# CURRICULUM OVERVIEW

AUACOM's educational program leading to the Medical Doctorate (MD) degree is a 4.5-year program consisting of two academic years of study on AUACOM's campus in Antigua and 84 weeks of study in the Clinical Sciences through clerkships in teaching hospitals principally in the United States.

In order to provide the most innovative and current methods for delivery of a medical education, AUA's curriculum brings medical disciplines together and fosters greater communication and cooperation between departments. Although each branch of medical science has its own importance and essence, the current trend in medical education is the delivery of a medical school curriculum through integration of those branches. AUA's curriculum has been developed with the goal of achieving an integrated and flexible curriculum that goes beyond examinations. It promotes the skill and art of medicine, critical thinking, and lifelong learning.

#### **BASIC SCIENCES**

#### FIRST SEMESTER COURSES:

## HUMAN STRUCTURE AND FUNCTION [HSF I]

Theme: Anatomy, Histology, Embryology, and Physiology

Credit hours: 7 | Course No: 5112 Course Director: Dr. Hassan Amiralli

Human Structure and Function is a course that integrates the themes of Gross Anatomy, Histology, Embryology, and Physiology. It is divided into HSF I-II, reflecting semesters I–II. The course focuses on how the human body develops, and the various systems in growth and homeostasis. The course is system-based, addressing the cardiovascular, respiratory, and GI systems in semester I, and the renal, endocrine and neurological systems in semester II. Teaching formats include lecture, clinical case correlations, small group laboratory dissection, and clinical simulation.

#### Required Reading:

- 1. Keith L. Moore: Essential Clinical Anatomy, 5th Ed. LWW, 2014 [978-1-4511-8749-6] \$75.99
- 2. T. W. Sadler: Langman's Medical Embryology, 12th Ed. Lippincott Williams & Wilkins, 2011. [978-1-4511-1342-6] \$79.99
- 3. John Hall: Guyton and Hall Textbook of Medical Physiology with Student Consult Online Access, 12<sup>th</sup> Ed. Elsevier, 2010. [978-1-4160-4574-8] \$125.95
- 4. Linda S. Costanzo: Physiology with Student Consult Online Access (Board Review Series), 6<sup>th</sup> Ed. Elsevier, 2014. [978-1-4511-8795-3] \$62.95

# MOLECULAR BASIS OF MEDICINE [MBM 1]

Theme: Biochemistry, Genetics, and Cell Biology

Credit hours: 6 | Course No: 5113

Course Directors: Dr. B. Shivaraj (Medical Biochemistry and Genetics) and Dr. Juli Valtschanoff (Medical Cell Biology)

Molecular Basis of Medicine comprises the themes of Biochemistry, Genetics, and Medical Cell Biology. This is an integrated course focusing on the molecular structure of cells that underlies cellular function. It is intended to provide the necessary background for medical students to understand the cellular and molecular disorders underlying diseases and the sites of action of drugs and other chemicals on cells. The essential facts are presented in the light of their clinical relevance. The material builds a foundation for understanding concepts taught in other disciplines of basic medical sciences and Introduction to Clinical Medicine. The course material is presented in an interactive lecture format.

Medical Genetics is one theme of this integrated course. Although the major aspects of genetics are covered in the second semester, the students will get a glimpse of Medical Genetics while studying the different aspects of medical biochemistry and cell biology. Medical Genetics, in general, deals with the diagnosis, treatment, and management of genetic diseases. The subject is a central component in the understanding of major diseases such as diabetes mellitus, heart disorders, various types of cancers, and a wide variety of neuropsychiatric disorders. Moreover, incidences of congenital birth defects having a genetic lineage are common across the globe. The knowledge of medical genetics paves the way for a better understanding of the molecular mechanisms involved in genetic diseases. This knowledge facilitates medical practitioners' abilities to not only manage multiple disorders but also explore ways to prevent the incidences of these disorders.

## Required Reading:

- 1. Steven R. Goodman: Medical Cell Biology, 3<sup>rd</sup> Ed. Elsevier, 2007. [978-0-12-370458-0] or the latest edition. \$39.95
- 2. Baynes, J. and Dominiczak, M.H. Medical Biochemistry With STUDENT CONSULT Online Access. 4th Ed. Elsevier. 2014. [978-1-4557-4580-7] \$75.95
- 3. <u>Denise R. Ferrier</u>: Lippincott's Illustrated Reviews Biochemistry. 6<sup>th</sup> Ed. Lippincott Williams and Wilkins. 2013. [978-1-4511-7562-2] \$72.99
- 4. Nussbaum, R. L., Mc Innes, R. R., and Huntington, F. W.: Thompson & Thompson' Genetics in Medicine, 8<sup>TH</sup> Ed. Elsevier, 2015. [978-1-4377-0696-3]

# INTRODUCTION TO CLINICAL MEDICINE I [ICM I]

*Theme:* Clinical Skills/Simulation, Evidence Based Medicine, Basic Life Support, and Integrated Medical Education

Credit hours: 4 | Course No: 5114

Course Directors: Dr. Nagaraj Mysore (Introduction to Clinical Medicine I [ICM]) and Dr. James M. Rice, and Dr. Waheeda Amiralli (Evidence Based Medicine I [EBM])

ICM is a course that spans all four semesters of Basic Sciences. ICM I integrates the themes of Clinical Skills/Simulation, Evidence Based Medicine, Basic Life Support, and Integrated Medical Education. Teaching formats in this course include lecture, small group clinical skills acquisition, simulation, and problem-based learning.

#### Required Reading:

- 1. John L. Coulehan & Marian R. Block: The Medical Interview: Mastering Skills for Clinical Practice, 5<sup>th</sup> Ed. F. A. Davis, 2006. [978-0-8036-1246-4] \$49.95
- 2. Lynn S. Bickley: Bates' Guide to Physical Examination and History Taking,  $11^{th}$  Ed. Lippincott Williams & Wilkins, 2012. [978-1-6091-3762-5] \$129.99
- 3. Mary Fran Hazinski: BLS for Healthcare Providers (Student Manual). American Heart Association, 2011. [978-1-6166-9039-7] \$19.95
- 4. Leon Gordis: Epidemiology, 5th Ed. Elsevier, 2013. [978-1-4557-3733-8] \$49.95

#### <u>MIND, BRAIN, BEHAVIOR [MBBI]</u>

Theme: Medical Student and Physician Well-being, Doctor–Patient Relationship, Medical Ethics and Fundamentals of Neuroscience

Credit hours: 4 | Course No: 5115 Course Directors: Dr. Vasavi Gorantla

MBB is our newest course, and it is designed to integrate behavioral science and neuroscience. This four-semester sequence is being rolled out one semester at a time, and the course was offered for the first time in the spring semester of 2015. The themes addressed in this first semester include Medical Student and Physician Well-being, the Doctor–Patient Relationship, Medical Ethics, and Fundamentals of Neuroscience. Teaching formats include lectures and modified problem-based learning.

## Required Reading:

- 1. Danny Wedding & Margaret Stuber: Behavior and Medicine, 5<sup>th</sup> Ed. Hogrefe & Huber, 2010. [978-0-8893-7375-4] \$59.00
- 2. Todd Vanderah & Douglas Gold: John Nolte's the Human Brain: An Introduction to Its Anatomy with Student Consult Online, 7<sup>th</sup> Ed. Elsevier, 2016. [978-1-4557-2859-6] [Effective February 2016 Semester] \$74.99

#### SECOND SEMESTER COURSES:

#### <u>HUMAN STRUCTURE AND FUNCTION II [HSF II]</u>

Theme: Anatomy, Histology, Embryology, and Physiology

Credit hours: 8 | Course No: 5211 Course Director: Dr. Hassan Amiralli

Human Structure and Function (HSF) is a course that integrates the themes of Gross Anatomy, Histology, Embryology, and Physiology. HSF is divided into HSF I and II, and is taught over two semesters. The course is systems-based, and in semester I addresses the fundamentals, as well as the cardiovascular, respiratory, and gastrointestinal systems. In semester II, genitourinary, endocrine, musculoskeletal, and neurological systems are taught. Teaching formats include lectures, clinical case correlation, and small group lab sessions. During the lab sessions, cadaver and digital dissection is done. Radiological and prosected specimens are also studied.

#### Required Reading:

1. Keith L. Moore: Essential Clinical Anatomy, 5th Ed. LWW, 2014 [978-1-4511-8749-6] \$75.99

- 2. Sadler TW: Langman's Medical Embryology. 12th Ed. Lippincott Williams & Wilkins, 2011. [978-1-4511-1342-6] \$79.99
- 3. John Hall: Guyton and Hall Textbook of Medical Physiology with Student Consult Online Access, 12<sup>th</sup> Ed. Elsevier, 2010. [978-1-4160-4574-8] \$125.95
- 4. Linda S. Costanzo: Physiology with Student Consult Online Access (Board Review Series), 6<sup>th</sup> Ed. Elsevier, 2014. [978-1-4511-8795-3] \$62.95

# MOLECULAR BASIS OF MEDICINE [MBM II]

Theme: Biochemistry, Genetics, and Cell Biology

Credit hours: 5 | Course No: 5212

Course Directors: Dr. B. Shivaraj (Medical Biochemistry and Genetics) and Dr. Juli Valtschanoff (Medical Cell Biology)

Molecular Basis of Medicine comprises the themes of Biochemistry, Genetics, and Medical Cell Biology. This is an integrated course focusing on the molecular structure of cells that underlies cellular function. It is intended to provide the necessary background for medical students to understand the cellular and molecular disorders underlying diseases and the sites of action of drugs and other chemicals on cells. The essential facts are presented in the light of their clinical relevance. The material builds a foundation for understanding of concepts taught in other disciplines of basic medical sciences and Introduction to Clinical Medicine. The course material is presented in an interactive lecture format.

#### Required Reading:

- 1. Steven R. Goodman: Medical Cell Biology, 3<sup>rd</sup> Ed. Elsevier, 2007. [978-0-1237-0458-0] or the latest edition. \$39.95
- 2. J. Baynes & M. H. Dominiczak: Medical Biochemistry with Student Consult Online Access, 4th Ed. Elsevier, 2014. [978-1-4557-4580-7] \$75.95
- 3. <u>Denise R. Ferrier</u>: Lippincott's Illustrated Reviews: Biochemistry, 6<sup>th</sup> Ed. Lippincott Williams and Wilkins, 2013. [978-1-4511-7562-2] \$72.99
- 4. R. L. Nussbaum, R. R. McInnes & F. W. Huntington: Thompson & Thompson's Genetics in Medicine. Elsevier, 2007. [978-1-4160-3080-5] or the latest edition. \$78.95

# INTRODUCTION TO CLINICAL MEDICINE II [ICM II]

*Theme:* Clinical Skills/Simulation, Evidence Based Medicine, Basic Life Support, and Integrated Medical Education

Credit hours: 4 | Course No: 5213

Course Directors: Dr. Waheeda Amiralli (Introduction to Clinical Medicine II [ICM II]) and Dr. James M. Rice and Dr. Waheeda Amiralli (Evidence Based Medicine [EBM])

ICM is a course that spans all four semesters of Basic Sciences. ICM II is a continuation of ICM I and integrates the themes of Clinical Skills/Simulation, Evidence Based Medicine, Basic Life

Support, and Integrated Medical Education. Teaching formats in this course include lecture, small group clinical skills acquisition, simulation, and problem-based learning.

# Required Reading:

- 1. John L. Coulehan & Marian R. Block: The Medical Interview: Mastering Skills for Clinical Practice, 5<sup>th</sup> Ed. F. A. Davis, 2006. [978-0-8036-1246-4] \$49.95
- 2. Lynn S. Bickley: Bates' Guide to Physical Examination and History Taking, 11<sup>th</sup> Ed. Lippincott Williams & Wilkins, 2012. [978-1-6091-3762-5] \$129.99
- 3. Mary Fran Hazinski: BLS for Healthcare Providers (Student Manual). American Heart Association, 2011. [978-1-6166-9039-7] \$19.95
- 4. Leon Gordis: Epidemiology, 5th Ed. Elsevier, 2013. [978-1-4557-3733-8] \$49.95

# MIND, BRAIN, BEHAVIOR II [MBB II]

Theme: Neurophysiology, Neuroanatomy, Neuropathology & Behavioral Science

Credit hours: 4 | Course No: 5215 Course Directors: Dr. Stephen Glasser

The second semester of the four-semester sequence builds on MBB1 and will provide an in-depth examination of brain anatomy and physiology. Students will learn about chronic pain and its management, and they will be introduced to the ways in which anomalies in brain structure and function affect behavior as a result of disease or dysfunction. Electroencephalography and brain imaging will be briefly covered. Teaching formats include lectures, lab sessions (brain cutting), video clips of patients and modified case-based learning.

#### Required Reading:

- 1. Danny Wedding & Margaret Stuber: Behavior and Medicine, 5<sup>th</sup> Ed. Hogrefe & Huber, 2010. [978-0-8893-7375-4] \$59.00
- 2. Todd Vanderah & Douglas Gold: John Nolte's the Human Brain: An Introduction to Its Anatomy with Student Consult Online, 7<sup>th</sup> Ed. Elsevier, 2016. [978-1-4557-2859-6] [Effective February 2016 Semester] \$74.99

#### THIRD SEMESTER COURSES:

#### DISEASE, IMMUNITY, AND THERAPEUTICS I [DIT I]

Theme: Immunology, Microbiology, Pathology, and Pharmacology

Credit hours: 12 | Course No: 6321

Course Directors: Dr. Ronnie Coutinho (Pathology), Dr. Bharati Balachandran (Microbiology and Immunology), and Dr. Hani Marcos (Pharmacology)

DIT- I is a course that integrates the themes of Pathology, Immunology, Microbiology, and Pharmacology. It spans the third and fourth semesters. In semester III, general principles and the following systems: the cardiovascular system,, hematology, head and neck to include eyes, ears, nose, and throat (EENT), the breast, the peripheral nervous system , the eye and the musculoskeletal system. Teaching formats include lectures and lab modules and active learning formats

#### Required Reading:

- 1. Jawetz, Melnick & Adelbergs' Medical Microbiology, 26th Ed. McGraw-Hill, 2012. [978-0-0717-9031-4] \$67.00
- 2. Patrick R. Murray, et al.: Medical Microbiology, 7<sup>th</sup> Ed. Elsevier, 2013. [978-0-3230-8692-9] \$91.95
- 3. Abul K. Abbas & Andrew H. Lichtman: Basic Immunology: Functions and Disorders of the Immune System with Student Consult, 4th Ed. Elsevier, 2014. [978-1-4557-0707-2] \$71.95
- 4. Vinay Kumar, et al.: Robbins & Cotran Pathologic Basis of Disease, 9<sup>th</sup> Ed. Elsevier, 2014. [978-1-4557-2613-4] \$124.99
- 5. Edward C. Klatt & Vinay Kumar: Robbins and Cotran's Review of Pathology, 4<sup>th</sup> Ed. Elsevier, 2015. [978-4557-5155-6] \$49.95
- 6. Bertram Katzung, et al.: Basic and Clinical Pharmacology, 13th Ed. McGraw-Hill, 2015. [978-0-0718-2505-4] \$59.95

# MIND, BRAIN, BEHAVIOR III [MBB III]

Theme: Behavioral Science & Psychopathology

Credit hours: 4 | Course No: 6325 Course Directors: Dr. Don Kastuk

MBB3 builds on students' knowledge of brain structure and function to explicate both normal and abnormal human behavior. Students will learn about normal human development, addictions, human sexuality, the doctor-patient relationship, communication with patients, and the ways in which culture and society affect health care. Students will also begin their study of psychopathology during this course, learning the standardized nomenclature used in the *Diagnostic and Statistical Manual* of the American Psychiatric Association.

#### Required Reading:

- 1. Danny Wedding & Margaret Stuber: Behavior and Medicine, 5<sup>th</sup> Ed. Hogrefe & Huber, 2010. [978-0-8893-7375-4] \$59.00
- 2. Donald Black & Nancy Andreasen: Introductory Textbook of Psychiatry, 6<sup>th</sup> ed. American psychiatric publishing, 2014. [978-1-58562-470-6] \$65.00

# INTRODUCTION TO CLINICAL MEDICINE III [ICM III]

Theme: Clinical Skills/Simulation, Community Medicine, and Integrated Medical Education

Credit hours: 4 | Course No: 6324 Course Director: Dr. Madeleine Fraser

ICM is a course that spans all four semesters of Basic Sciences. ICM II integrates the themes of Clinical Skills/Simulation, Community Medicine, and Integrated Medical Education. Teaching formats in this course include lecture, small group clinical skills acquisition, simulation, and problem-based learning.

EBM-3 Theme: Evidence-based medicine is incorporated in ICM-3 The EBM-3 Theme classes continue on the foundation lectures in EBM-1 and EBM-2. Lectures cover advanced analysis techniques (e.g., Logistic regression, MANOVA, etc) as well as qualitative analysis and the problems with multiple comparisons. Students acquire additional information on reading the medical literature, and the EBM-3 labs encourage and assess a student's ability to glean and communicate important information from medical research articles.

# Required Reading:

- 1. John L. Coulehan & Marian R. Block: The Medical Interview: Mastering Skills for Clinical Practice, 5<sup>th</sup> Ed. F. A. Davis, 2006. [978-0-8036-1246-4] \$49.95
- 2. Lynn S. Bickley: Bates' Guide to Physical Examination and History Taking, 11<sup>th</sup> Ed. Lippincott Williams & Wilkins, 2012. [978-1-6091-3762-5] \$129.99
- 3. Mary Fran Hazinski: BLS for Healthcare Providers (Student Manual). American Heart Association, 2011. [978-1-6166-9039-7] \$19.95
- 4. Leon Gordis: Epidemiology, 5th Ed. Elsevier, 2013. [978-1-4557-3733-8] \$49.95

#### FOURTH SEMESTER COURSES:

# DISEASE, IMMUNITY, AND THERAPEUTICS II [DIT II]

Theme: Immunology, Microbiology, Pathology, and Pharmacology

Credit hours: 14 | Course No: 6421

Course Directors: Dr. Ronnie Coutinho (Pathology), Dr. Bharati Balachandran (Microbiology and Immunology), and Dr. Hani Marcos (Pharmacology)

DIT – II is a course that integrates the themes of Pathology, Immunology, Microbiology, and Pharmacology. It spans the third and fourth semesters. The following is covered in semester iv: respiratory, endocrine, gastrointestinal (to include the liver, gallbladder and pancreas), the kidney, the female genital tract, the lower urinary tract and male genital system ,the lung, the central nervous system ,the skin, bones and , joints. Teaching formats include lectures and lab modules and active learning formats

#### Required Reading:

- 1. Jawetz, Melnick & Adelbergs' Medical Microbiology, 26th Ed. McGraw-Hill, 2012. [978-0-0717-9031-4] \$67.00
- 2. Patrick R. Murray, et al.: Medical Microbiology, 7<sup>th</sup> Ed. Elsevier, 2013. [978-0-3230-8692-9] \$91.95
- 3. Abul K. Abbas & Andrew H. Lichtman: Basic Immunology: Functions and Disorders of the Immune System with Student Consult, 4th Ed. Elsevier, 2014. [978-1-4557-0707-2] \$71.95
- 4. Vinay Kumar, et al.: Robbins & Cotran Pathologic Basis of Disease, 9<sup>th</sup> Ed. Elsevier, 2014. [978-1-4557-2613-4] \$124.99
- 5. Edward C. Klatt & Vinay Kumar: Robbins and Cotran's Review of Pathology, 4<sup>th</sup> Ed. Elsevier, 2015. [978-4557-5155-6] \$49.95
- 6. Bertram Katzung, et al.: Basic and Clinical Pharmacology, 13th Ed. McGraw-Hill, 2015. [978-0-0718-2505-4] \$59.95

# MIND, BRAIN, BEHAVIOR IV [MBB IV]

Theme: Behavioral Science & Psychopathology

Credit hours: 4 | Course No: 6425 Course Directors: Dr. Dewey Meyers

This course concludes the 4-semester MBB sequence by providing a more detailed and nuanced review of the major psychiatric conditions introduced in MBB III. In addition, students will be introduced to the major neurocognitive disorders (e.g., Alzheimer's), personality disorders, psychiatric emergencies, legal issues in psychiatry, and the major therapeutic modalities used in psychiatry. Teaching formats include lectures, small group discussions, video clips of patients and modified case-based learning.

#### Required Reading:

- 1. Danny Wedding & Margaret Stuber: Behavior and Medicine, 5<sup>th</sup> Ed. Hogrefe & Huber, 2010. [978-0-8893-7375-4] \$59.00
- 2. Donald Black & Nancy Andreasen: Introductory Textbook of Psychiatry, 6<sup>th</sup> ed. American psychiatric publishing, 2014. [978-1-58562-470-6] \$65.00

# INTRODUCTION TO CLINICAL MEDICINE IV [ICM IV]

Theme: Clinical Skills/Simulation, ACLS, and Integrated Medical Education

Credit hours: 5 | Course No: 6424 Course Director: Dr. Jennifer Cannon

ICM is a course that spans all four semesters of Basic Sciences. ICM IV integrates the themes of Clinical Skills/Simulation, ACLS, and Integrated Medical Education. Teaching formats in this course include lecture, small group clinical skills acquisition, simulation, and problem-based learning.

EBM-4 Theme: Evidence-based medicine is incorporated in ICM-4. The EBM-4 Theme classes are a continuation of the EBM-3 Theme. Advanced topics in EBM are covered including controversial topics in medicine. The textbook and assigned readings discuss how medical professionals access and use the medical literature (Cochrane, PubMed, etc), and the EBM lab requires students to demonstrate oral and written communication skills to explain research and to solve a clinical problem.

#### Required Reading:

- 1. John L. Coulehan & Marian R. Block: The Medical Interview: Mastering Skills for Clinical Practice, 5<sup>th</sup> Ed. F. A. Davis, 2006. [978-0-8036-1246-4] \$49.95
- 2. Lynn S. Bickley: Bates' Guide to Physical Examination and History Taking, 11<sup>th</sup> Ed. Lippincott Williams & Wilkins, 2012. [978-1-6091-3762-5] \$129.99
- 3. Mary Fran Hazinski: BLS for Healthcare Providers (Student Manual). American Heart Association, 2011. [978-1-61669-039-7] \$19.95
- 4. Leon Gordis: Epidemiology, 5th Ed. Elsevier, 2013. [978-1-4557-3733-8] \$49.95

#### FIFTH SEMESTER COURSE:

# BASIC SCIENCES INTEGRATION COURSE [BSIC]

Theme: ANATOMY, Behavioral Science/Epidemiology/Bio statistics, Biochemistry, Medical Genetics, Microbiology/Immunology, Physiology, Pathology, Pharmacology, Clinical Integration

Credit hours: 10 | Course No: 6855 Course Director: Dr. Ronnie Coutinho

This 10-week course is designed to review and reinforce with Q & A sessions, relevant material and concepts in the Basic Science subjects. It also helps students improve their test-taking skills, and further enhances integration of knowledge acquired in the basic sciences, and application of this knowledge in clinical scenarios. .this course also helps facilitate student preparation for the USMLE Step 1 Board Examination.

#### Required Reading:

1. Kaplan medical lecture notes in each discipline mentioned above in the theme

#### CLINICAL SCIENCES

#### OVERVIEW

During the clinical education in semesters VI through X, students continue to develop clinical and communication skills in all areas of patient care under the direction of AUA's medical faculty at teaching hospitals in patient-centered environments.

The clinical education consists of 84 weeks of core and elective rotations.

The FAM1/INT1 (6 weeks) clinical training course focuses on enhancing the skills required to perform physical examinations and to interact with patients, families, and healthcare providers in a U.S. medical environment.

The 44 weeks of CLINICAL CORE ROTATIONS (Internal Medicine – 12 weeks; Surgery – 8 weeks; Family Medicine – 6 weeks; OB/GYN – 6 weeks; Pediatrics – 6 weeks; Psychiatry – 6 weeks) include in-hospital patient care (that might be combined with outpatient office experience where permitted by state law), creating a learning environment in which clinical competence can be achieved.

In addition, students have the opportunity to enhance their medical knowledge and strengthen their clinical skills during the 34 weeks of CLINICAL ELECTIVE ROTATIONS in subspecialties of the core subjects, other medical specialties, and research. In general, the duration of an elective rotation is four weeks.

The clinical rotations are integrated educational experiences that allow students to develop the knowledge, skills, attitudes, and professionalism essential to caring for patients effectively, efficiently, and humanely. The faculty's goal is to facilitate learning, stimulate curiosity, promote independent thinking, encourage compassion, inspire excellent care, and equip students with the tools for a lifetime of learning. The acquisition of clinical knowledge and skills during the clinical clerkship is achieved through direct interaction with clinical faculty, patients, standardized patients, and simulation, and is supplemented by clinical core subject-specific clinical content (e.g., virtual patients) provided via the university's Blackboard e-learning platform as well as reading assignments.

# FAMILY/INTERNAL MEDICINE (FAM1/INT1)-6 WEEKS

The advanced introduction to clinical medicine will help students improve their clinical skills, focusing on history taking, physical examination, communication, and interaction with patients and healthcare teams. This course prepares students to successfully complete subsequent clinical core and elective rotations.

#### CLINICAL CORE ROTATIONS

#### INTERNAL MEDICINE - 12 WEEKS

Students gain general knowledge of internal medicine, including health promotion, disease prevention, and diagnosis and treatment of men and women from adolescence through old age, in times of health through all stages of acute and chronic illness. Additionally, students develop skills in problem-solving and decision-making, and an attitude of caring driven by humanistic and professional values. This rotation incorporates a consideration of human biology and behavior, and an understanding of the epidemiology and pathophysiology of disease and treatment modalities. Students master clinical skills in interviewing, physical examination, differential diagnosis, diagnostic testing strategies, therapeutic techniques, counseling, and disease prevention.

# Recommended Reading:

Medical Students can sign up for American College of Physicians membership free of charge.

- American College of Physicians and the Clerkship Directors in Internal Medicine: Internal Medicine Essentials for Students: A Companion to MKSAP\* for Students, edited by Patrick C. Alguire, 3<sup>rd</sup> Ed. American College of Physicians, 2011. [978-1-9344-6543-1] \$54.95
- 2. Joseph Loscalzo, Dennis Kasper, Stephen Hauser, Anthony Fauci, Dan Longo & and J. Jameson: Harrison's Principles of Internal Medicine (2 Volumes), 19<sup>th</sup> Ed. McGraw-Hill, 2015. [978-0-0718-0215-4] \$249.00
- 3. Hemant Godara: The Washington Manual of Medical Therapeutics, 34th Ed. Lippincott Williams & Wilkins, 2013. [978-1-4511-8851-6] \$74.99

#### <u>SURGERY - 8 WEEKS</u>

Students will gain an appreciation for the specific role of surgeons in the spectrum of medical care. This clerkship introduces the principles of surgery and the rationale for surgical therapeutic intervention through many different educational modalities. Students should have exposure to the breadth and depth of surgery under the guidance of a preceptor, and function as a contributing member of the surgical team. Students should demonstrate an understanding of surgical procedures and the elements required to establish surgical diagnoses. Preoperative evaluation, perioperative care, and postoperative follow-up — with documented progress in each component of care — are emphasized. Relevant information should be described in the brief postoperative note. There should

be evidence of understanding the legal aspects of the medical record. The Surgery Clerkship will foster student growth in areas of patient care, medical knowledge, interpersonal and communication skills, practice-based learning and improvement, professionalism, and systems-based practice.

#### Recommended Reading:

- 1. Cornelius Dyke & Eric J. DeMaria: Surgical Attending Rounds, 3<sup>rd</sup> Ed. Lippincott Williams & Wilkins, 2004. [978-0-781-75046-2] \$68.99
- 2. Alden H. Harken: Abernathy's Surgical Secrets, 6th Ed. Mosby, 2009. [978-0-323-05711-0] \$44.95
- 3. Mary E. Klingensmith & Abdulhameed Aziz: The Washington Manual of Surgery, 6th Ed. Lippincott Williams & Wilkins, 2011. [978-1-4511-1594-9] \$68.99
- 4. F. Brunicardi, et al: Schwartz Principles of Surgery, 10th Ed. McGraw-Hill, 2015. [978-0-0717-9675-0] \$199.00

#### FAMILY MEDICINE - 6 WEEKS

The clerkship in family medicine will introduce students to the aspects of family medicine that are applicable to all fields of medical practice, including the comprehensive and continuous care provided by family physicians to patients of all ages. The clerkship will enhance the students' ability to recognize the importance of family systems and the impact of chronic illness on patients and their families. The health of individual family members, cultural issues, family systems, and their cumulative effect on health outcomes will be highlighted. Students will become familiar with end-oflife issues and palliative care and the role of the physician in these decision-making processes. The clerkship will emphasize the importance of recognizing symptoms and acquiring medical knowledge in providing patients with the highest-quality medical care. The family medicine clerkship will promote the highest standards of professional behavior and clinical competence while preparing students for the practice of family medicine to diverse patient populations. The clerkship will enhance students' knowledge and awareness of the common diagnoses and the impact of cultural issues and family systems upon the patient.

#### Recommended Reading:

- 1. Robert E. Rakel & David Rakel: Textbook of Family Medicine, 9th Ed. Elsevier, 2015. [978-0-323-23990-5] \$169.99
- 2. Martin S. Lipsky & Mitchell S. King: Blueprints Family Medicine. Lippincott Williams & Wilkins, 2010. [978-1-6083-1087-6] \$45.99
- 3. Alfred F. Tallia, Joseph E. Scherger & Nancy Dickey: Swanson's Family Medicine Review, 7th Ed. Elsevier, 2013. [978-1-4557-0790-4] \$89.95

All students in the Family Medicine clinical rotation <u>must</u> complete all FM cases during their clinical rotation. FM cases have proven to be an invaluable teaching tool for clinical training and especially for NBME (shelf) exams. Please complete <u>all</u> FM cases in their entirety.

# OBSTETRICS AND GYNECOLOGY - 6 WEEKS

During this rotation, students will acquire a set of basic educational and technical skills related to the maintenance of women's health. They will learn to take an obstetrical and gynecological history and physical examination, with emphasis on the breasts, abdomen, and pelvis. Students will develop a basic understanding of the pathophysiology in women as they occur, from menarche through the reproductive years and menopause. This will include an appreciation of specific obstetric and gynecologic issues encountered at different stages of a woman's life. Inpatient obstetrical and gynecological admissions and surgical procedures, as well as ambulatory outpatient clinic or private practice experience provide the necessary core fundamentals of the clerkship. Students are required to master their understanding of the physiology of endocrinology during pregnancy, renal function and basic anatomy.

#### Recommended Reading:

- 1. Tamara Callahan & Aaron Caughey: Blueprints Obstetrics and Gynecology (Blueprints Series), 6th Ed. Lippincott Williams & Wilkins, 2013. [978-1-4511-1702-8] \$46.99
- 2. Matthew Kaufman, Latha Ganti, Jeane Holmes & Priti Schachel: First Aid for the Obstetrics and Gynecology Clerkship, 3<sup>rd</sup> Ed. McGraw-Hill, 2010. [978-0-0716-3419-9] \$49.00
- 3. Charles R. B. Beckmann, William Herbert, Douglas Laube, Frank Ling & Roger Smith: Obstetrics and Gynecology, 7<sup>th</sup> Ed. Lippincott Williams & Wilkins, 2013. [978-1-4511-4431-4] \$72.99
- 4. Neville F. Hacker, Joseph C. Gambone & Calvin J. Hobel: Hacker & Moore's Essentials of Obstetrics and Gynecology, 5<sup>th</sup> Ed. Elsevier, 2010. [978-1-4160-5940-0] \$67.95
- 5. <u>APGO-Uwise 7 units, 250 comprehensive questions.</u> [https://www.apgo.org/student/uwise2.html]
- 6. <u>USMLE World Qbank- Obstetrics & Gynecology 205 Questions.</u>
  [http://www.kaptest.com/Medical-Licensing/Step1/s1-qbank.html?gclid=COLGiNHSxcACFQwV7AodAUgAwg]

#### PEDIATRICS - 6 WEEKS

This clerkship provides students with the basic skills and knowledge required to care for children and their families. The focus of the pediatric clerkship is to teach students about issues unique to the infant, child, and adolescent. There is a major emphasis on disease prevention, treatment, and the impact of disease and treatment on the child. During the six weeks, the students develop the

communication, physical examination, and problem-solving skills required to evaluate the health status of a pediatric patient from birth to 18 years of age. Review of all relevant basic sciences including genetics, embryology, biomedical sciences, complications during pregnancy, and physiology is expected.

# Recommended Reading

- 1. Robert M. Kliegman, Bonita Stanton, Joseph St. Geme & Nina F Schor: Nelson Textbook of Pediatrics (2 Volumes), 20th Ed. Elsevier, 2016. [978-1-4557-7566-8] \$169.99
- 2. Michael South & David Isaacs: Practical Paediatrics, 7th Ed. Elsevier, 2012. [978-0-7020-4292-8] \$95.95
- 3. Daniel Bernstein & Steven P. Shelov: Pediatrics for Medical Students, 3<sup>rd</sup> Ed. Lippincott Williams & Wilkins, 2011. [978-0-7817-7030-9] \$65.99
- 4. Sheela Lahoti, Eugene Toy, Robert Yetman, et al.: Case Files Pediatrics, 4th Ed. McGraw-Hill, 2012. [978-0-0717-6973-0] \$34.00
- 5. Bradley S. Marino & Katie S. Fine: Blueprints Pediatrics, 6th Ed. Lippincott Williams & Wilkins, 2013. [978-1-4511-1604-5] \$46.99
- 6. Baby OSCE.

#### PSYCHIATRY - 6 WEEKS

The objective of the psychiatric rotation is to prepare the student to recognize, assess, and treat a wide range of mental health problems that may present during an individual's lifetime. Emphasis is placed on assessment of the patient's mental status and personality traits as they relate to the patient's health practices, and on legal issues such as mental competency, dangerousness, and civil commitment and their relevance to clinical management of other medical conditions. The student should be able to use the interview situation to obtain an in-depth history, perform a comprehensive mental status examination, and establish a positive professional doctor-patient relationship. This knowledge should be the basis of the student's ability to make a comprehensive diagnosis of common psychiatric conditions. The student is required to review and understand all aspects of neurophysiology, neuroanatomy, neuropharmacology, and behavioral sciences. The student should also acquire knowledge of the various therapeutic modalities, including pharmacological, psychotherapeutic and social interventions, and be aware of their indications and limitations. By becoming more skilled in assessing the personal strengths and vulnerabilities of a patient's mental state, the student should become more competent in interviewing in all medical settings.

# Recommended Reading:

- 1. Myrl R. S. Manley: Psychiatry Clerkship Guide, 2<sup>nd</sup> Ed. Elsevier [Mosby], 2007. [978-1-4160-3132-1] \$54.95
- 2. Benjamin J. Sadock & Virginia A. Sadock: Kaplan and Sadock's Concise Textbook of Clinical Psychiatry. Lippincott Williams & Wilkins, 2008. [978-0-7817-8746-8] \$84.99

- 3. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 4th Ed., Text Revision (DSM-IV-TR). American Psychiatric Association, 2000. [978-0-8904-2025-6]
- 4. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, 5th Ed. American Psychiatric Association, 2013. [978-0-89042-554-1] \$199.00
- 5. Laura Weiss Roberts & Alan K. Louie: Study Guide to DSM-5. American Psychiatric Association, 2014. [978-1-5856-2464-5] \$70.00
- 6. Michael R. Privitera & Jeffrey M. Lyness: Psychiatry Mentor: Your Clerkship & Shelf Exam Companion. F. A. Davis, 2009. [978-0-8036-1692-9] \$46.95

# Study Guides

Most students use one of the examination study guides such as Pretest, First Aid, or Case Files. Students should be aware that the sample questions in these books are easier than the Shelf Examination questions. However, these books do ensure that students thoroughly review popular examination question topics.

## Psychiatric Memoirs

1. Kay Redfield Jamison: An Unquiet Mind [Autobiography], Vintage Books, 1995. [978-0-6794-4374-2]

# CLINICAL ELECTIVE ROTATIONS - 4 WEEKS

# ADDICTION MEDICINE/CHEMICAL DEPENDENCY

The incidence of substance abuse and substance dependency is increasing throughout the country. These are commonly seen in patients receiving inpatient medical services and in medical practices, and are frequently comorbid with other medical and psychiatric disorders. In spite of public education and outreach efforts, considerable societal stigma exists toward patients with addictive disorders; healthcare providers frequently have negative attitudes toward these patients as well. Many believe that it is a social issue, not a medical issue. As we are aware, the identification, assessment, and referral for treatment of patients are strongly influenced by physician attitudes and life experiences with personal, family, or prior patients' substance use. Effective tools and strategies help clinicians recognize the physiological and behavioral red flags of addiction and elicit a substance use history in a nonjudgmental manner, enabling the physician to make the appropriate diagnosis and develop a patient-specific plan for treatment and referral.

# <u>ADULT PAIN MANAGEME</u>NT

Pain management uses a multidisciplinary approach to reduce acute and chronic pain in pediatric and adult patients. Local, regional, and general anesthetic procedures are used in combination with psychological and other techniques such as chiropractic manipulations or acupuncture.

# AMBULATORY MEDICINE

This rotation will provide an educational experience in primary care community practice settings. This will provide exposure to community medicine physicians and role models, different practice models and practice styles, and aid in future career planning. Students will learn the management of urgent problems encountered in primary care practices. Students will also be able to perform problem-focused evaluations in an efficient manner.

# ANESTHESIOLOGY

Anesthesia is an intervention that allows the performance of surgical or other painful procedures in pediatric and/or adult patients using local, regional, or general anesthesia techniques. Perioperative care and acute and chronic pain management are also components of anesthesia.

# BURN SURGERY

The treatment of burns is a time-consuming and all-encompassing endeavor. During this elective rotation, students are exposed to the burn unit and its various components.

# CARDIOLOGY

The goal of this rotation is for the student to develop the ability to independently evaluate, treat, and monitor ACS, atrial fibrillation, CHF, ventricular arrhythmias, HTN, hyperlipidemia, valvular heart disease, and aortic dissection. At the completion of this elective, the student should be able to describe the diagnostic evaluation and management of common cardiac conditions.

# CHILD/ADOLESCENT PSYCHIATRY

The range of problems that may be encountered in child and adolescent psychiatry are, in part, covered by reports describing addictions and substance abuse, emergency psychiatric interventions, consultation liaison, school problems, and family disruptions. The orientation of an elective in child and adolescent psychiatry could cover a wide range of clinical problems. All of these areas of study and patient care demand the ability to relate with patients in creative ways, to know the range of diagnostic and treatment options available, and to prioritize one's intervention in a practical and safe manner. Though family involvement is often required in the evaluation and treatment of adults, in child and adolescent psychiatry this involvement is required and is often essential. An elective in psychiatry therefore covers an immense range of problems including the possible placement of the child on a temporary or even permanent basis.

### CLINICAL RESEARCH

AUA clinical students may opt to take a research elective in medical research. This is typically a four-week experience. Initially, each student selects a preceptor/supervising physician who will guide and supervise the research experience. The specific activities required of the student will vary depending on the medical research topic and the stage of the research project. In some cases, the student may be completing a review of the literature, including an evaluation of the methodological strengths and weaknesses of that literature. In other cases, they may be developing a research proposal or collecting and analyzing data. Once this plan is reviewed and approved by the clinical student and the supervising physician, it must be submitted to the AUA Research Council for review and recommendation to the executive dean of the Clinical Sciences. The research elective cannot proceed without approval from the executive dean of the Clinical Sciences.

# COLORECTAL SURGERY

This rotation exposes students to a team specializing in colorectal pathologies. Diagnostic and therapeutic evaluations of all colorectal pathologies that plague a large portion of our population are emphasized. Tumors, both benign and malignant, along with inflammatory bowel pathologies, are the mainstay of pathologies seen. Students will gain essential knowledge about management of colon pathologies including Crohn's disease, ulcerative colitis, and benign and malignant colon tumors.

# <u>COMPREHENSIVE PSYCHIATRIC EMERGENCY PROGRAM</u> (<u>CPEP</u>)

Students are exposed to a variety of psychiatric emergencies including suicide attempts, drug overdoses, and other emergent acute psychiatric, psychotic disorders.

#### CRITICAL CARE

Clinical experiences in critical care medicine are intended to assist students' understanding of the unique life-threatening conditions faced by critically ill patients. These include, but are not limited to, organ failure, coma, shock, ventilatory support, and end-of-life transitions. The purpose of the elective is for students to become familiar with and comfortable in critical care units caring for a diverse population of surgical, neurological, and medical patients.

#### DERMATOLOGY

Dermatology is the specialty of medicine concerned with management of disorders of the skin, mucous membranes, and adnexal structures, including hair and nails. This elective is designed to expose medical students to various aspects of dermatology and to gain a working knowledge of how to recognize skin signs of systemic diseases, normal findings (including benign growths of the skin), and common skin malignancies. The rotation will consist primarily of outpatient encounters, with some inpatient consultation with an attending physician and/or dermatology resident. A broad spectrum of disease entities will be seen that range in patient stage from initial diagnosis to those patients that have diseases that have been refractory to treatment.

Students will be exposed to inflammatory, infectious, neoplastic, metabolic, congenital, and structural disorders, and will be involved in the discussion of differential diagnoses, diagnostic evaluation, and outline of treatment plans. The goal is to have students understand how dermatologists apply an interdisciplinary approach to the management of skin disorders in a professional and compassionate manner.

## <u>EMERGENCY MEDICINE</u>

This rotation is typically done in a full-service emergency room, but students may spend some time in an urgent care center. The key in this rotation is the art of triage. Students shall be exposed to patients with pediatric psychiatric and adult medical-surgical emergencies. Students will observe their attending physicians, decide whether to admit and treat a patient on an inpatient basis, or arrange outpatient care of the patient. The treatment of many acute conditions, such as trauma and heart failure, requires a broad medical knowledge.

## <u>EMERGENCY/TELEPSYCHIATRY</u>

Many psychiatric problems present as emergencies and often occur in places with no local psychiatric services. Significant help in diagnosis and treatment can be carried out at a distance through telephonic means.

#### <u>ENDOCRINOLOGY</u>

The goal of the endocrine elective is for students to develop the ability to independently evaluate, treat, and monitor common endocrine disorders (e.g., diabetes, thyroid dysfunction, lipid abnormalities, metabolic bone disease, and calcium disorders) and to become familiar enough with the less common endocrinopathies (e.g., adrenal disease, pituitary disease, and gonadal dysfunction) to recognize the abnormality and initiate proper evaluation and treatment.

#### ENT

This rotation will expose students to pathologies of the ears, nose, and throat. These pathologies include otitis media and externa. Students will be exposed to both benign and malignant tumors of the ears, salivary glands, thyroid, parathyroid, vocal cords, and pharynx, and hypopharynx. Students will learn to evaluate these structures to determine the presence or absence of neck masses.

# FORENSIC PATHOLOGY

This rotation immerses students into a medical legal environment, typically in a medical examiner's office. The chain of evidence and time and cause of death will be studied in this rotation. The pathologist determines, through the use of scientific deduction, the immediate and contributory cause and time of death, along with the identification of victim.

#### GASTROENTEROLOGY

The gastroenterology elective is designed to provide medical students with a well-rounded learning experience in gastroenterology and hepatology that is integral to the specialty of internal medicine. The goal of this elective is for students to develop the ability to independently evaluate, treat, and monitor the broad range of diseases in general gastroenterology and hepatology, including transplant hepatology, and to understand the use of advanced endoscopy in both inpatient and outpatient settings.

# GENERAL SURGERY

This is typically an extension of the core rotation. All the basic skills required in your basic rotation are finessed here. This would be the place to have more extensive exposure to the OR and more bedside procedures and teaching. Students typically round with the team and perform tasks similar to those of first-year residents. This is an ideal rotation for those students who are interested in surgical specialties.

# GERIATRIC MEDICINE

The geriatric/gerontology elective rotation fosters geriatric community experiences improving the understanding of persons over the age of 65 years, enhancing clinical skills assessments in geriatric areas and increasing students' interest in geriatric care.

# <u>GYN ONCOLOGY</u>

GYN oncology is an elective involving diagnosis and treatment of gynecologic neoplasms. The rotation will be supervised by the gynecologic oncologist in the office/clinic setting for diagnosis and medical treatment, as well as surgical procedures for invasive disease. The elective may also involve co-management with radiation oncology for radiation treatment and hematology oncology for chemotherapy options while treating invasive gynecologic neoplasms.

# HEMATOLOGY/ONCOLOGY

The hematology and oncology elective is designed to facilitate students' understanding of common clinical presentations, evaluation, and management of blood dyscrasias and neoplastic disorders. Students will learn the proper evaluation and care of the oncology patient, from diagnosis and tumor staging to chemotherapy and palliation. Simultaneously, students will learn the proper evaluation of hematological disorders, including interpretation of diagnostic tests and initiation of treatment.

# INFECTIOUS DISEASE

The purpose of the infectious disease rotation is to assist students in understanding the evaluation and treatment of both chronic and acute infectious illnesses. In the supervised setting, students will learn to isolate infectious sources and choose appropriate antimicrobial therapies based on evidence gathered from multiple sources, including patient history and physical, as well as blood work, radiological studies, and empiric data. At the completion of this elective, the student should be able to describe the diagnostic evaluation and management of common infectious diseases.

# INTERNAL MEDICINE

The purpose of the elective in internal medicine is for the medical student to gain further experience in the elements of patient care. This elective will focus on the more detailed aspects of histories, physical examinations, various elements used in diagnosis (imaging procedures, lab tests, invasive testing, etc.), and the development and implementation of diagnostic and therapeutic plans.

# INTERVENTIONAL CARDIOLOGY

The goal of the interventional cardiology elective is to introduce students to a branch of cardiology that deals specifically with the catheter-based treatment of structural heart diseases.

#### NEONATOLOGY

The purpose of the neonatology elective is to give students the experience in learning about normal and ill newborns. In a supervised setting, students will have hands-on training in handling both the infants and the equipment.

#### <u>NEPHROLOGY</u>

The nephrology elective is designed to help students understand the signs, symptoms, and management of common renal syndromes, including acute renal failure, chronic renal failure, glomerulonephritis, and nephrotic syndrome. Additionally, students will become familiar with the management of fluid, electrolyte and acid-base disorders, and the diagnosis and management of primary and secondary hypertension.

#### <u>NEUROLOGY</u>

Neurology is a field based on knowledge of brain and peripheral nerve function that is essential for both neurologists and all clinicians. It includes many diseases of the central nervous system, such as temporal lobe epilepsy, that can present with prominent psychiatric symptoms that have a known organic basis. During this elective rotation students will become familiar with the diagnostic evaluation and treatment of patients with common neurologic disorders, including peripheral neuropathy and cerebrovascular accident.

# <u>NEUROPSYCHIATRY</u>

Students will utilize his/her basic knowledge of neurology and psychiatry to become proficient in understanding several illnesses that present symptoms and signs of a clear organic origin and a syndrome with primary behavioral symptoms.

# NEUROSURGERY

Students will become familiar with a proper neurologic exam while assigned to a neurosurgical team. Exposure to a wide array of neurosurgical procedures and pre- and postoperative care will be provided. This rotation is a unique experience for any student; students will acquire skills in neurologic evaluation that will serve them well in their medical careers.

# OCCUPATIONAL MEDICINE

The occupational and environmental health elective is the area of family medicine dedicated to the prevention and management of occupational and environmental injury, illness and disability, and the promotion of health and productivity of workers, their families and communities.

#### OPHTHALMOLOGY

The goal of this elective is to provide students with a strong foundation in clinical ophthalmology, including an understanding of the anatomy of the eye and orbit, the basics of a complete eye examination (i.e., vision acuity, pupil response, intra-ocular pressure, ocular motility, visual field, anterior segment, and fundus examination), the basics of common eye diseases (e.g., cataract, glaucoma, macular degeneration), and the basics of ophthalmic manifestations of systemic diseases (e.g., diabetes, thyroid disease).

# ORTHOPEDIC/SPORTS MEDICINE

The goal of this elective rotation is to expose students to common problems encountered in sports medicine, including their presentation, diagnosis, and management. The student will be given the opportunity to learn and refine musculoskeletal physical examination skills and become familiar with common procedures used in sports medicine (e.g., injection techniques, fracture care, splinting/casting).

# ORTHOPEDIC SURGERY

This clerkship will emphasize the study and prevention of musculoskeletal diseases through a four-week rotation with an orthopedic team. Students will participate in assessment of X-rays and examination of fractures and arthrosis. Students will also participate in orthopedic surgeries as a team member.

#### PAIN MANAGEMENT

During this rotation, students will identify and understand the physiology of somatic, neuropathic, and visceral pain, system regional and local ways of pain management, and the implications of acute and chronic pain.

#### PATHOLOGY

This elective is designed to expose students to the fields of anatomic and clinical pathology, including surgical pathology, cytopathology, hematopathology, and laboratory medicine. It will also introduce students to the practice of pathology and the role of the pathologist in diagnosis and management of disease.

#### PEDIATRICS

The purpose of the pediatric elective is to give students further exposure and experience with children from birth to age 18. Under supervision, students will be given the opportunity to examine, manage, and follow patients, as well as learn to perform common procedures such as venipuncture and lumbar puncture.

# PERINATOLOGY

Perinatology, also known as maternal fetal medicine (MFM), is a four-week elective encompassing high-risk pregnancies. The rotation will be supervised by the perinatologist, and performed alongside attending obstetricians and residents involved with high-risk antepartum, intrapartum, and postpartum care. The majority of the elective will be spent in the antepartum testing unit learning high-risk fetal surveillance (NST, BPP, USS) along with management and treatment of medical complications of high-risk patients on the antepartum floor and L&D.

# <u>PERIOPERATIVE MEDICINE</u>

During this rotation, students will round with surgical and medical teams caring for surgical patients pre- and postoperatively. Students will observe the optimization preoperatively of patients with multiple comorbidities. Students will gain experience in operative procedures on these patients and the care in the immediate postoperative period. Students will be exposed to the operating room and critical care units.

# PHYSICAL MEDICINE & REHABILITATION

During this rotation, students will be exposed to the basics of rehabilitation medicine as it applies to the performance of ambulation, activities of daily living, and occupational activities.

#### PLASTIC SURGERY

Students will have the opportunity to experience the workings of a plastic surgery specialty, exposing them to reconstructive and cosmetic procedures. Students will participate in the assessment of and reconstruction of postoperative cancer patients. Students will become familiar with the preparation and planning of wound treatments and reconstructive procedures. Cosmetic procedures will also be introduced.

# PREVENTIVE & SOCIAL MEDICINE/PUBLIC HEALTH

This elective will provide students with an interest in general preventive medicine and public health a unique opportunity to gain insight into the practice of clinical and population-based preventive medicine. The students will observe and discuss preventive medicine and public health issues with preventive medicine-trained physicians; their role in population health will be emphasized.

# PSYCHIATRY CONSULTATION & LIAISON

Patients admitted to hospitals for the evaluation of any medical problem experience stress and some degree of psychological disruption of their usual functioning. A significant number of patients admitted for medical, surgical, or other reasons may manifest management problems of many types including mental disorientation, noncompliance with their care, or psychiatric symptoms indicative of an unrelated underlying psychiatric disorder. All hospitalized patients' lives are disrupted by the illness that brings them to the hospital.

# PULMONARY ICU

The goal of the pulmonary ICU elective is to facilitate students' understanding of the common clinical presentations, evaluation, and management of pulmonary disorders requiring treatment in the intensive care unit. Students will learn the evaluation and treatment of acute and chronic pulmonary diseases ranging from the familiar (COPD) to the infrequent (sarcoidosis).

# <u>PULMONOLOGY</u>

The goal of the pulmonology elective is to facilitate the students' understanding of the common clinical presentations, evaluation, and management of pulmonary disorders. Students will learn the proper evaluation and treatment of acute and chronic pulmonary diseases, both common and uncommon.

# RADIOLOGY

The goal of this elective is 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 outpatient and inpatient settings is emphasized.

#### REPRODUCTIVE ENDOCRINE/INFERTILITY

Reproductive endocrine/infertility (REI) is a four-week elective with emphasis on common endocrine and infertility issues involved with reproductive and menopausal patients. The rotation will take place mainly in an office/clinic setting, include minimally invasive laparoscopic procedures for certain diagnoses (e.g., endometriosis, chronic pelvic pain, unexplained infertility) and be supervised by the reproductive endocrinologist.

# RHEUMATOLOGY

The goal of the rheumatology elective is to introduce students to the diagnostic approach, workup, and management of the connective tissue diseases, inflammatory arthropathies, crystalline arthropathies, and vasculitides. This rotation will form the foundation for understanding the often complex nature of autoimmune and musculoskeletal diseases.

#### <u>SURGICAL ICU</u>

This rotation will provide students with a complete exposure to the day-to-day workings of a surgical ICU. Students will learn the management of postoperative patients. While on the SICU rotation, students will understand the management of respirators, chest tubes, central lines, drains, etc.

Students will be exposed to the use of a variety of pharmacologic agents including pressors and understand the day-to-day evaluation of critically ill postoperative patients and possible complications, including sepsis and multi-organ failure. These learned skills will serve students well regardless of his/her ultimate chosen field of medicine.

# SURGICAL ONCOLOGY

Students will be involved in the care of surgically treated oncology patients. These patients will include, but not be limited to, those with some of the more common surgically treated cancers. Breast, GI, colon, skin (including melanoma), and lung cancers will be part of the student's day-to-day practice. The student will understand and work with radiation and medical oncologists.

## TRAUMA

Students will be placed with a trauma team. Trauma protocols and evaluation (i.e., triage) of trauma patients will be learned. These patients have varied injuries. Students will learn basic ATLS. Students' immersion in this rotation will teach them to properly prioritize trauma patients.

# <u>URGENT CARE</u>

Students on the urgent care rotation work in the ambulatory setting. Patients are scheduled with urgent concerns and for follow-up visits after emergency department or inpatient care. Working closely with the supervising attending physicians, the urgent care learner is expected to develop skills necessary to provide excellent patient care in the urgent care setting.

#### <u>UROGYNECOLOGY/MINIMALLY INVASIVE SURGERY</u>

Urogynecology, also known as pelvic reconstructive surgery, is an elective involving the diagnosis and treatment of urinary incontinence and pelvic floor disorders. The rotation will be supervised by the urogynecologist along with gynecologists and residents who treat urogynecologic conditions medically in an office/clinic setting and surgically utilizing minimally invasive techniques (e.g., laparoscopy, vaginal colposuspensions).

#### UROLOGY

During this rotation, students will rotate with a urology team. Evaluation of urogenital function in both male and female patients with a concentration on renal, bladder, ureter, and urethral pathologies is provided. Students will learn to evaluate the flow dynamics of the bladder and urethra with a special concentration in prostate pathologies. Both benign and malignant tumors associated with these structures, including the testes, will be evaluated.

#### VASCULAR SURGERY

This rotation usually involves students with a vascular team. The day-to-day evaluation of vascular patients includes invasive and noninvasive vascular testing. The examination of these patients will include determination of claudication, tissue loss and impeding gangrene, and the selection of appropriate therapies, be they endovascular, open vascular, or medical options

# WOMEN'S HEALTHCARE & AMBULATORY GYNECOLOGY (WHC)

Ambulatory gynecology, also known as women's healthcare (WHC), is supervised by the gynecologist and/or family practitioner in an office/clinic setting for common ambulatory outpatient gynecologic conditions (e.g., abnormal bleeding, vaginitis, colposcopy for abnormal pap smears), as well as preventive care counseling (e.g., STIs, contraception, domestic violence). Students are exposed to a large variety of diseases and are expected to become familiar with the evaluation and treatment of these disorders.