



OBGY 603

Medical Genetics

Elective Description

This elective provides an introduction to the field of clinical genetics. Students have the opportunity to learn about a range of genetic disorders, genetic diagnostics and genetic counseling by participating in the evaluation of fetal development during pregnancy.

Credit: 2-4 semester credits

Prerequisites: OBGY 500

Course Structure: Most of the time students will observe and participate in patient evaluation and care. Students may also have the opportunity to participate in the activities of different types of genetic laboratories depending upon the site selected for the elective. These may include biochemical genetics, cytogenetics and/or molecular genetics laboratories. Students gain additional experience with high risk pregnancy.

Entrustable Professional Activities

As a fourth-year student, the focus of skills development are those tasks important for entering residency training:

- Gather a history and perform a physical exam
- Prioritize a differential diagnosis following a clinical encounter
- Recommend and interpret common diagnostic and screening tests
- Enter and discuss orders and prescriptions
- Document a clinical encounter in the patient record
- Provide an oral presentation of a clinical encounter
- Form clinical questions and retrieve evidence to advance patient care
- Give or receive a patient handover to transition care responsibility
- Collaborate as a member of an inter-professional team
- Recognize a patient requiring urgent or emergent care and initiate evaluation and management
- Obtain informed consent for tests and/or procedures
- Perform general procedures of a physician
- Identify systems failures and contribute to a culture of safety and improvement

General Course Objectives

Medical Knowledge

- Review common congenital disorders including clinical presentation, treatment and prognosis.

Patient Care

- Be able to discuss the complexity of evaluating patients and families with a genetic disease.
- Review the salient features of the patient family history and how it can yield information about congenital disorders.

- List the indications for chromosome or molecular analysis and other special genetic tests.
- Identify the techniques indicated for specific prenatal analysis of genetic disorders.
- Review the ethical and legal issues surrounding fetuses and infants with congenital disorders.

Interpersonal and Communication Skills

- Be able to concisely communicate the key features of the genetic assessment and management plans to the treatment team.
- Effectively communicate with patients and families using sensitive, non-judgmental language
- Recognize the emotional impact of a genetic diagnosis on patients and families
- Describe the confidentiality requirements of diagnoses

Professionalism

- Demonstrate commitment to professional responsibilities and ethical principles, and sensitivity to a diverse patient population

Systems-Based Practice

- Demonstrate an appreciation for collegial interaction necessary for teamwork on the service
- Demonstrate a willingness to participate in a team approach to health care and patient well-being

Practice-Based Learning and Improvement

- Be able to articulate how other areas of medicine are involved in the prevention of genetic disease
- Be able to locate resources for rare disorders and the status of current research for genetic disorders

REQUIRED TEXTBOOKS and Other Resource Material

Rimoin, DL, RE Pyeritz, BR Korf. 2013. *Emery and Rimoin's Principles and Practice of Medical Genetics*, 3-volumes, 6th edition, Churchill Livingstone Publishers. – continually updated e-dition. [ISBN: 9780123838353]

GeneClinics - a publicly funded medical genetics information resource developed for physicians and other healthcare providers available at no cost.

<http://www.ncbi.nlm.nih.gov/sites/GeneTests/?db=GeneTests>

OMIM – Online Mendelian Inheritance in Man - a comprehensive, authoritative, and timely compendium of human genes and genetic phenotypes. <http://www.ncbi.nlm.nih.gov/omim>

Evaluation

The evaluation will include the entrustable professional activities. The clerkship preceptor will evaluate those relevant to this clerkship experience.

GRADES

This elective is graded Satisfactory/Unsatisfactory.

POLICIES

ACADEMIC DISHONESTY

The University holds its students to the highest standards of intellectual integrity. Therefore, the attempt of any student to pass any examination by improper means, present work which the student has not performed or aid and abet a student in any dishonest act may result in disciplinary action including immediate dismissal. Any student witnessing or observing a perceived violation of academic

dishonesty is required to report it as outlined in the Guidelines. Students failing to report an observed violation may also receive disciplinary action.

ATTENDANCE POLICIES

Attendance of lectures and laboratories is based on the University's stated attendance policy. Refer to the Student handbook for more information.

CONDUCT

The University expects all students to be responsible individuals who possess the highest standards of integrity, honesty and personal conduct. These traits are prerequisites to independent learning, professional development, the successful performance of academic and clinical assignments, and the conduct of one's personal life. Accordingly, students are expected to adhere to a standard of behavior consistent with the University's high standards at all times off and on campus. Compliance with institutional rules and regulations, in addition to city, state and federal laws, is expected.

COPYRIGHT POLICY

Trinity Medical Sciences University must respect and observe the right and privileges of copyright holders, obey the United States Copyright Act and preserve the integrity of its internal network systems. All students must sign the technology and software use policy. A copy of this policy may be obtained from the Information and Technology Department.

DRESS CODE

All students are expected to maintain the highest standards of professional appearance at all times. During years one and two and while on campus. Medical students are required to wear scrubs or white coats with appropriate dress. Appropriate dress for clinical students includes business slacks with open-collar shirt for men, and business slacks or skirt with professional shirt or sweater for women.

Trinity School of Medicine Faculty Contact Information

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