Overall Program Goals:

The goal of our fellowship program is to recruit and train talented physicians who are committed to a career in academic gastroenterology and hepatology. Our program has three academic pathways, each with excellent faculty role models and mentors that allow trainees to develop their academic careers as: 1.) a basic laboratory researcher, 2.) a clinical researcher or 3.) a clinician/teacher.

A key measure of our success in this regard is the proportion of our graduates who enter academic medical practice after graduation and, more importantly, remain in academic practice over time.

Rotations:

F1: In-Patient Consult

The Gastroenterology Consult Service provides inpatient subspecialty consultations for patients with gastrointestinal and hepatic and biliary tract disorders. The primary responsibility of the service is to respond to requests for consultations in a timely and effective manner. In general, we aim to provide a "same day" consultation service. In the case of non-urgent consultations that are forwarded to us late in the working day, it may be acceptable to see the patient the following morning.

It is expected that consult patients will be followed by the fellow until discharge or until resolution of their active gastrointestinal problems. Follow-up notes and recommendations should be made as indicated. If specialized investigations (e.g. endoscopic procedures) are recommended, the fellow will assist in those procedures whenever possible. When the GI attending physician determines that further follow-up by the GI service is no longer indicated, a note to this effect should be placed in the patient’s medical record.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services across the spectrum of GI and hepatology disorders seen in the in-patient and ER settings.
- Acquisition of medical knowledge regarding the GI and hepatology disorders seen in the in-patient and ER settings (and as laid out in the curriculum).
- Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinician.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
• Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff, as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.

• Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.

F1. Out-Patient Continuity

Fellows will attend at least one half day session of gastroenterology out-patient clinic weekly. Patients are referred to this clinic by their primary care physicians or by other specialists for consultation regarding diagnosis and management of a wide range of gastrointestinal and hepatobiliary disorders. The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the trainee on his/her evaluation of the patient and discusses the appropriateness of the trainee’s proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

The educational goals of this rotation include:

• Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services across the spectrum of GI and hepatology disorders seen in the out-patient setting.

• Acquisition of medical knowledge regarding the GI and hepatology disorders seen in the out-patient setting (and as laid out in the curriculum).

• Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.

• Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.

• Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.

• Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.
F1. Endoscopy:

Endoscopic training occurs during all three years of the fellowship and is an integral component of most rotations including:

- **In-patient consult**: Trainees assist in performing endoscopic procedures for the patients they see as in-patient consults.
- **Out-patient continuity**: Trainees assist in performing endoscopic procedures for the patients they see in their out-patient continuity clinics.
- **Advanced sub-specialty out-patient clinics**: Whenever their schedules allow trainees also assist in performing endoscopic procedures for the patients they see during their advanced sub-specialty out-patient clinics (IBD, motility, advanced hepatology & liver transplantation, advanced endoscopy and EUS, pancreatic disease, celiac disease).
- **Advanced Endoscopy and EUS**: During the 3rd year of training, 1.5-3 months are devoted to advanced endoscopy, ERCP and EUS training.

It is expected that first year fellows will require continuous supervision as well as frequent advice and assistance in performing endoscopic procedures.

The educational goals of this rotation are to provide training in all key elements of endoscopy including knowledge, experience and competency in:

- Patient evaluation by history, examination, laboratory, radiographic and special studies to determine indications, contra-indications and procedure planning including appropriate anesthesia for diagnostic and therapeutic endoscopic procedures.
- Knowledge regarding the appropriate indications, contra-indications, preparations and techniques for each endoscopic procedures.
- Endoscopic techniques and skills acquired through continuous supervised practice and experience
- Effective communication with patients, family members and with referring physicians regarding the indications, risks, benefits, alternatives, findings and management implications of endoscopic procedures.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff, as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of endoscopic services including the effective use of resources, identification of potential safety concerns in the delivery of endoscopic services, evaluation of negative outcomes, “near misses” and patient feedback to achieve continuous quality improvements.
F1: Hepatology:

The Hepatology Service provides inpatient and out-patient subspecialty consultation and attending physician care for patients with hepatic disorders. In general, we aim to provide a "same day" consultation service for in-patient consults. In the case of non-urgent consultations that are forwarded to us late in the working day, it may be acceptable to see the patient the following morning.

It is expected that consult patients will be followed by the fellow until discharge or until resolution of their active hepatic problems. Follow-up notes and recommendations should be made as indicated. If specialized investigations (e.g. endoscopic procedures or liver biopsy) are recommended the fellow will assist in those procedures whenever possible. When the hepatology attending physician determines that further follow-up by the hepatology service is no longer indicated a note to this effect should be placed in the patient’s medical record.

Fellows will also attend at least one half day session of hepatology out-patient clinic weekly. Patients are referred to this clinic by their primary care physicians or by other specialists for consultation regarding diagnosis and management of a wide range of hepatobiliary disorders. The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the resident or fellow on his/her evaluation of the patient and discusses the appropriateness of the trainee’s proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services in liver disease.
- Acquisition of medical knowledge regarding the management of liver disorders (and as laid out in the curriculum).
- Acquisition of and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.
**F1. Research:**

Fellows are provided with 2 weeks of protected research time (only clinical roles are ½ day out-patient clinic and scheduled call). Clinical responsibilities are covered by FY3 colleagues. Fellows meet with the PD and/or an Associate PD prior to the research weeks to optimize use of time during this short rotation.

Priorities vary by fellow but include:
1. Identify and meet with potential faculty mentors with a goal to solidifying a mentor relationship.
2. Generation of a research hypothesis
3. Formulation of a research proposal including background literature, preliminary data when available and a research plan including materials and methods, experimental protocol and data analysis plan
4. Initiation or submission of an IRB and/or an Animal Use protocol.
5. Deciding and applying for advanced research training opportunities during FY2 (Masters Course, Catalysts courses, MSPH Summer Course etc.).
**F2: In-Patient Consult**

The Gastroenterology Consult Service provides inpatient subspecialty consultations for patients with gastrointestinal and hepatic and biliary tract disorders. The primary responsibility of the service is to respond to requests for consultations in a timely and effective manner. In general, we aim to provide a "same day" consultation service. In the case of non-urgent consultations that are forwarded to us late in the working day, it may be acceptable to see the patient the following morning.

It is expected that consult patients will be followed by the fellow until discharge or until resolution of their active gastrointestinal problems. Follow-up notes and recommendations should be made as indicated. If specialized investigations (e.g. endoscopic procedures) are recommended the fellow will assist in those procedures whenever possible. When the GI attending physician determines that further follow-up by the GI service is no longer indicated a note to this effect should be placed in the patient’s medical record.

It is expected that the medical care and management plans developed by second year fellows will require little revision by the attending physician.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services across the spectrum of GI and hepatology disorders seen in the in-patient and ER settings.
- Acquisition of more advanced medical knowledge regarding the GI and hepatology disorders seen in the in-patient and ER settings (and as laid out in the curriculum).
- Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.

**F2. Out-patient Continuity**

Fellows will attend at least one half day session of gastroenterology out-patient clinic weekly. Patients are referred to this clinic by their primary care physicians or by other specialists for consultation regarding diagnosis and management of a wide range of
gastrointestinal and hepatobiliary disorders. The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the resident or fellow on his/her evaluation of the patient and discusses the appropriateness of the trainees proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

It is expected that the medical care and management plans developed by second year fellows will require little revision by the attending physician.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services across the spectrum of GI and hepatology disorders seen in the out-patient setting.
- Acquisition of medical knowledge regarding the GI and hepatology disorders seen in the out-patient setting (and as laid out in the curriculum).
- Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.

**F2. Endoscopy:**

Endoscopic training occurs during all three years of the fellowship and is an integral component of most rotations including:

- **In-patient consult:** Trainees assist in performing endoscopic procedures for the patients they see as in-patient consults.
- **Out-patient continuity:** Trainees assist in performing endoscopic procedures for the patients they see in their out-patient continuity clinics.
- **Advanced sub-specialty out-patient clinics:** Whenever their schedules allow trainees also assist in performing endoscopic procedures for the patients they see during their advanced sub-specialty out-patient clinics (IBD, motility,
advanced hepatology & liver transplantation, advanced endoscopy and EUS, pancreatic disease, celiac disease).

- **Advanced endoscopy and EUS:** During the 3rd year of training, 1.5-3 months are devoted to advanced endoscopy, ERCP and EUS training.

It is expected that second year fellows will require minimal assistance in performing routine diagnostic endoscopic procedures but will require frequent advice and assistance for advanced and therapeutic procedures.

The educational goals of this rotation are to provide training in all key elements of endoscopy including knowledge, experience and competency in:

- Patient evaluation by history, examination, laboratory, radiographic and special studies to determine indications, contra-indications and procedure planning including appropriate anesthesia for diagnostic and therapeutic endoscopic procedures.
- Knowledge regarding the appropriate indications, contra-indications, preparations and techniques for each endoscopic procedures.
- Endoscopic techniques and skills acquired through continuous supervised practise and experience
- Effective communication with patients, family members and with referring physicians regarding the indications, risks, benefits, alternatives, findings and management implications of endoscopic procedures.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of endoscopic services including the effective use of resources, identification of potential safety concerns in the delivery of endoscopic services, evaluation of negative outcomes, “near misses” and patient feedback to achieve continuous quality improvements.

**F2: Hepatology:**

The Hepatology Service provides inpatient and out-patient subspecialty consultation and attending physician care for patients with hepatic disorders. In general, we aim to provide a "same day" consultation service for in-patient consults. In the case of non-urgent consultations that are forwarded to us late in the working day, it may be acceptable to see the patient the following morning.

It is expected that consult patients will be followed by the fellow until discharge or until resolution of their active hepatic problems. Follow-up notes and recommendations should be made as indicated. If specialized investigations (e.g. endoscopic procedures or liver biopsy) are recommended the fellow will assist in those procedures whenever possible. When the hepatology attending physician determines that further follow-up by the hepatology service is no longer indicated a note to this effect should be placed in the patient’s medical record.
Fellows will also attend at least one half day session of hepatology out-patient clinic weekly. Patients are referred to this clinic by their primary care physicians or by other specialists for consultation regarding diagnosis and management of a wide range of hepatobiliary disorders. The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the resident or fellow on his/her evaluation of the patient and discusses the appropriateness of the trainees proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

It is expected that the medical care and management plans developed by second year fellows will require little revision by the attending physician.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services in liver disease.
- Acquisition of medical knowledge regarding the management of liver disorders (and as laid out in the curriculum).
- Acquisition of and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.

**F2. Research:**

All fellows engage in research (basic, translational or clinical) during the second year of fellowship. This consists of a mentored program of training tailored to each individual fellow's career goals. There are over 30 full-time research staff and a current year research budget in excess of $5 million. Thus, there is ample opportunity and mentorship for rigorous research training. For those interested in a career in clinical research, we offer access to masters programs through Harvard University (Masters in Medical Sciences & Masters in Public Health). Our faculty members encompass a broad range of clinical and research interests and expertise and provide one-to-one
mentoring for candidates wishing to pursue careers in any of the three majors academic tracks i.e. clinician/educator, clinical investigator, or laboratory investigator.

Individual Projects are developed by fellows in conjunction with a faculty mentor(s). The mentor and trainee together determine the specific aims of each individual research project. However, the general educational goals are to familiarize trainees with:

6. Generation of a research hypothesis
7. Formulation of a research proposal including background literature, preliminary data when available and a research plan including materials and methods, experimental protocol and data analysis plan
8. Acquiring and recording research data
9. Data analysis
10. Presentation of research findings
11. The ethical conduct of research including compliance with FDA, IRB, Animal Use Committee and institutional guidelines and requirements.
F3. Out-Patient Continuity

Fellows will attend at least one half day session of gastroenterology out-patient clinic weekly. Patients are referred to this clinic by their primary care physicians or by other specialists for consultation regarding diagnosis and management of a wide range of gastrointestinal and hepatobiliary disorders. The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the resident or fellow on his/her evaluation of the patient and discusses the appropriateness of the trainees proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

It is expected that the medical care and management plans developed by third year fellows will require minimal substantial revision by the attending physician.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services across the spectrum of GI and hepatology disorders seen in the out-patient setting.
- Acquisition of medical knowledge regarding the GI and hepatology disorders seen in the out-patient setting (and as laid out in the curriculum).
- Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.

F3. Endoscopy:

Endoscopic training occurs during all 3 years of the fellowship and is an integral component of most rotations including:

- In-patient consult: Trainees assist in performing endoscopic procedures for the patients they see as in-patient consults.
- **Out-patient continuity:** Trainees assist in performing endoscopic procedures for the patients they see in their out-patient continuity clinics.

- **Advanced sub-specialty out-patient clinics:** Whenever their schedules allow trainees also assist in performing endoscopic procedures for the patients they see during their advanced sub-specialty out-patient clinics (IBD, motility, advanced hepatology & liver transplantation, advanced endoscopy and EUS, pancreatic disease, celiac disease).

- **Advanced endoscopy and EUS:** 1.5 - 3 months during the 3rd year of training are devoted to advanced endoscopy, ERCP and EUS training.

It is expected that third year fellows will require minimal assistance in performing routine diagnostic endoscopic procedures and over the course of this year will attain competence in performing advanced and therapeutic procedures.

The educational goals of this rotation are to provide training in all key elements of endoscopy including knowledge, experience and competency in:

- Patient evaluation by history, examination, laboratory, radiographic and special studies to determine indications, contra-indications and procedure planning including appropriate anesthesia for diagnostic and therapeutic endoscopic procedures.

- Knowledge regarding the appropriate indications, contra-indications, preparations and techniques for each endoscopic procedures.

- Endoscopic techniques and skills acquired through continuous supervised practise and experience.

- Effective communication with patients, family members and with referring physicians regarding the indications, risks, benefits, alternatives, findings and management implications of endoscopic procedures.

- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.

- Awareness and contribution to the efficiency, safety and quality of endoscopic services including the effective use of resources, identification of potential safety concerns in the delivery of endoscopic services, evaluation of negative outcomes, “near misses” and patient feedback to achieve continuous quality improvements.

**F3: Hepatology:**

The Hepatology Service provides inpatient and out-patient subspecialty consultation and attending physician care for patients with hepatic disorders. In general, we aim to provide a "same day" consultation service for in-patient consults. In the case of non-urgent consultations that are forwarded to us late in the working day, it may be acceptable to see the patient the following morning.

It is expected that consult patients will be followed by the fellow until discharge or until resolution of their active hepatic problems. Follow-up notes and recommendations should be made as indicated. If specialized investigations (e.g. endoscopic procedures...
or liver biopsy) are recommended the fellow will assist in those procedures whenever possible. When the hepatology attending physician determines that further follow-up by the hepatology service is no longer indicated a note to this effect should be placed in the patient's medical record.

Fellows will also attend at least one half day session of hepatology out-patient clinic weekly. Patients are referred to this clinic by their primary care physicians or by other specialists for consultation regarding diagnosis and management of a wide range of hepatobiliary disorders. The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the resident or fellow on his/her evaluation of the patient and discusses the appropriateness of the trainees proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

It is expected that the medical care and management plans developed by third year fellows will require minimal revision by the attending physician. Third year fellows will also acquire additional training and experience in liver transplantation.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services in liver disease.
- Acquisition of medical knowledge regarding the management of liver disorders (and as laid out in the curriculum).
- Acquisition of and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.


**F3: In-Patient Consult**

This consists of a brief exposure in FY3 (2 weeks plus night and weekend call and "sick-call"). The Gastroenterology Consult Service provides inpatient subspecialty consultations for patients with gastrointestinal and hepatic and biliary tract disorders. The primary responsibility of the service is to respond to requests for consultations in a timely and effective manner. In general, we aim to provide a "same day" consultation service. In the case of non-urgent consultations that are forwarded to us late in the working day, it may be acceptable to see the patient the following morning.

It is expected that consult patients will be followed by the fellow until discharge or until resolution of their active gastrointestinal problems. Follow-up notes and recommendations should be made as indicated. If specialized investigations (e.g. endoscopic procedures) are recommended the fellow will assist in those procedures whenever possible. When the GI attending physician determines that further follow-up by the GI service is no longer indicated a note to this effect should be placed in the patient’s medical record.

It is expected that the medical care and management plans developed by second year fellows will require little revision by the attending physician.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide sub-specialist diagnostic and management services across the spectrum of GI and hepatology disorders seen in the in-patient and ER settings.
- Acquisition of more advanced medical knowledge regarding the GI and hepatology disorders seen in the in-patient and ER settings (and as laid out in the curriculum).
- Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.

**F3. Research:**

All fellows engage in research (basic, translational or clinical) during the third year of fellowship. This consists of a continuation of the mentored program of training
developed for the trainee during the second fellowship year. In many instances this includes completion of coursework and thesis for masters programs through Harvard University (Masters in Medical Sciences & Masters in Public Health).

**F3. Advanced Sub-Specialty Out-Patient:**

Fellows will attend at least one half day session of a specialized gastroenterology out-patient clinic weekly. This will incorporate a year long rotation between our Centers in IBD, Hepatology, Motility disorders, Pancreatic disorders and Celiac disease. Patients are referred to these specialized clinics by their primary care physicians or by other specialists for advanced consultation regarding diagnosis and management of a wide range of gastrointestinal and hepatobiliary disorders.

The gastroenterology fellow will obtain a complete history, perform a physical examination, review the results of available studies and laboratory tests and then develop a diagnostic impression, investigation and management plan. Their findings will then be presented to the supervising faculty member. The supervising faculty member interviews the patient and corroborates the physical examination findings. The attending physician also provides feedback and instruction to the resident or fellow on his/her evaluation of the patient and discusses the appropriateness of the trainee’s proposed plan for investigation and management. The trainee and supervising faculty then discuss the diagnostic impression and management plan with the patient.

It is expected that the medical care and management plans developed by third year fellows will require minimal substantial revision by the attending physician.

The educational goals of this rotation include:

- Experience in patient evaluation by history, examination, laboratory, radiographic and special studies to provide advanced sub-specialist diagnostic and management services to patients with complex or rare GI and hepatology disorders seen in the out-patient setting.
- Acquisition of in-depth medical knowledge regarding the GI and hepatology disorders seen in the out-patient setting (and as laid out in the curriculum).
- Continuous honing and improvement of clinical skills and practice through supervised patient evaluation, case presentation and feedback from experienced supervising clinicians.
- Effective and ongoing communication with patients, family members and with referring physicians regarding diagnosis, testing and management plans.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of patient care including the effective use of hospital and other healthcare resources, identification of potential safety concerns in the delivery of care, evaluation of negative or suboptimal outcomes and patient feedback to achieve continuous quality improvements.
F3. Advanced Endoscopy & EUS:

During the 3rd year of training, 1.5-3 months are devoted to advanced endoscopy, ERCP and EUS training. This provides third year fellows with an opportunity for intensive training in advanced endoscopic procedures.

The educational goals of this rotation are to provide training in all elements of advanced endoscopy including knowledge, experience and competency in:

- Patient evaluation by history, examination, laboratory, radiographic and special studies to determine indications, contra-indications and procedure planning including appropriate anesthesia for diagnostic and therapeutic endoscopic procedures.
- Knowledge regarding the appropriate indications, contra-indications, preparations and techniques for each endoscopic procedures.
- Endoscopic techniques and skills acquired through continuous supervised practise and experience.
- Effective communication with patients, family members and with referring physicians regarding the indications, risks, benefits, alternatives, findings and management implications of endoscopic procedures.
- Appropriate conduct in terms of respecting patient dignity, professional interaction with nursing and other support staff as well as thoughtful, timely and complete communications with patients, family members, referring physicians and other care providers.
- Awareness and contribution to the efficiency, safety and quality of endoscopic services including the effective use of resources, identification of potential safety concerns in the delivery of endoscopic services, evaluation of negative outcomes, “near misses” and patient feedback to achieve continuous quality improvements.
Though the rotations and hours do vary between fellows (for instance, some third year fellows choose a longer Advanced Endoscopy rotation), the table below is meant to represent the general distribution of fellows’ weekly hours:

<table>
<thead>
<tr>
<th></th>
<th>hours/week</th>
<th>weeks/year</th>
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<tbody>
<tr>
<td><strong>F1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Clinic</td>
<td>4 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>In-Patient Consults</td>
<td>36 hrs</td>
<td>34 (8.5 months)</td>
</tr>
<tr>
<td>Endoscopy</td>
<td>10 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>Hepatology</td>
<td>36 hrs</td>
<td>12 (3 months)</td>
</tr>
<tr>
<td>Research</td>
<td>36 hrs</td>
<td>2 (0.5 months)</td>
</tr>
<tr>
<td><strong>F2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Clinic</td>
<td>4 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>Endoscopy</td>
<td>4 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>In-Patient Consults</td>
<td>42 hrs</td>
<td>6 (1.5 months)</td>
</tr>
<tr>
<td>Hepatology</td>
<td>42 hrs</td>
<td>6 (1.5 months)</td>
</tr>
<tr>
<td>Research</td>
<td>42 hrs</td>
<td>36 (9 months)</td>
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<tr>
<td><strong>F3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced Endoscopy</td>
<td>46 hrs</td>
<td>6 (1.5 months)</td>
</tr>
<tr>
<td>Endoscopy</td>
<td>4 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>Advanced Hepatology</td>
<td>42 hrs</td>
<td>6 (1.5 month)</td>
</tr>
<tr>
<td>Advanced Subspecialty Outpatient</td>
<td>4 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>Continuity Clinic</td>
<td>4 hrs</td>
<td>52 (12 months)</td>
</tr>
<tr>
<td>In-Patient Consults</td>
<td>36 hrs</td>
<td>2 (0.5 months)</td>
</tr>
<tr>
<td>Research &amp; Elective</td>
<td>38 hrs</td>
<td>36 (9 months)</td>
</tr>
</tbody>
</table>