Fellowship in Hepatology and Liver Transplantation

Mayo Graduate School of Medicine

Mayo Clinic Jacksonville
Jacksonville, Florida
Fellowship in Hepatology and Liver Transplantation

The one-year Fellowship in Hepatology and Liver Transplantation at Mayo Clinic Jacksonville offers:

- The Mayo tradition of excellence in patient care, education and research
- Outstanding facilities and institutional resources
- Large patient population with an ideal mix of unusual and common disorders
- Dedicated and enthusiastic faculty
- Active educational conference program
- Superior hands-on training in all areas of clinical hepatology
- Intensive experience in the care and management of patients before, during and after liver transplantation
- Training in liver biopsy
- Clinical research training and experience
- Training that fulfills UNOS criteria for Liver Transplant Physician

Training at Mayo Clinic

Mayo Clinic has a long-standing tradition of practicing both the art and science of medicine. As one of the country’s largest and best-known private group practices of academic medicine, Mayo Clinic was founded on the belief that physicians need to work together, teach and learn from others, and conduct research to provide excellent patient care.

Physicians, scientists, residents, students, nurses and allied health staff members work as a team at Mayo Clinic. Our staff clinicians and scientists are called consultants in recognition of their teaching and mentoring role in the team.
Other active training programs at Mayo Clinic Jacksonville include residencies in internal medicine, surgery, and family medicine, fellowships in gastroenterology and hematology/oncology, and training programs in surgery, radiology, anesthesia, and other medical and surgical specialties.

**Mayo Clinic teamwork spans many locations**

**In Jacksonville, Florida**
Mayo Clinic Jacksonville
St. Luke’s Hospital

**In Rochester, Minnesota**
Mayo Clinic Rochester
Saint Marys Hospital
Rochester Methodist Hospital
Charter House

**In Scottsdale, Arizona**
Mayo Clinic Scottsdale
Mayo Clinic Hospital

**Mayo Health System**
**Program Description**

**Clinical Training**

Our primary goal is to train clinical scholars for career paths that include subspecialty patient care and academic activities such as teaching and clinical research. Expected career settings for graduates are as clinical faculty in a traditional university academic practice, or as a scholarly subspecialist at a referral center. This training would also be excellent preparation for clinical practice outside of an academic environment.

Your training will include a broad exposure to common and unusual problems in the field of hepatology and liver transplantation, and guide you to develop the clinical skills necessary to evaluate and manage inpatients and outpatients with these problems. You will become skilled at liver biopsy, and interpretation of hepatobiliary imaging studies. Through your patient care experiences and educational conferences, the training program will help you to rapidly expand your knowledge base in the fields of hepatology and liver transplantation.

During your fellowship you will work on a one-to-one basis with faculty to provide patient care in ambulatory and inpatient settings. The favorable faculty ratio, large and diverse patient population, and state-of-the-art diagnostic, therapeutic, and research facilities combine to create an ideal educational setting. The “Mayo Clinic way” of graduate medical education ensures you will have the finest teaching and the broadest patient care experience possible during a busy, hands-on fellowship program. In the outpatient clinic, you will follow a group of patients over the duration of your training program, to gain an understanding of the long-term course of diseases, and course of liver transplant patients. Your clinical activities are designed for their educational value to you.
The primary training sites are Mayo Clinic Jacksonville and St. Luke’s Hospital in Jacksonville. Elective rotations at Mayo Clinic Rochester and at Nemours Children’s Clinic are also available.

**Rotation Schedule**

Schedules for fellows will vary, but will include the following exposures:

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Month(s)</th>
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<tbody>
<tr>
<td>Outpatient Liver Transplant Clinic</td>
<td>3 months</td>
</tr>
<tr>
<td>Inpatient Liver Transplantation Service</td>
<td>3 months</td>
</tr>
<tr>
<td>Outpatient Hepatobiliary Clinic</td>
<td>5 months</td>
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<tr>
<td>Research</td>
<td>1 month</td>
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**Rotation Descriptions**

**Liver Transplantation**

The liver transplantation program at St. Luke’s Hospital and Mayo Clinic Jacksonville began in 1998, but represents an expansion and continuation of the internationally recognized Mayo Clinic liver transplantation program. The program is extremely busy and is expected to perform nearly 100 liver transplants a year. The liver transplant service and clinic are very active and provide exposure to patients with chronic liver disease who are being evaluated for liver transplantation, as well as patients at all stages following transplantation. You will become skilled in the management of patients with chronic hepatic insufficiency and fulminant hepatic failure. You will develop expertise in the management of all types of post-transplant complications including rejection, biliary complications, and complications of immunosuppression. This training will meet UNOS criteria for certification as a Liver Transplant Physician for fellows who complete a gastroenterology fellowship.
Hepatobiliary Clinic

During this rotation you will evaluate and manage patients with a wide variety of liver and biliary diseases, including cholestatic diseases, viral hepatitis, alcoholic liver disease, autoimmune hepatitis, and hepatobiliary neoplasms. You will develop skill in managing complications of chronic liver disease including portal hypertension, pruritis, and encephalopathy.

Research Training

Participation in clinical research is an important part of this training program. Fellows are expected to participate in clinical research projects with a faculty mentor. A Clinical Research Center provides facilities, equipment, and research nurse assistants to support your clinical research projects. There are opportunities to collaborate with basic scientists in the Birdsall Research Center at Mayo Clinic Jacksonville, or with researchers at Mayo Clinic Rochester. The information generated in this year will form the basis for presentations at national meetings and in publications. A one month block of time is allocated for analyzing data, preparing presentations, and writing manuscripts.
Didactic Training

Clinical conferences, seminars, small-discussion groups, journal clubs and one-on-one instruction are all an integral part of the Fellowship in Hepatology and Liver Transplantation.

Teaching Conferences

We maintain an active schedule of teaching conferences relevant to hepatology and liver transplantation. The goal of these conferences is to help you develop the knowledge and skills necessary to function as an effective consultant in hepatology and liver transplantation in a clinical academic setting.

Bench to bedside

Mayo Clinic is committed to basic and clinical research that leads to better patient care.

Mayo Clinic’s hallmark is teamwork —
- Among basic and clinical investigators
- Among investigators and clinical practitioners
- Across Mayo Clinic sites
- Between Mayo Clinic and other institutions

Mayo Clinic people in research —
- 250+ full-time physicians and scientists
- 400+ associates and fellows
- 1300+ administrative and allied health staff

Research funding sources —
- Extramural funds = $130 million+
- Mayo Clinic funds/other revenue = $110 million+
During a series of Hepatology Core Conferences, faculty members provide a didactic review of important topics in hepatology and liver transplantation. GI Basic Science Conferences cover important areas of hepatic physiology. Visiting professors give state-of-the-art talks and review cases with fellows. Other regular conferences provide teaching in the format of case discussions and literature reviews, and include: GI Medical-Surgical Conference, Hepatobiliary Case Conference, Journal Club, Liver Biopsy Conference, GI Research Conference, and Liver Transplant Selection Conference.

There are other conferences in the Division of Gastroenterology and Hepatology, as well as clinic-wide conferences such as Grand Rounds and Clinical-Pathologic Conferences. Other Mayo Clinic Jacksonville divisions and training programs also have active conference schedules that will include topics of interest.

**Training in Scholarly Activities**

We will help you develop your teaching skills, and your ability to give effective oral presentations. You will participate in the formal and informal teaching of colleagues, internal medicine and family medicine residents, medical students and nursing staff. You may have the opportunity to make presentations at national CME meetings sponsored by our division.

**Teaching Opportunities**

You will have the opportunity to teach internal medicine and surgery residents, Mayo Medical School students and visiting students from other medical schools through bedside instruction and formal didactic lectures.
Cardiac Life Support Certification

Certification in Basic Cardiac Life Support and Advanced Cardiac Life Support (ACLS) is required for all Mayo Clinic residents and fellows. ACLS courses are held during the last week of June, just before the start of the academic year. The ACLS course also is offered evenings every three months during the year to facilitate recertification.

General Program Information

Patient and Service Mix

As a regional medical center for the Southeast, Mayo Clinic Jacksonville registers more than 55,000 patients each year. Eighty-five percent of the clinic’s patients are self-referred and come from within a day’s drive. Although Mayo Clinic has a reputation for successfully handling the most obscure and difficult medical problems for people from around the world, common medical concerns are actually the norm. This allows you to see and treat an exceptional variety of illnesses during your clinical training.

Call Frequency

Your call schedule will vary by individual rotation. Mayo Clinic follows the recommendations of the Accreditation Council for Graduate Medical Education.
Moonlighting
Moonlighting is permitted for licensed residents and fellows beyond the PGY-1 level. Moonlighting activities may be scheduled during those times when you are assigned to consultative or outpatient rotations.

Evaluation
To ensure that you acquire adequate knowledge and develop your technical skills to expert levels, your performance will be monitored carefully during your Fellowship. You will be evaluated formally by supervising faculty members after each rotation. You will meet with the Program Director on a regular basis to review your evaluations, and will have the opportunity to provide critiques of your training experience and faculty performance. During meetings with the Program Director, you will be able to discuss ways that we may improve your training experience.

Career Development
You will meet periodically with the Program Director, your research mentor, and other faculty members to discuss your career goals. Mayo Clinic recruits the majority of its staff physicians from its own subspecialty training programs. Thus, when you successfully complete the Fellowship in Hepatology and Liver Transplantation, job opportunities may be available at Mayo Clinic’s group practices in Jacksonville, Rochester, or Scottsdale.
Faculty

In addition to caring for patients in their clinical practices, Mayo Clinic’s faculty members are committed to teaching and facilitating the growth of medical knowledge. Many of our faculty have published and lectured extensively and are recognized leaders in their field. You will have direct access to these individuals throughout your training program.

The Division of Gastroenterology and Hepatology includes three hepatologists, and nine other gastroenterologists with a broad range of expertise. Faculty for the Fellowship in Hepatology and Liver Transplantation also includes a liver transplant surgeon, radiologists, and pathologists. We have a three-year Gastroenterology Fellowship, with one fellow per year. We see outpatients with GI and liver disease from around the world and across the U.S., as well as from the large local population. This creates a mix of unusual referral cases, and “bread and butter” hepatology that is optimal for education. We perform more than 12,000 outpatient procedures each year, including advanced procedures like endoscopic US, laser and photodynamic therapy, esophageal stents, PEG, ERCP, and enteroscopy. Our radiology department includes skilled interventional radiologists who are expert in TIPS placement, percutaneous cholangiograms, and interventions to relieve biliary obstruction.

Advisers

You will be assigned a faculty adviser who can provide comprehensive educational advice and personal support. Your adviser also will serve as a contact point, introducing you and your family to Jacksonville and the Mayo Clinic system.
Visiting Professors

Many prominent professors visit Mayo Clinic each year. They present their work during noon and/or morning lectures and participate in hospital rounds. You will be encouraged to take full advantage of these opportunities.

Facilities and Resources

Mayo Clinic Jacksonville

Mayo Clinic Jacksonville, a comprehensive outpatient medical facility, is located on 240 acres near the Intracoastal Waterway in eastern Jacksonville. It includes a full-service laboratory, an on-site pharmacy, an ambulatory surgical center and a radiation-oncology center. More than 270 full-time staff physicians represent virtually all clinical specialties. It is a major regional and international referral center, with more than 55,000 new patient registrations each year.

A state-of-the-art medical research building houses researchers conducting a large-scale study of Alzheimer’s disease. They are particularly interested in the mechanisms of neurodegenerative disorders, cell damage and Alzheimer’s disease. Dedicated In 1993, this state-of-the-art facility allows scientists and students to explore some of the newest areas of medical science. A cancer research building is currently under construction.

St. Luke’s Hospital, located nine miles inland from Mayo Clinic Jacksonville, is a modern 289-bed facility with 16 operating rooms, an ICU, a bone marrow transplant unit, an epilepsy unit, two cardiac catheterization laboratories and a stereotactic neurosurgery suite. More than 9200 patients are
admitted to St. Luke’s each year. The emergency room treats nearly 25,000 patients per year. The current facility was completed in 1985, but St. Luke’s Hospital is the oldest hospital in Florida. This hospital has been a Mayo Clinic facility since 1987.

Libraries

The Bursak Biomedical Library at Mayo Clinic Jacksonville has a large collection of medical texts and journal subscriptions. Fellows have 24-hour access to study space, computers, copiers, audiovisual services, and on-line database information services. The St. Luke’s Hospital Library is also available 24 hours. Reference librarians can perform literature searches or help you with interlibrary loans. Many clinical conferences are preserved on videotape. You can view these tapes at the library or check them out for use at home. The Bursak Biomedical Library is also connected to computer database services that link Mayo Clinic Jacksonville researchers to a global network of scientific information.

In addition, the resources of Mayo Clinic’s library system in Rochester, Minnesota, are easily accessible, and articles from older or obscure journals can be obtained by fax or overnight mail. The Mayo Library system has one of the largest medical collections in the world, with more than 4,300 journal subscriptions and 353,000 bound volumes.
Telecommunications System

Mayo’s clinics in Jacksonville, Rochester, and Scottsdale are linked via a sophisticated telecommunications system, which provides video teleconferencing and data transmission. Staff can have live, interactive consultations with physicians and their patients at other sites via TV monitors. In addition, X-rays, laboratory test results, CT scans, angiograms and pathology slides can be transmitted between the sites.

The advanced telecommunications system is the foundation for Mayo Clinic’s unique five-digit telephone dialing and pager system. Physicians at any Mayo Clinic site can be easily accessed for consultations or updates, strengthening the teamwork among consultants, trainees, and allied health care staff at all three practice sites.

Resources

During your Fellowship, you will have access to these resources and support services:

• Teaching files in radiology and pathology
• Large collection of gastroenterology, hepatology, and nutrition texts in the Division Library
• Teaching slide sets for liver biopsy interpretation
• Secretarial services for patient care and academic activities
• Computer support for Internet, literature search, slide creation, data base, word processing and e-mail
• Graphic services for slide and poster presentations
• Office and work space for Fellows
• Computerized patient records system allows immediate access to medical records from any workstation
Compensation and Benefits

Vacation and Trip Policy
You may take up to 15 working days (three weeks) each year for vacation.

You are encouraged to present your research at regional and national meetings. If you are selected to make a presentation, Mayo Clinic will pay authorized expenses for you to attend that meeting (within the United States). During the Fellowship, Mayo Clinic will also pay for you to attend one meeting at which you do not make a presentation.

Stipends and Other Benefits
Mayo has highly competitive stipends and a benefits package that includes:
• A comprehensive medical care plan
• Short-term disability insurance
• Voluntary basic life insurance, disability insurance, and family life insurance
• Voluntary additional life insurance
• Voluntary accidental death and dismemberment insurance
• A dental assistance plan
• Excess personal liability insurance
• Professional liability coverage

Additional information about stipends and benefits will be provided during personal interviews.
Jacksonville is a great place to work and live. Built along the St. Johns River and the Atlantic Ocean in northeastern Florida, is home to more than one million residents. Known for its beaches, Jacksonville attracts many visitors for surfing, swimming, windsurfing, fishing and water skiing. Tennis and golf also are popular activities in the region. The international headquarters for the Association of Tennis Professionals and the national headquarters of the Professional Golf Association Tour are located in Jacksonville.

If you enjoy team sports, you have several choices. College basketball and baseball teams are fielded by Jacksonville University and the University of North Florida. Jacksonville also is home to the annual Gator Bowl and a National Football League team, the Jacksonville Jaguars.

The city has five regional shopping centers, more than 200 restaurants, a zoo, two major art galleries, eight museums, a symphony orchestra, and several theaters and nightclubs. There are nearly 250 public and private schools and 14 regional colleges and universities. The nationally famous Jacksonville Jazz Festival is held each year in Metropolitan Park.

Lifestyles in Jacksonville are focused around neighborhoods, each with its own distinctive character and schools. Housing costs are among the lowest of Florida’s major cities.
Appointments and Applications

There are two positions available each year in the Mayo Clinic Jacksonville Fellowship in Hepatology and Liver Transplantation. Qualified applicants will have completed an accredited internal medicine residency program by the time they begin their hepatology fellowship. You may complete the hepatology fellowship before a gastroenterology fellowship, but to fulfill UNOS training criteria for qualification as a Liver Transplant Physician a gastroenterology fellowship must be completed at some point.

To apply for this fellowship, you need to submit:

- A completed Mayo Graduate School of Medicine application form
- Official college, graduate school, and medical school transcripts
- An official record of board scores (NBME, FLEX, USMLE, LMCC, VQE, or FMGEMS)
- A dean’s letter and at least two other letters of recommendation (including letters from internal medicine residency program director, and gastroenterology fellowship program director)
- A curriculum vitae
- A personal statement outlining your reasons for applying and career plans and goals
- A valid ECFMG certificate (if you graduated from a medical school outside of the U.S. or Canada)

The academic year for this program begins on July 1. Applications should be completed at least one year in advance of appointment if possible, but will be considered at any time. If you are considered for an appointment, you will be asked to visit Mayo Clinic Jacksonville for an interview with the program director and selected faculty.
Inquiries

For an application or more information contact:

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For more information about the Mayo Graduate School of Medicine, please visit our Web site at http://www.mayo.edu/mgsm/gsm.htm
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