Educational Goal and description of the rotation. The overall goal of this set of clinical rotations is for fellows to learn how to evaluate and treat a wide variety of endocrine disorders. The Endocrine, Diabetes and Lipid (E, D & L) Consultation Office is held one half day per week for 12 months. Fellows in endocrinology, diabetes and metabolism see patients in the Consultation Office typically throughout their second year of training in our subspecialty. This is a general endocrinology, diabetes and metabolism clinic. It also includes patients referred for consultations and those with complex chronic endocrine-metabolic disorders receiving long-term care. However, the balance is shifted toward the former (relative to that in the Fellow’s Continuity Clinic.) The ED & L Consultation Office embraces the faculty clinical practice including Drs. Baranski, Clutter, Cryer, Fisher, McGill, Ostlund and Semenkovich. All fellows work individually with Drs. Baranski, Clutter, Ostlund and Semenkovich at a minimum. This rotation differs from others in two ways. First, while such patients often present in the other educational settings the patients seen in the ED & L Consultation Office are enriched in the less common endocrine metabolic disorders such as functioning pituitary tumors (e.g., prolactinoma, acromegaly) and hypopituitarism, multiple endocrine neoplasia and polyglandular-endocrinopathies, pheochromocytoma, aldosteronoma, Cushing’s syndrome etc.). Second, the ED & L Consultation Office rotation teaches the fellows to assume progressive responsibility for the management of an endocrinology, diabetes and metabolism referral practice.

Educational purpose (curriculum). The specific educational purposes of this rotation are to permit the fellow to understand the clinical presentation of outpatients with endocrine-metabolic disorders and to learn to evaluate, diagnose and treat endocrine-metabolic disorders in the outpatient setting. The specific objectives of this rotation are to teach the fellow to become skilled in the evaluation and treatment of outpatients – ours is largely an outpatient subspecialty – with a broad array of acute, subacute or chronic endocrine-metabolic disorders and the identification of non endocrine-metabolic disorders presenting with symptoms, signs or laboratory findings suggestive of endocrine-metabolic disorders. The endocrine-metabolic disorders include diabetes, dyslipidemias, metabolic bone disease including osteoporosis, disorders of calcium, phosphorous and magnesium metabolism, age-related disorders including the menopause and the impact of aging on treatment of endocrine-metabolic disorders, obesity and other nutritional disorders, hypertension, cardiovascular-diseases in the setting of endocrine-metabolic disorders, hormone producing neoplasms, disorders of fluid/electrolyte/acid-base metabolism as well as endocrine adaptations/maladaptations to systemic diseases including psychiatric disorders, hypothalamic-pituitary, thyroid, parathyroid, pancreatic islet, adrenocortical, adrenomedullary, ovarian and testicular disorders.
Patient Care. Fellows will have direct interaction with most or all of the patients seen in the consultants’ office on the day of clinic. Fellows will be responsible for obtaining the history and doing the physical examination on new or return patients. Fellows then present the case to the consultant, and after discussion about the presentation, a plan is devised. As their expertise increases, fellows take more responsibility for the development of diagnostic and treatment plans. Fellows are expected to follow-up on patient test results, communicating the results to both the patient and referring physician.

Medical knowledge. We expect the fellows, by or during their second year of fellowship to 1) Acquire the specialized knowledge of endocrinology, diabetes and metabolism needed to provide exemplary care to patients affected by the disorders encompassed with the subspecialty. 2) Learn how to perform, interpret and cost-effectively use diagnostic testing essential to the modern practice of endocrinology, diabetes and metabolism. 3) Develop the abilities to critically evaluate clinical data relevant to endocrine-metabolic disorders and to make appropriate decisions in the management of patients with those disorders.

Practice-based learning and improvement. Fellows will understand (particularly when a knowledgeable senior attending points this out) the limitations of their prior knowledge and work aggressively to improve the level of their expertise in the diagnosis and management of complex endocrine disorders.

Interpersonal and communication skills. By their second year, fellows are expected to be able to communicate comfortably and effectively with a wide range of patients. This rotation is an excellent rotation to make this determination, because the attending has often known the patient for a number of years, and the patient may provide feedback about the interaction with the fellow.

Professionalism. While a comprehensive, structured curriculum covering the science of endocrinology, diabetes and metabolism is fundamentally important; it is not sufficient for the training of an effective endocrinologist. The faculty must also teach professionalism, humanism and ethics coupled with sensitivity to cultural, occupational, environmental, socioeconomic and behavioral issues. These issues can, and are, incorporated into lectures but it is our premise that these are most effectively taught by example and by discussion in the setting of the care of real patients – inpatients, outpatients, patient-based conferences – with diverse cultural, occupational, environmental, socioeconomic and behavioral backgrounds. This is made possible by the racial/ethnic and socioeconomic diversity of our patient population, which is drawn from inner city, middle class, suburban, rural and distant referral areas, and the sensitivity of our faculty to the importance of the ethical care of patients.

Systems-based practice. The fellow needs to be adaptable to different practices between the attending consultants, and to different methods of charting and letter-writing. The slightly different approaches allow fellows to determine which style or which style characteristics work will for them.

Teaching methods. Educational outcomes. We expect each fellow in the clinical training program to: To achieve these outcomes we use the following methodology for teaching, faculty, methods of evaluation and educational settings.

Methodology for Teaching. For each of the major dimensions of the curriculum teaching is carried out under the supervision of a member of the faculty in the educational settings detailed below through the use of the following discrete methods:
• Performance of a history and physical examination on patients with endocrine-metabolic disorders.

• Presentation to a faculty member of the historical data and physical findings for both inpatient and outpatient encounters. The faculty member confirms and/or corrects the clinical data at the bedside or in the clinic examination room.

• Progressive, graduated responsibility for the development of diagnostic plans based on available clinical data.

• Progressive, graduated responsibility for the development of treatment plans based on clinical data and results from diagnostic testing.

• Directed reading based on patient encounters and references provided by faculty members individually and through the conferences.

• Progressive, graduated responsibility for communication of the findings with the patient and the referring physician, integration of new information from the patient, the referring (often primary care) physician, the patient’s course and the laboratory, and systematic follow-up.

• Attendance and participation in the following conferences: Metabolism Grand Rounds, Internal Medicine Grand Rounds, Clinical Endocrinology Course, Pediatric/Adult Conference, Surgical Endocrinology/Oncology Conference and Optional Bone Conference.

Fellows are supervised by faculty in all patient encounters. While fellows are given progressively increasing responsibility for their patients, each patient they see is also seen by a member of the faculty.

Mix of diseases. The endocrine-metabolic disorders include diabetes, dyslipidemias, metabolic bone disease including osteoporosis, disorders of calcium, phosphorous and magnesium metabolism, age-related disorders including the menopause and the impact of aging on treatment of endocrine-metabolic disorders, obesity and other nutritional disorders, hypertension, cardiovascular-diseases in the setting of endocrine-metabolic disorders, hormone producing neoplasms, disorders of fluid/electrolyte/acid-base metabolism as well as endocrine adaptations/maladaptations to systemic diseases including psychiatric disorders, hypothalamic-pituitary, thyroid, parathyroid, pancreatic islet, adrenocortical, adrenomedullary, ovarian and testicular disorders.

Reading lists and other educational materials. Fellows are expected to read about their patients’ problems and incorporate the new information gained into the care of those and future patients. This is facilitated by the availability to all fellows of online services as “Up-to-Date in Endocrinology.” References to specific patient-related issues are provided by the faculty working with the fellow in inpatient and outpatient settings and references to specific topics are provided in conference/handouts. General reference:

I have reviewed the Goals and Objectives for the *E, D and L Consultative Office* rotation with Dr. ________________________. I understand that evaluation of resident’s and fellows should consider their level of training and be directed at the attainment of competency in this specialty area. Verbal feedback is helpful during and at the end of the rotation.

__________________________________________  _________________
SIGNATURE OF ATTENDING PHYSICIAN          DATE

__________________________________________  _________________
SIGNATURE OF FELLOW          DATE

__________________________________________
PRINTED NAME OF FELLOW

(The fellow is responsible for printing the attestation form, the goals and objectives and for returning the signed attestation form to Karen within one week of reviewing goals and objectives. Please scan and send by e-mail: kmuehlha@dom.wustl.edu)