

Clinical Curriculum Description

Transplant Hepatology Fellowship

Overview of Annual Schedule for Transplant Hepatology: The 1 year transplant hepatology fellowship program will be based at the University of Washington Medical Center (UWMC) and the VA Puget Sound Health Care System (VAPSHCS). (The addition of the VAPSHCS as part of the transplant hepatology fellowship will be effective 7/1/08, with the addition of a second transplant hepatology fellow. Until 7/1/08 the curriculum is based entirely at UWMC). There will be one fellow at UWMC and one fellow at VAPSHCS each month, and the fellows will rotate in 3 month blocks.

Month	Fellow 1	Fellow 2
Jul	UWMC	VAPSHCS
Aug	UWMC	VAPSHCS
Sep	UWMC	VAPSHCS
Oct	VAPSHCS	UWMC
Nov	VAPSHCS	UWMC
Dec	VAPSHCS	UWMC
Jan	UWMC	VAPSHCS
Feb	UWMC	VAPSHCS
Mar	UWMC	VAPSHCS
Apr	VAPSHCS	UWMC
May	VAPSHCS	UWMC
Jun	VAPSHCS	UWMC

UWMC: Overview of Weekly Clinical Schedule for Transplant Hepatology

Monday		Tuesday		Wednesday		Thursday		Friday	
OLT Rounds ↓ ↓	Liver Biopsies* ↓ ↓	OLT Rounds ↓ ↓	OLT Clinic Pre-OLT ↓ ↓	OLT Rounds ↓ ↓	Liver Tumor Clinic / Board ↓ ↓	OLT Rounds ↓ ↓	Liver Biopsies ↓ ↓	OLT Rounds ↓ ↓	Liver Biopsies ↓ ↓
		↓ ↓			↓ ↓	Hepatology Clinic ↓ ↓			
		↓ ↓			↓ ↓				
Hepatology Clinic ↓ ↓ ↓ ↓		OLT Clinic New Patients ↓ ↓ ↓ ↓		OLT Selection Conference ↓		Hepatology Clinic ↓ ↓ ↓ ↓		Hepatology Clinic ↓ ↓ ↓ ↓	
									OLT Clinic Post-Transplant ↓ ↓ ↓ ↓
									↓ ↓
				Liver Biopsy Conference					↓ ↓

OLT = Orthotopic Liver Transplant

*Liver Biopsies performed all days except Tuesday

VAPSHCS: Overview of Weekly Clinical Schedule for Transplant Hepatology During their time at VAPSHCS, each fellow will also spend ½ day per week at the Harborview Medical Center (HMC) Hepatology clinic, in order to gain exposure to HIV and Hepatitis B/C coinfecting patients.

Monday	Tuesday	Wednesday	Thursday	Friday
Hepatology Clinic	Hepatology Clinic / Liver tumor clinic	Endoscopy	HMC Liver Clinic	UWMC academic conferences
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓
Hepatology Clinic	Research	GI -Hepatology - Radiology - Surgery Conference	Hepatology Clinic	Research
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓
↓	↓	↓	↓	↓

TRANSPLANT HEPATOLOGY FELLOWSHIP

1. Hepatology/Liver Disease. The Transplant Hepatology Fellow (“the Fellow”) will be taught to recognize and treat the major clinical syndromes and diseases encountered in the practice of Hepatology:

a. Diseases seen include, but are not limited to:

Acute Liver Failure	Budd-Chiari Syndrome
Alcoholic Liver Disease	Drug-Induced Liver Disease
Autoimmune Liver Diseases, including	Metabolic Liver Diseases
◆ autoimmune hepatitis	◆ Wilson’s Disease
◆ primary biliary cirrhosis (PBC)	◆ Alpha-1 Antitrypsin Deficiency
◆ primary sclerosing cholangitis (PSC)	◆ Hemochromatosis
Liver Tumors, including	◆ Nonalcoholic Fatty Liver Disease
◆ Hepatocellular Carcinoma	Viral Hepatitis
◆ Cholangiocarcinoma	◆ Hepatitis A, B, C, D
◆ Focal Nodular Hyperplasia or Adenoma	◆ Hepatitis - other
◆ Hemangioma	

b. Attendance at all Hepatology Clinics throughout the year. The Fellow will gain an understanding of the outpatient management of liver disease in all forms and stages.

c. Assisting the junior fellows and residents. The Fellow will be able to direct the junior fellows and residents on the Hepatology Service, and provide structure and teaching. The Fellow is expected to help with inpatient consultations, paracenteses, endoscopy (at VAPSHCS) and liver biopsies as necessary.

2. Liver Transplant. The Fellow will be taught the appropriate testing necessary for the assessment of and consideration for orthotopic liver transplantation. The Fellow will be able to meet criteria for UNOS certification as a transplant hepatologist at the conclusion of the year because of these activities.
 - a. Attendance at all Liver Transplantation Clinics throughout the year (2 per week). The Fellow will gain an intimate understanding of the process of evaluation of the liver transplant candidate from initial presentation to post-transplant management.
 - b. Rounding with the Liver Transplantation Team (2+ per week), while at UWMC. It is not expected that the Fellow will have primary responsibility for patients on the Transplantation In-Service (such as writing daily notes and follow-up on laboratory tests, etc.). It *is* expected that the Fellow will be an active participant in transplant rounds. The Fellow will learn in detail the inpatient management of both pre-transplant and post-transplant patients. The fellow will develop an in-depth understanding of the management of immunosuppression.
 - c. Transplant Selection Conference (1 per week). The Fellow will attend these sessions during their time at UWMC in order to obtain an insight into the process of the selection of patients for liver transplantation. The Fellow will be an active participant in the discussions regarding selection of patients for transplant.
3. Liver Cancer Clinic and Conference. At UWMC and VAPSHCS, this is a once weekly multidisciplinary conference including diagnostic radiology, oncology, hepatology, interventional radiology, and hepatobiliary surgery. It is an excellent educational experience. The Fellow will see patients who have been referred for management of their liver tumors. The Fellow will present these cases at the tumor conference and participate actively in the decision-making with regard to their management. The Fellow, in conjunction with the Hepatology Attending, will see the patients after conference and follow-up with them after the decisions are made and implemented.
4. Conferences. The Fellow will participate in the GI, Hepatology, and Liver Transplant Division-wide education programs designed for the fellows and faculty members
 - a. Gastroenterology Conference. This weekly conference consists of journal club, grand rounds, and educational sessions. The Fellow will attend these weekly conferences and be an active participant in those conferences at which the Hepatology service is scheduled to present.
 - b. Liver Pathology Conference. The Fellow will attend this weekly pathology conference. At this conference, all liver biopsies performed on transplant patients and selected biopsies on non-transplant patients are reviewed with the hepatopathologists. The Fellow will gain an understanding of the different presentations of liver disease on histology and an ability to read these biopsies.
 - c. Radiology Conference. This is a once weekly (as needed) conference to review all studies obtained on all liver transplant patients. It is attended also by the transplant surgery and hepatology attendings and the liver transplant nurse coordinators.

- d. Liver Transplant Grand Rounds. This is a monthly conference with up-to-date lectures on issues affecting the liver transplant community. The Fellow will attend this conference.
5. Team Structure. The transplant hepatology team is composed of the Hepatology Attending, the Transplant Hepatology Fellow, a junior GI Fellow, and a 3rd year resident. The Fellow will become an active member of this team and an important interface between the team and the transplant surgeons.
6. Principal Teaching Methods
 - a. *Case discussion and review* - The team reviews and discusses all cases. All patients are seen by the Hepatology Attending.
 - b. *Rounds*. Rounds will be held daily or as needed on the Hepatology Consult patients. Bedside rounds are also held daily for patients on the liver transplant service. These rounds are held in conjunction with the Liver Transplant Surgeons. The Fellow will attend these rounds.
 - c. *Didactics in Liver*. Weekly conferences are held during which subjects directly related to transplant are discussed.
7. Call. The Fellow will be expected to take transplant/hepatology call in rotation along with the other members of the Hepatology on-call team. The Fellow is available during the weeknights for urgent calls. The weekend call rotation generally results in weekend call about every fourth to sixth weekend. There are always Hepatology Attendings available during the year for the Fellow to call upon should the need arise.
8. Research Clinics. There are at least 2 research clinics that will be ongoing throughout the year, as well as multiple clinical research studies that involve seeing research patients. There are a large number of active research protocols that are ongoing and the Fellow will be able to see these patients. The Fellow will learn the basics of basic, clinical, and translational research, depending upon the Fellow's interest. In addition, we would strongly encourage the Fellow to develop his/her own research study with one of the Hepatologists. It is expected that the Fellow have at least one presentation (oral or poster) at the annual AASLD meeting.
9. Human Physiology Course. Occasionally, the Fellow is asked to assist in teaching the Medical School's Human Physiology Course. This course is taught by a team of faculty to the second year medical students as their introduction to gastroenterology. **It is exciting and well received by the students and in the past has been considered an excellent educational experience by fellows.**