Hepatology Curriculum

The rotation in Hepatology will be for a minimum of 3 months during the first two years of the Gastroenterology Fellowship. The purpose of Level I training is to develop a basic understanding of and familiarity with the principles and practice of Hepatology. The trainee should acquire sufficient experience to function completely as a consultant in the field. This training however, does not entitle the trainee to claim expertise sufficient to function solely as a clinical/academic Hepatologist or a transplant Hepatologist. It is anticipated that the Fellow will receive broad clinical experience encompassing a variety of Hepatobiliary disorders and behavioral adjustments of patients to their hepatic disease. Fellows will gain experience with a wide array of therapeutic interventions and the appropriate utilization of laboratory tests including interpretation of live biopsy specimens and interventional procedures. Fellows will gain experience with liver transplant patients. In addition to this ongoing clinical service or activity, the Fellow will also be exposed to clinical and basic research and will participate in conferences designed to address aspects of clinical and basic Hepatology.

Specific Program Content:

The following material is abstracted from an article entitled Guidelines for Training in Hepatology, Hepatology 1992: 16:4:1084-1086

Objectives:

1) During the course of the GI Fellowship the Fellow will come to understand:
   a) Biology and pathobiology of the liver
   b) Clinical management of patients with Hepatobiliary diseases, including:
      1. Viral hepatitis
      2. Fulminant hepatic failure
      3. Complications of chronic liver disease
      4. Gallstone disease
      5. Hepatobiliary disorders of pregnancy
      6. Preoperative evaluation of patients with hepatobiliary diseases
      7. Drug hepatotoxicity
      8. Medical therapy of liver disease
      9. Selection and long-term care of liver transplant patients
   c) Nutrition and malnutrition
   d) Exposure to standard techniques of hepatobiliary research
   e) Exposure to pediatric and congenital liver disease (desirable, but not essential)
   f) Liver pathology interpretation

2) The Fellow must develop and appreciation for the indications, contraindications, limitations, and complications of the following procedures:
   1) Diagnostic and therapeutic endoscopy
   2) Radiological examination of liver and biliary tree
   3) Interventional radiology
4) Nuclear medicine  
5) Percutaneous cholangiography  
6) Ultrasonography  
7) Transvenous liver biopsy  
8) Laparoscopy and laparoscopic cholecystectomy  
9) Need aspiration of lesions  
10) Biliary stone treatments including medical therapy

b) Procedural Skills required will include:  
   1) Performance and interpretation of percutaneous liver biopsy  
   2) Diagnostic and therapeutic paracentesis  
   3) Upper gastrointestinal endoscopy including treatment of esophageal varices

**Training Process**

1) Training in Hepatology should take place after Fellows have completed their basic 3 year postdoctoral education in internal medicine.  
2) Level I training will occur during the first two years of a clinical Gastroenterology Fellowship  
3) Level one training will have a duration of 3 months

**Hepatology Research**

All Fellows will participate in research during their fellowship. This research can be either clinical or basic in nature. Fellows will be actively involved in the mechanistic aspects of the research as well as presentation of data at national or regional meetings.

**Conferences, Seminars, Literature review, and Lectures**

a) Hepatology Fellows will participate in all of the teaching conferences of the division. Specific conferences focused on hepatologic aspects of disease include:  
   1) Liver pathology conference  
   2) Patient selection committee for liver transplantation  
   3) GI Liver clinical conference  
   4) Hepatobiliary conference

b) Residents and interns in internal medicine who rotate through the service will also interact with the Fellow. The Fellow will be responsible for teaching and supervising the Internal Medicine residents. This role will also be shared by the attending hepatologists.

**Assessment of Competence**
Monthly written evaluations of the above requirements and goals will be completed by the attending(s) on the Hepatology service. In addition, specific skill oriented evaluations will be completed for inclusion in the Fellows quarterly review by the entire faculty body.