement, Systems-based practice, Professionalism.

#### **Goal (s)**

The goal is to acquire the knowledge and develop the skills and behavioral characteristics critical to be a successful physiatrist that can positively affect the lives of patients in the future.

#### **General Objective (s)**

Understand the concepts of Physical Medicine and Rehabilitation Participate actively in the treatment of musculoskeletal, rheumatological and neurological conditions and helping patients while doing so Enhance the student abilities in the management of patients and the communication skills. The student will learn to evaluate clinical data, laboratory results, x-rays and other diagnostic aids. To learn about the different diagnostic tools and indications within the PMR field.

## Specific Objectives

- 1) Physical Medicine and Rehabilitation Basic Knowledge
  - a. Assess principles of strength
  - b. Evaluation and conservative treatment of neck and back pain
  - c. Classification and treatment of most common pain syndromes
  - d. Treatment using traditional physical alternatives like manipulation, traction and mobilization.
  - e. Basic principles of regenerative PMR, such as phototherapy and platelet rich plasma (PRP) indications, use and benefits.
- 2) Communication Skills
  - a. Learn the importance of proper oral and written communication with patients suffering from chronic pain.
  - b. Understand the importance of proper communication in an interdisciplinary team environment including physiatrists, physiotherapists.
- 3) Professionalism
  - a. Explain the importance of excellent personal and interpersonal behaviors in the practice of PMR
  - b. To deliver the highest standard of care with compassion, integrity and honesty.

## Learning Activities:

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

<b>Person in Charge :</b>	Alejandro Perez, MD, / Juan Jirau, MD
<b>Dates Offered:</b>	Throughout the year
<b>Course Duration:</b>	4 weeks
<b>Enrollment per Session:</b>	1 student
<b>Meeting Place:</b>	Spine, Sports & Manual Medicine Clinic Medical Center in Guaynabo 321 Carr #2 Villa Caparra, Guaynabo, PR 787-782-2424
<b>Evaluation Assessment:</b>	Evaluation will be based on daily attendance, professionalism, clinical skills, and team involvement
<b>Grading System:</b>	This rotation will be a pass or fail class.

Approved by Curr C SOM  
September 18, 2018  
Prof. Zilka Ríos  
Associate Dean for Academic Affairs SOM

**Prerequisite:** Have completed third level Internal Medicine, Pediatric, Surgery 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.

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

**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.

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

### **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, gynecologic, 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

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

## MRAD-79 DIAGNOSTIC RADIOLOGY SPECIALTY 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):

The goal of the course is providing future clinicians with a clear imaging modalities in diagnosis and intervention available as well as the most efficient and cost effective way to use them in patient care.

### General Objective (s):

The elective is organized to provide a comprehensive 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 correlate imaging studies with pathological findings.

**Evaluation and Assessment:**

The student will be evaluated on the basis of medical knowledge, responsibility, professionalism, judgments and attitudes during the duration of the course. Written and oral presentation. A written evaluation will be performed by the attending at the completion of the rotation. The evaluation will be based on fulfillment of rotation requirements and observations by the physicians.

<b>Person in Charge</b>	:	Ángela Méndez, M.D.
<b>Dates Offered</b>	:	Throughout the academic year (By arrangements)
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Department of Diagnostic Radiology M & P Radiology Center, 617 Calle Manuel Pavía Santurce, PR. (787) 727- 5381, 8:00 am- 5:00pm <a href="mailto:amendez@mprad.com">amendez@mprad.com</a>

**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 comprehensive 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 correlate 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.

<b>Person in Charge</b>	:	Eduardo Acosta, M.D.
<b>Dates Offered</b>	:	Throughout the academic year (By arrangements)
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	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, gynecologic, 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 assessed: arrives in timely manner with adequate dress code and attitude throughout the rotation period.

<b>Person in Charge</b>	:	Dr. José Isado.
<b>Dates Offered</b>	:	By arrangements
<b>Course Duration</b>	:	2-8 weeks
<b>Enrollment per Session</b>	:	1 student
<b>Meeting Place</b>	:	Auxilio Mutuo Hospital
<b>Grading System</b>	:	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.

<b>Person in Charge</b>	:	Dr. José L. Oliver-Sostre
<b>Dates Offered</b>	:	Throughout the Academic Year (Except July) <b>Strictly by appointment.</b>
<b>Course Duration</b>	:	2-4 weeks
<b>Enrollment per Session</b>	:	2 students unless otherwise appointed by the person in charge
<b>Meeting Place</b>	:	Multidisciplinary Clinical Skills Training Center (MdCSTC)
<b>Evaluation</b>	:	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%

## **MDEAN-02 TRANSITION TO RESIDENCY PROGRAM: CLER FOCUS AREAS**

**Prerequisites:** Successful completion of Year 3

### **Justification:**

**NOT AVAILABLE AT THIS MOMENT** Specialty elective experience to on to a residency program as physicians. Since 1999 the Institute of Medicine (now National Academy of Medicine), published the report "To Err is Human" calling for a national effort to make health care safer. ACGME has recognized that: more than 20 years after the release of those reports, the overall progress in improving the nation's health care has been slow and has recognized that this next generation of physicians needs the skills to be able to lead changes in our nation's health care organizations, both large and small. To address those needs the ACGME implemented the Clinical Learning Environment Review (CLER). The CLER Program is designed to provide teaching hospitals, medical centers, health systems, and other clinical settings affiliated with ACGME-accredited institutions with periodic feedback that addresses the following six Focus Areas: Patient Safety; Health Care Quality; Care Transitions (Teaming); Supervision; Well-Being; and Professionalism.

### **Course Description:**

Students will develop awareness and gain insight into important topics of patient safety, teaming, health care quality and professionalism in a clinical setting. They will familiarize themselves with the relevant literature and reflect on topics that emerge from their clinical experiences, from research papers, from online resources, and media. They will explore their roles, identify and analyze possible barriers in the context of the health care system in ensuring patient safety and top quality care.

### **Competencies:**

Medical knowledge, Professionalism, Patient care, Teaming, Effective Communication, Teaming, Quality of Care and Critical Thinking.

### **Goal (s):**

Increase knowledge about patient safety, teaming, health care quality, professionalism in a clinical setting concepts that are important in their transition to a residency program as physicians.

### **General Objective (s):**

Introduce to medical students to the CLER-ACGME six six Focus Areas: Patient Safety; Health Care Quality; Care Transitions (Teaming); Supervision; Well-Being; and Professionalism.

### **Specific Objectives:**

1. To define patient safety and quality from several perspectives: inpatient, outpatient, administration, and the operating room.
2. To understand the importance of Teaming concepts, professionalism and effective communication in a health care setting.
3. To discuss the problem of patient quality and safety in health care including the impact of quality and safety issues on the cost of health care.
4. To explain multiple causes and the various adverse effects associated with medical errors in health care.
5. To recognize the importance of integrity and communication in both the prevention and management of medical errors.
6. To describe some processes of evidence base for quality improvement.
7. To identify processes for monitoring, investigating and preventing medical errors using the principles of root cause analysis and fish bone analysis.

**Learning Activities:**

This elective provides Medical students with the opportunity to read, watch, and reflect on various aspects of Patient Safety; Health Care Quality; Care Transitions (Teaming); Supervision; Well-Being; and Professionalism. The students will review relevant journal articles and/or health care cases from external sources such as the Agency for Healthcare Research and Quality™ web-based Morbidity and Mortality Rounds. Students will have the opportunity to view selected films, interact and dialogue on the course Discussion Board, review video presentations, and other media products addressing medical errors and patient safety in healthcare on Teams (ELENTRA).

**Evaluation and Assessment:**

They will submit a reflection on the material they have reviewed. The reflection will include a brief synopsis of the issue, their thoughts and feelings about it, a brief review of the relevant literature on the topic, and lessons learned. Also, the students will applied a root cause analysis o a fish bone analysis to a case study and discuss the results of this analysis and recommendations.

<b>Person in Charge</b>	: Waleska Crespo-Rivera, DrPH, MHSA.
<b>Dates Offered</b>	: Academic year
<b>Course Duration</b>	: 2-4 weeks
<b>Enrollment per Session</b>	: 10 students
<b>Meeting Place</b>	: Online / Clinical Facility (TBA)
<b>Grading System</b>	: Honor, Pass or Fail

## 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.

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



# AMERICAN SIGN LANGUAGE BASIC COURSE

**SIGN-01**

## AMERICAN SIGN LANGUAGE BASIC COURSE

**Pre-Requisites:** None

### Description:

The course is the first in a series of courses designed to develop the skills and knowledge needed to communicate in American Sign Language with some variables of the sign used in Puerto Rico. This course introduces basic sign language vocabulary and fingerspelling. In addition, students will be introduced to aspects of American Deaf culture and history. Other relevant topics will be addressed..

### Justification:

American Sign Language (ASL) is the 4th most studied modern/foreign language at colleges and universities in the U.S., according to the Modern Language Association's statistics. As an health care specialized institution, it should move on with the needs of all the patients. Also the UCC will be heading towards a new complementary education.

### General Education Objectives:

Students will demonstrate the ability to use and understand American Sign Language at a basic level:

- Students will be able to demonstrate a variety of simple statements and questions, and often the main idea of longer, but simple messages and conversations.
- Students will be able to initiate and respond to simple statements and questions, and be able to engage in basic face-to-face conversation within the framework of the vocabulary and grammar appropriate to this level.
- Students will exhibit basic competency in fingerspelling.
- Students will demonstrate knowledge of the Deaf culture and D/deaf history through reading and writing assignments.
- Students will demonstrate knowledge of the Deaf culture and D/deaf history through written researched assignments, formal evaluations, and class discussions.

### Specific Objectives:

- Culture: ways of communicating; getting other's attention; beginning and ending conversations; maintaining eye contact; making connections; negotiating signing environments.
- History: Deaf Profiles: Significant People in Deaf History; American School for the Deaf (ASD); Gallaudet University; evolution of ASL (LSF, Martha's Vineyard, indigenous signs); terminology (Deaf vs. deaf); debunking common myths.
- Grammar: simple statements, commands, wh-questions, yes/no questions; affirmative and negative statements; topicalization (topic/comment structure); personal pronouns; contrastive structure; spatial agreement and spatial.

### Learning Activities:

- Instructional resources for this course will include texts designed specifically for the teaching American Sign Language, a variety of college level books, periodicals, and instructor developed materials.
- Methods of instruction will include lecture, independent and group work, guests, videos, computer and on line instruction through available College platforms such as Angel. Students will also have the opportunity to attend Deaf culture events.

### Evaluation and Assessment:

Formal and informal measures will be used to assess the Student Learning Outcomes. These measures will include formal unit tests to assess student's receptive "listening" skills, including a written section to assess student's knowledge of Deaf culture and history. Assessment of student's expressive "speaking" skills will be assessed with a formal rubric. Additional assessment measures will include: journals, self- evaluation/reflection papers, research, and reports both written and signed. Critical thinking, computer literacy, and information resources will assessed through a research paper

### Grading System:

The grading system will be based on Certification or Participation depending on the scale grade that the student have.

<b>Dates Offered</b>	:	Throughout the academic year (By arrangements)
<b>Contact Person</b>	:	Sor Irma Castillo <a href="mailto:icastillo@sangabrielparasordos.org">icastillo@sangabrielparasordos.org</a> Colegio San Gabriel
<b>Text Book</b>	:	"Aprende Señas Conmigo"- Aida Luz Matos <b>\$25.00</b> per unit
<b>Course Duration</b>	:	Semester (Tuesdays from 5:00 to 8:00 p.m.)
<b>Enrollment per Session</b>	:	___ student
<b>Meeting Place</b>	:	Colegio San Gabriel
<b>Evaluation</b>	:	Honor, Pass or Fail
<b>Cost</b>	:	<b>\$250.00</b> per person. <b>\$40.00</b> The certificate of the Universidad del Turabo, (this certificate is not mandatory). Colegio San Gabriel delivers one but that does not apply to continuing education credits.

Approved by Curr C SOM  
October 2, 2014