

# **Pancreas Research Fellowship Curriculum**

Center for Digestive Health



## **Introduction & Background**

Built on the foundation of Virginia Mason's internationally renowned Digestive Disease Institute, which was established to bring our accomplished group of digestive disease specialists and investigators together in a highly collaborative environment, the Center for Digestive Health's active, state-of-the-art therapeutic endoscopy service at Virginia Mason Medical Center performs in excess of 1,500 endoscopic retrograde cholangiopancreatography (ERCP) and approximately 1,200 endoscopic ultrasound (EUS) procedures every year.

Our active benign pancreas program is internationally renowned and sees approximately 1,300 patients every year. The Center for Digestive Health at Virginia Mason Franciscan Health has created the Pancreas Research Fellowship in keeping with the Institute's mission to optimize patient care through innovations in research, education, and a multidisciplinary approach to treatment of digestive and liver diseases.

Shayan Irani, MD, Pancreas Research Fellowship Program Director, works closely with Richard Kozarek, MD, Faculty Emeritus, to ensure a valuable educational experience. Pancreas research fellows work with business analysts and multidisciplinary providers as well as program faculty.

## **Program Faculty**

Supervision and mentoring will be provided by Shayan Irani, MD, Fellowship Director, and other faculty (listed below) depending upon specific areas of engagement. These faculty members are part of the Center for Digestive Health and include surgeons, gastroenterologists, pathologists, and radiologists with expertise in the treatment and research of digestive disease.

**Shayan Irani, MD**, Pancreas Research Fellowship Program Director  
**Andrew Ross, MD**, Medical Director, Endoscopy Research Director, Center for Digestive Health  
**Richard Kozarek, MD**, Faculty Emeritus, Digestive Disease Institute  
**Blaire Burman, MD**, Director, Training and Education  
**Scott Helton, MD**, Director, Liver, Pancreas & Biliary Surgical Center of Excellence  
**Russell Dorer, MD, PhD**, GI Pathologist  
**Christopher Gault, MD**, GI Pathologist  
**David Coy, MD**, GI Radiologist

### **Duration of Fellowship**

The duration of training is one year. This duration of time can be modified in special circumstances to two years.

### **Number of Positions**

One.

### **Prerequisites for Training**

Trainees for the Pancreas Research Fellowship must have an MD degree and have completed at least three years of residency. Non-native speakers of English must take and submit TOEFL scores. We cannot consider applicants with J1 visa status. Applications from international applicants eligible for an H1-B visa will be considered.

### **Salary**

The Pancreas Research Fellow will receive a competitive salary and benefits at the regionally- determined PGY-4 level or higher, depending on level of training. Additionally, the Fellow is entitled to a \$2,000 conference stipend.

### **Expected Products**

1. At least three publications on Virginia Mason Franciscan Health research/clinical results in peer-reviewed journals per year, co-authored with mentoring supervisor.
2. Presentations of research at a minimum of one national or international meeting.

### **Program Goal**

The goal of the Pancreas Research Fellowship program is to provide a unique and challenging experience for the fellow to:

1. Perform meaningful, supervised research and engage in scholarly activities. The fellow will not participate in clinical patient care.
2. Examine records from a population of pancreas patients in the context of a high-volume inpatient service, outpatient clinic and outpatient treatment center.
3. Learn a multidisciplinary team approach to medical research. Fellows are expected to shadow and observe the work of major providers in six main areas including diagnostic radiology, gastroenterology, surgery, and pathology - and serve as valued and important contributors to the team.
4. Study, analyze and publish on pancreas disease, with a focus on benign pancreatic conditions.

### **Objectives**

By the end of the fellowship year, the fellow will be able to:

#### **Research Skill**

- Design and execute scientific research projects.
- Apply knowledge of Human Subjects Research ethics and institutional review board requirements to submission of projects for approval.
- Apply various statistical methods to analysis of clinical data.
- Use data abstraction and analysis skills to report from and analyze data to meet study aims.

#### **Medical Knowledge**

- Demonstrate understanding and application of medical knowledge in the assessment of pancreas disease clinical data.
- Apply knowledge of medical literature to evaluation of clinical data and profiles of patients with pancreas disease.
- Use medical knowledge and analytical thinking to develop manuscripts that will contribute significantly to the literature.

#### **Interpersonal Skills, Communication Skills and Professionalism**

- Complete assigned tasks, including documentation, reliably and in a timely manner.
- Demonstrate integrity, respect for others, honesty, and compassion.
- Set a tone of respect and collegiality for individuals and the team.

## Expected Activity

1. Design and complete at least three research projects in benign pancreas disease. If a project cannot be finished before the Fellow graduates, the project will be continued by the incoming Fellow, who then becomes a co-author.

- a. **Identify a topic/project** – meet with a member of the faculty to identify/confirm potential topic, data needed or available, and knowledge necessary to investigate further.

### Sample Pancreas Research Projects

Topic: **Endoscopic & Surgical Approaches to Post-Whipple Pancreaticojejunal Strictures**  
Mentor: Richard Kozarek, MD

Topic: **Update on Endoscopic Management of Disconnected Duct Syndrome**  
Mentor: Shayan Irani, MD

Topic: **Acute Pancreaticobiliary Fistulas: Etiology and Medical Management**  
Mentor: Scott Helton, MD

Topic: **Quality of Life in Patients with Chronic Abdominal Pain from Calcific Pancreatitis Treated with ESWL and Surgery**  
Mentor: Scott Helton, MD

- b. **Formulate a hypothesis**—using the knowledge you have gained, formulate a hypothesis about a cause or effect of the phenomenon, or the relationship of the phenomenon to some other phenomenon.
  - c. **Test the hypothesis**—plan and carry out tests of the hypothesis, including gathering and sorting data as needed.
  - d. **Analyze the data**—use proper mathematical analysis to see if the results of the experiment support or refute the hypothesis.
  - e. **Draft a manuscript**—use AMA formatting to draft a publishable academic research article; provide initial and subsequently improved drafts to faculty member for input for improvement; identify appropriate peer-reviewed journals for submission.
  - f. **Submit manuscript**—follow publisher guidelines for submitting manuscript, make changes in response to reviewer feedback, and re-submit in a timely manner.
2. Interact daily with supervisor to identify next steps on research plan(s), collaborate on analysis and submission, enhance research methodology, perform statistical review, and build on database creation and analysis skills.

3. Work with GI physicians, DDI business analysts, and multidisciplinary providers to determine appropriate inclusion/exclusion criteria for use in building robust databases.
4. Participate actively in the regularly scheduled GI Cancer, GI Pathology and GI Radiology conferences (tumor boards), and Journal Club.

**GI Cancer Conference - Every Tuesday, 5-6pm, Rad-Onc Conference Room**

Biweekly cancer conference focuses on gastrointestinal cancers. Faculty and fellows from gastroenterology, hepatology, surgery, pathology, interventional radiology and oncology meet weekly to present, review and discuss the medical conditions and treatment options of individual patients with gastrointestinal and pancreaticobiliary cancers. Consensus recommendations for further evaluation and treatment for each patient are documented and communicated to patients and treating physicians.

**GI Pathology Conference - 4<sup>th</sup> Tuesday, 7:30-8:30am, Pathology Conference Room**

Meet monthly with pathologists, radiologists, and gastroenterologists to review biopsy specimens. Some of biopsies have been performed by the Radiology Department, referral hospitals and/or referral physicians. The number of biopsies reviewed will vary. For any patient who has an autopsy, the results will be discussed during the conference as well. All explants will be reviewed during pathology conference.

**GI Radiology Conference - 3<sup>rd</sup> Tuesday, 7:30-8:30am, Correa B Conference Room**

Faculty, gastroenterologists, surgeons, general radiologists, interventional radiologists and fellows meet monthly to review computed tomography, magnetic resonance, angiograms and ultrasonography on selected patients to be discussed. Indications, contra-indications, limitations, and complications of all radiologic procedures pertinent to the subspecialty of pancreatic disease are also discussed.

**Journal Club – 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> Thursday, 7:30-8:30am, Buck 5 Radiology Conference Room**

Providers meet weekly to discuss the latest news from literature published for physicians and health care providers.

**Conference Schedule**

<b>Name</b>	<b>Conference Director</b>	<b>Occurrence</b>	<b>Location</b>
Grand Rounds	Nitsche	Friday, 7:30-8:30 am	Volney-Richmond Auditorium
AHPBA Grand Rounds	Helton	1st Wednesday, every month, 2:00 pm	Rad/Onc Conference Room
Bariatric Care Conference	Hunter	Last Monday, every month, 7:00am;	Rad/Onc Conference Room Bainbridge Island (CR WIN VIDEO) Federal Way Auditorium-- (CR SO AUDITORIUM)
GI Journal Club	Krishnamoorthi	1st Tuesday, every month, 7:30am	Buck 5 Radiology Conference Room
GI / Pathology	Dorer	Regularly 4th Tuesday, every month, 7:30am	Pathology Conference Room
GI / Radiology	Coy	3rd Tuesday, every month, 7:30am	Correa B
GI M&M	Ross	1st Tuesday, every month, 7:30am	Correa B
GI Conference	B. Lin (Pancreas-Biliary) B. Lin, Song (Luminal GI)	Every Tuesday, 5:00pm	Rad/Onc Conference Room
Hepatology Didactics	Burman and Helton	Every other Wednesday, 1:00 to 2:00 pm	Hill Library
Liver Cancer Conference	Burman and Helton	Every Tuesday, 4:15pm	Rad/Onc Conference Room
Thoracic Cancer Conference	Low	Every Wednesday, 4:00pm	Rad/Onc Conference Room
Hepatology/ Pathology Conference	Dorer	Every Wednesday, 1:00pm	Pathology Conference Room
Multidisciplinary Team Conference for IBD	TBD	First Thursday, 5pm Followed by City-Wide IBD Journal Club	Buck 327 Conference Room

## **Program Objectives**

In the **first quarter**, the fellow will:

1. Complete CITI GPC/Ethics Training and Statistics course.
2. Attend the Wilske Research Symposium in September.
3. Develop studies and submit IRBs.
4. Complete data collection and present to Fellowship Director.

In the **second quarter**, the fellow will:

1. Develop additional studies and submit IRBs.
2. Present research findings at DDI Director's Meeting in December.
3. Submit abstracts to Digestive Disease Week by December.
4. Finalize analysis; write and distribute manuscripts.

In the **third quarter**, the fellow will:

1. Finalize approval of manuscripts.
2. Finalize analysis; write and distribute new manuscripts.
3. Submit 3+ manuscripts for publication.
4. Present at University of Washington Frontiers in GI in March/April.

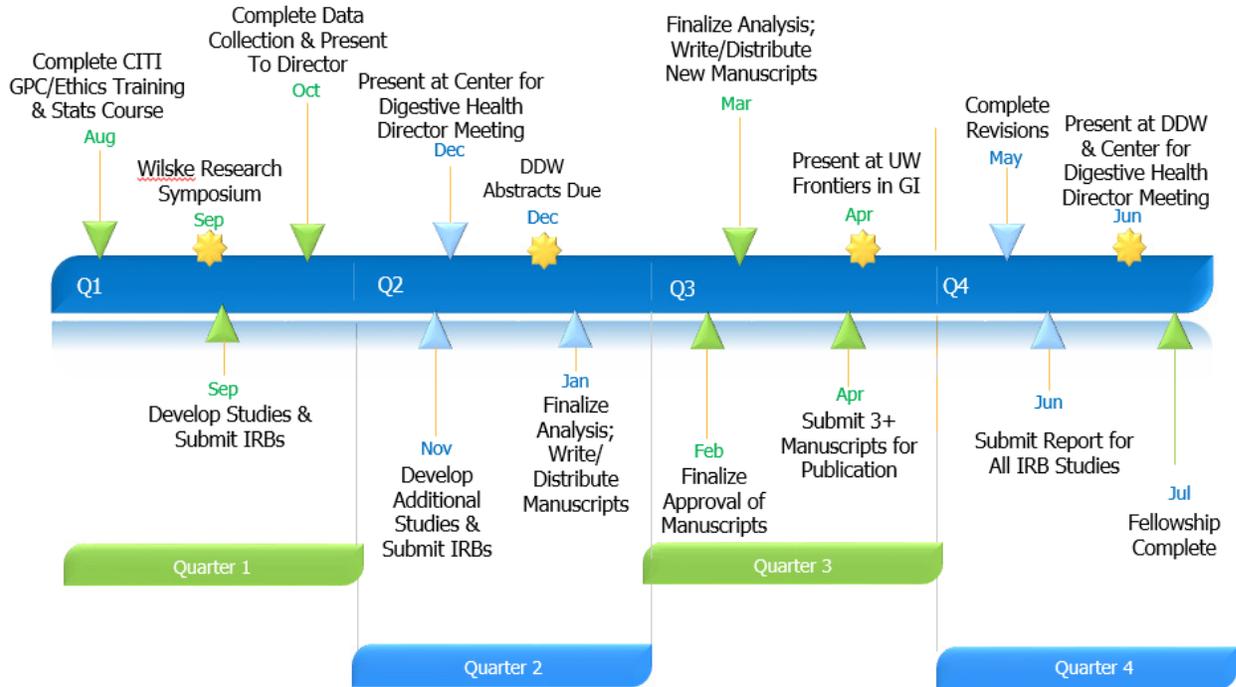
In the **fourth quarter**, the fellow will:

1. Complete all revisions on studies and manuscripts and resubmit.
2. Submit report for all IRB approve studies.
3. Present research findings at Digestive Disease Week and DDI Director's Meeting in May/June.

All research data must be stored on a secured, shared drive. No PHI may be placed on a flash drive or moved from the secured, shared drive in any manner.

If the fellow is unable to complete a manuscript prior to completion of appointment as a Virginia Mason Franciscan Health Fellow, authorship may change. Access to Virginia Mason Franciscan Health's electronic medical record, including for purpose of research, concludes when the fellowship appointment ends.

## Research Fellowship Research Timeline



Center for Digestive Health

### Evaluation and Feedback

The fellow will meet with the Program Director weekly and will receive regular verbal and written evaluations at intervals to be determined throughout the fellowship year. The fellow will be expected to provide confidential assessment and feedback about the program and faculty. DDI faculty, research support staff, DDI business analysts, and other staff who interact with the fellow may also be asked periodically to evaluate the Fellow. Assessment will focus on the key areas above.