BIOCHEMISTRY AND MOLECULAR BIOLOGY

M-ID 728 DVLPMT OF PBL CASES 4 Credit Hours
SELECTIVE
This selective is designed to provide an opportunity for a student to review knowledge of basic sciences as it applies to a particular clinical case. The focus of the activity should be on all of the basic science mechanisms and explanations for the signs and symptoms in a selected patient and on the disease process itself. The object of the selective is a case for use in problem-based learning sessions for first- or second-year students in the medical curriculum. Initially, the student should select a disease of interest, one manifested by a patient encountered during clinical rotations. The patient's history, including the history of the disease process, any predisposing conditions, attempts to treat the disease, and outcome of treatment will form the introductory phase of the study. Then the student should consult the literature to obtain information about the causes of the disease, variations in its presentation, the different treatments used and their relative effectiveness, the prognosis for patients and psychosocial issues impacting the outcomes. During this process, mastery of all basic science issues connected to the case must be considered more important than all other components. The student is expected to consult with clinical and basic science faculty regarding the case, the disease, basic science facts or mechanisms. Students will be expected to contact Dr. MacDonald to obtain approval for the topic then the Office of Medical Education (OME) to obtain a case number. If the COM already has too many cases on a particular topic/disease, the student may be asked to select a different patient/topic. The OME will then enroll the student in the Blackboard course "PBL Case Writing for M4 Students" and provide access to the PBL case database. The end product of the selective will be a finished, ready-to-use case. Full instructions for the assembly of the case will be found in the case-writing handbook found in the Blackboard course. The case should be submitted on a computer disk or as an email attachment with the word processor files for the entire case, preferably in Microsoft Word format. A Form (the checklist) signed by the clinical consultant and basic science consultant should be submitted with the case. Also, include a pharmacologist in the review process for all M2 cases or if any drug therapy is included in the case. Only complete cases (i.e., those with all of the parts listed in the case-writing handbook), written in acceptable English and typed in proper format will be accepted. To receive a letter grade, the case must be completed by the end of the Fall Semester for those registered during July, August, September, October, or November OR by April 1st for those registered in January or February. A letter grade (H, HP, P, M, F) will be assigned to the submitted case based upon the following criteria: Usability-Can the case be used for PBL with little modification? Readability-Is the case written in acceptable English and comprehensible? Is the case written as a case, not as a patient's chart? Completeness-Are all facts, data and exhibits necessary to understand the case included? Understanding-Is there evidence that the student understands the case and the basic science involved? Mastery of the basic science underpinnings of the case and their incorporation into the presentation is considered a major requirement of the selective.

Contact: Dr. Richard MacDonald.
Typically Offered: July through February, excluding December.
Capacity: Variable.
Visiting Student Information: This course is NOT available to visiting students.

M-ID 746 INBORN ERR OF METABOL 4 Credit Hours
SELECTIVE
This selective will offer the student an opportunity to gain familiarity with those inborn metabolic diseases most likely to be encountered during residency and practice, along with methods for confirmatory diagnosis. The student will be able to attend metabolic management clinics as well as regularly scheduled conferences and seminars in metabolism, genetics and biochemistry. In addition to a general overview of inborn errors of metabolism, the student will focus in depth on one area of metabolic disease and prepare a written report after extensive reading of the primary literature and discussion with metabolic specialists. A short presentation will be given to the biochemistry and genetics group. Because any listing of clinically important inborn errors is quite lengthy, it is anticipated that each student's experience can be individualized, according to career directions. A prospective internist or family practitioner might emphasize the hyperlipidemias, the hyperuricemias, and the porphyrias. Surgeons and anesthesiologists might emphasize diseases with abdominal symptoms, surgical complications, and conditions causing intolerance to brief fasting or conditions leading to organ transplant. Similar examples could be cited for the prospective orthopedist, pathologist, radiologist, ophthalmologist, obstetrician, dermatologist, or pediatrician.

Contact: Dr. William B. Rizzo.
Typically Offered: September, October, November, January, February, March and April.
Capacity: 2
Visiting Student Information: This course is NOT available to visiting students.