

**1. Curriculum Goals and Objectives for the Program**

There is a profound need for physicians specialized in the medical management of exocrine pancreatic disease who can provide expertise in the diagnosis and management of recurrent/chronic pancreatitis as well as difficult, unusual or refractory cases attributable to pancreatitis or potential for pancreatic cancer. This also includes management of patients who undergo total pancreatectomy for chronic pancreatitis or premalignant conditions such as IPMN. Our Pancreas Center under the direction of Drs. Steven Freedman and Sunil Sheth, is one of only a few centers in the country able to provide such expertise and advanced patient care related to medical pancreatology. As a result, we are increasingly asked to facilitate the training of internists, gastroenterologists and others in medical pancreatology and its management. Although there are advanced pancreatico-biliary fellowship programs in interventional ERCP/EUS, there are only a few programs nationwide focused on medical pancreatology. To fulfill this need and to continue to advance clinical/translational research in pancreatic disease, the Pancreatic Clinical and Research Fellowship was created.

The goals of the program are:

- To provide advanced clinical training in medical pancreatology with regard to diagnosis and management to Internal Medicine and Gastroenterology subspecialty physicians.
- To provide training in basic, translational and/or clinical research to physicians (MD or MD, PhD) wishing to establish an academic career in exocrine pancreatic disease patient care and research.

**2. Rotation Schedule/Primary units on which the trainee will function:**

- No night or weekend call
- Out-patient clinic rotations will be throughout the two year fellowship in our Pancreas Center. This includes all day Friday in the Pancreas Center with Dr. Freedman as well as a half to one day clinic session with other members of the Pancreas Center (Drs. Sheth, Sawhney, and Berzin). In addition, the fellow will have the opportunity to attend a half day weekly clinic at Boston Children’s hospital CF clinic with Dr. Freedman. The maximum number of assigned clinics will be 5 half day sessions per week to guarantee protected time for research and academic enrichment. The fellow will be directly supervised by the appropriate Pancreas Attending in that clinic (Drs. Freedman, Sheth, Sawhney, or Berzin).
- Elective sessions will be offered in General Gastroenterology, IBD, GI endoscopy, Motility, and Pathology.

**Expected Progression**

<b>Pancreas Competency-BIDMC Clinical Fellowship</b>	<b>6 Months</b>	<b>12 Months</b>	<b>24 Months</b>
Diagnostic Criteria for Exocrine Pancreatic disease including acute, recurrent, and chronic pancreatitis as well as pancreatic premalignant and malignant disease	Familiar	Skilled	Skilled

Histologic Features of exocrine Pancreatic Disease (in collaboration with the Department of Pathology)	Familiar	Competent	Skilled
Differential Diagnosis of abdominal pain and malabsorption that may be attributable to exocrine pancreatic disease	Familiar	Skilled	Skilled
Differentiating chronic pancreatitis vs motility disorder	Familiar	Competent	Skilled
Evaluation and treatment of pancreatic cystic lesions including IPMN	Familiar	Competent	Skilled
Use of genetic testing in the diagnosis and management of recurrent and chronic pancreatitis	Competent	Competent	Skilled
Disease severity scores in acute pancreatitis	Familiar	Competent	Skilled
Role of interventional ERCP/EUS and surgery	Familiar	Competent	Skilled
Role & Interpretation of MRI and CT in exocrine pancreatic disease	Familiar	Competent	Skilled
Indications and clinical use of medications in chronic pancreatitis	Familiar	Competent	Skilled
Nutritional management of exocrine pancreatic disease	Familiar	Competent	Skilled
Optimal use of EUS disease diagnosis and management	Familiar	Competent	Skilled
<b>Research</b>			
Human Subjects Protection Training / Good Clinical Practice	Competent	Skilled	Skilled
Data Collection & Storage Methodology	Familiar	Competent	Skilled
Sample Acquisition Techniques - Whole Blood & Pancreas Tissue/Cystic Fluid	Competent	Skilled	Skilled
Statistical Analyses	Familiar	Competent	Skilled
Scientific Publications / Meeting Abstracts	1 abstract	1-2 abstracts, 1 paper	2 papers, 1 review article

### 3. Lectures/Didactics/ Conferences

- Exocrine Pancreatic disease specific:
  - Research laboratory meeting (weekly). Fellows will be expected to present regularly on the progress and findings of their research projects. This is facilitated by attendance of weekly lab meetings with Dr. Freedman's research team of MDs, PhDs.
  - Attendance and presentation of patients at the weekly multidisciplinary Pancreatic Conference (Reisman 2 conference room 5:15-6:30 pm)
  - Clinical pathology meeting (monthly).
  - Quarterly "Research-in-progress" presentation with the Pancreas Center faculty.
  
- Gastroenterology: Pancreas fellows' training will be enhanced by participation in regularly scheduled general Gastroenterology and Hepatology Fellow teaching events. This will also help fellows to become integrated with the other clinical and research trainees during their fellowship.
  - Pathophysiology of disease - core curriculum conference (weekly)
  - Medical-Surgical GI conference (weekly)
  - Combined (BIDMC, BWH, CHB) Longwood GI conference (twice per month)
  - Journal Club (bi-weekly)
  - Research-in-Progress conference (monthly)
  - Research lecture series (monthly)
  - Inflammatory bowel disease conference (monthly)
  - Motility Conference (monthly)

**4. Research /Scholarly Activity:** This will include leading at least one clinical/translational research project as well as writing and submission at least one review article in the area of medical pancreatology. It is expected that the fellow will present at major GI/Pancreas meetings as well as at BIDMC GI journal club and GI Med/Surg conference.

**5. Supervision Policy** (progression, direct, indirect, responsible faculty):

1. The Pancreas Fellowship Director (Dr. Steven Freedman) will have overall responsibility for all Fellows
2. The attending physician(s) have the ultimate responsibility for all medical decisions regarding his/her patients.
3. The attending physician is responsible for providing oversight and supervision of all care provided by trainees.
4. Attending physicians are expected to behave in a professional manner at all times in regard to trainee supervision, and are expected to encourage each trainee to seek guidance from the attending at any time the trainee believes it may be beneficial to patient care. The attending physician is to make clear to each trainee that failure to seek guidance whenever appropriate will be considered problematic whereas seeking guidance unnecessarily will never be considered so.
5. Supervision of endoscopic procedures (upper endoscopy, colonoscopy, and flexible sigmoidoscopy) and patient care will depend on the experience of the trainee and complexity of the procedure/clinical situation.

**OUTPATIENT:** Trainee level Pancreas fellows will be precepted in all outpatient clinics and will present cases to the Attending Staff member who will see the patients and be present for the critical parts of the history and physical exam. Attending staff will review and cosign each of the Fellow's notes. For faculty level fellows, attending staff will be available on an as needed basis, based on the complexity of the presenting patient.

**ENDOSCOPY:** Trainee level Pancreas fellows will have the opportunity to perform upper endoscopy, colonoscopy, and flexible sigmoidoscopy in the second year of fellowship under the direct supervision of the attending staff who will evaluate for competency in the Fellows knowledge and indication for procedures, professionalism, informed consent presentation skills and performance technique. For faculty level fellows, attending staff will be available on an as needed basis, based on the complexity of the procedure.

**INPATIENT CONSULTATION:** Training is both inpatient and outpatient. Inpatient consult requests will be received by the Pancreas fellow, who will liaise with the general GI fellow as needed and independently evaluate and examine the patient to determine the appropriate course of action. Diagnosis and treatment plan will be discussed and documented with the consult attending on the inpatient Pancreatitis Service at the soonest possible time and within 24 hours of the initial consultation request. Note that the inpatient Pancreatitis Service attendings is covered by Drs. Freedman, Sheth, Sawhney, and Berzin.

**RESEARCH:** The Pancreas Fellow will be actively involved in research under the preceptorship of a Faculty member. The fellow will attend research conferences, be trained in basic epidemiology, data interpretation, study design and issues with translational research. The facilities exist for an extended Fellowship for research if desired. The Fellow will be expected to present work at a research conference and prepare his/her project for presentation at national meetings and for publication. The Faculty preceptor will certify that the training block was satisfactorily completed.