MESSAGE FROM THE DIVISION HEAD

The Gastroenterology Division continues to thrive, succeeding in each of our three key missions: delivering the highest-quality patient care, conducting impactful and innovative research, and providing an ideal environment for education of medical students, residents and fellows. In this newsletter I hope to convey the depth and breadth of achievement of our faculty, trainees and staff, and illustrate the wealth of knowledge and enthusiasm we have harnessed to make this one of the top Divisions in the country.

Our faculty and fellows continue to publish in high impact journals that truly move the field of gastroenterology and hepatology forward. Dr. Lisa Strate published a study of the epidemiology of diverticulitis in the highest impact journal for our subspecialty, Gastroenterology, and she remains the most recognized investigator in this highly prevalent disease. Dr. Jason Dominitz published a comprehensive review of strategies to reduce colorectal cancer mortality, also in the journal Gastroenterology. Dr. Rachel Issaka published a review of interventions to improve adherence to colorectal cancer screening (Preventative Medicine), and Dr. Cynthia Ko published the results of an NIH funded study comparing screening with colonoscopy versus flexible sigmoidoscopy for the reduction in cancer mortality in Plos One. Drs. Kiran Bambha and Scott Biggins had their study of outcomes after transplantation with organs procured after donor death in the American Journal of Transplantation.

Dr. George Ioannou was awarded an NIH R21 to fund his work on developing a mobile app that could be used by patients at home to detect minimal hepatic encephalopathy, improving patient quality of life while reducing hospital admissions. NIH funding has also been procured using the resources provided by the GI biorepository and disease registry by Drs. Bill Grady and John Inadomi, and directed by Wynn Burke. This program continues to enroll patients from our endoscopy units to obtain clinical data, blood, DNA samples and tissue biopsies for research questions that are currently being asked, as well as preparing ourselves for questions that we hope to answer in the future.

This July we will welcome 7 new fellows to our training program: Omeed Alipour (UCLA), Naomi Chou (Beth Israel/Harvard), Alexander Dao (Georgetown), Nicole de Cuir (Columbia), Caralos Moscoso (UW), Sam Rosenfeld (UW) and Erik Snider (UW). These are the brightest and most accomplished physicians from a pool of over 400 applicants to our fellowship program, and we are excited to embark with them upon this educational journey.

I am most pleased to act as the steward for the Division of Gastroenterology and am tremendously proud of the work that the faculty, fellows and staff and produced, and look forward to even greater achievements in this new decade.

Sincerely,

John M. Inadomi, MD
Cyrus E. Rubin Professor & Head
CONGRATULATIONS TO OUR 2020 FELLOWSHIP MATCHES!

OMEED ALIPOUR
University of California
Los Angeles, CA

NAOMI CHOU
Beth Israel Deaconess
Boston, MA

ALEXANDER DAO
Medstar Georgetown
Washington, DC

NICOLE DE CUIR
Columbia University
New York, NY

CARLOS MOSCOSO
University of Washington
Seattle, WA

SAMUEL ROSENFELD
University of Washington
Seattle, WA

ERIK SNIDER
University of Washington
Seattle, WA
UPCOMING EVENTS

2020 Microbiome Symposium
APRIL 9 & 10, 2020
The 2020 Biennial Microbiome Symposium co-hosted by the Fred Hutch Microbiome Research Initiative and the CMiST | Center for Microbiome Sciences & Therapeutics is scheduled for April 9 & 10. The 2020 symposium will feature presentations by local and international investigators involving therapeutics, HIV and the microbiome, chemistry and the microbiome, models of disease, biostatistics and computational methods, and the pediatric biome. Please join us as we communicate new knowledge, develop collaborations, network with colleagues, and exchange scientific ideas.

This symposium is open to faculty, staff, and students who hold a position or research affiliation at one of the following organizations: Fred Hutchinson Cancer Research Center, University of Washington, Seattle Children's, Institute for Systems Biology, Bill & Melinda Gates Foundation, and the Benaroya Research Institute. If the venue reaches maximum capacity, affiliates will have the opportunity to view a live stream of the symposium in a meeting room on the Fred Hutch campus.

Speakers and registration on the website here.

FEATURED ARTICLE

VERTICAL SLEEVE GASTRECTOMY EFFECTS ON REFLUX
JUDY CHEN, MD, FACS, FASMBS, ABOM

The most common bariatric operation currently performed is the irreversible and permanent sleeve gastrectomy. If you did not believe there is a high incidence of Barrett's esophagus after sleeve gastrectomy, this multi-center trial may convince you: 18.8% incidence from 5 centers with no Barrett's preoperatively. The vertical sleeve gastrectomy has surpassed all other bariatric surgeries as the most commonly performed surgery worldwide for many reasons. Favorable features include a better safety profile, less nutrition and surgical complications and overall better patient acceptance. The risk of gastroesophageal reflux disease continues to be controversial. There are no standards for preoperative counseling. Multiple other studies recently published have found a high post-operative rate of Barrett's esophagus at 5 years, ranging from 15-17.7%. More compelling is that Barrett's is at times found in otherwise asymptomatic patients. Symptomatic reflux, therefore, may not be the best symptom to guide workup or surveillance. So, in comparison to 1.6% Barrett's prevalence in the general population, it is important to be aware of the potential for significantly higher rates after sleeve gastrectomy. Bariatric surgery continues to be the safest and most effective treatment for obesity, but interdisciplinary care and long-term follow up is essential.

MAY 2-5, 2020
Digestive Disease Week provides a venue for scientists and clinicians to attend sessions and learn from their colleagues and peers through special lectures and 5,400 abstract-based poster and oral presentations. Every year it attracts approximately 18,000 physicians, researchers, and academics from around the world.

More info on DDW and UW's reception here.
**FACULTY IN THE NEWS**

**DR. INADOMI NAMED 2019 PHYSICIAN TO KNOW**

Dr. John Inadomi, professor and head of Gastroenterology was listed as one of 117 GI Physicians To Know in 2019 by Becker’s GI and Endoscopy.

**DR. KIM AND DR. ISSAKA AUTHOR ARTICLE IN “TRANSPLANT INFECTIOUS DISEASE”**

Dr. Nicole Kim, fellow, is lead author and Dr. Rachel Issaka, assistant professor, is senior author of “Disseminated adenovirus infection after autologous stem cell transplant” in Transplant Infectious Disease.

**DR. BAMBHA’S RESEARCH ONE OF THE MOST-VIEWED UW MEDICINE ARTICLES OF 2019**

“Patient with bile duct cancer receives rare transplant” featuring research by Dr. Kiran Bambha, associate professor, is one of the three most-viewed UW Medicine Newsroom stories for 2019.

**DR. KEARNEY CO-AUTHORS BOOK**

Dr. David Kearney, professor, is co-author of the book “Mindfulness-Based Interventions for Trauma and Its Consequences” published by the American Psychological Association.

**DR. LANDIS PRESENTS ED-BASED STUDY AT ANNUAL LIVER DISEASE MEETING**

Dr. Charles Landis presented an ED-based HCV screening program, in which Kevin Le and Nicole Kim received national recognition, at the annual meeting of the American Association for the Study of Liver Diseases.

**DR. LIOU GRANTED INAUGURAL FELLOWS TEACHING AWARD**

“Dr. Liou works nonstop to provide exceptional patient care while always finding the time to teach.”

- Yana Thaker, MD - Gastroenterology Fellow

**DR. TOMIZAWA AWARDED 2020 ASGE RESEARCH AWARD**

Dr. Yutaka Tomizawa was granted a 2020 ASGE Research Award for his project “Risk factors for neoplasia in U.S. patients with gastric intestinal metaplasia.” The award will include funding for 2 years.

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**NOTABLE PUBLICATIONS**

**DR. LISA STRATE: EPIDEMIOLOGY, PATHOPHYSIOLOGY, AND TREATMENT OF DIVERTICULITIS**

Strate LL, Morris AM  
Gastroenterology, 2019.  
PMID: 30660732  
[Read More ➔](#)

**DR. JOHN INADOMI & DR. RACHEL ISSAKA: WHAT MULTI-LEVEL INTERVENTIONS DO WE NEED TO INCREASE THE COLORECTAL CANCER SCREENING RATE TO 80%**

Inadomi JM, Issaka RB, Green BB  
Clinical Gastroenterology and Hepatology, 2019.  
PMID: 31887438  
[Read More ➔](#)

**DR. JASON DOMINITZ: STRATEGIES FOR COLORECTAL CANCER SCREENING**

Ladabaum U, Dominitiz JA, Kahi C, Schoen RE  
Gastroenterology, 2020.  
PMID: 31394032  
[Read More ➔](#)

**DR. RACHEL ISSAKA: POPULATION HEALTH INTERVENTIONS TO IMPROVE COLORECTAL CANCER SCREENING BY IMMOUNCHEMICAL TESTS: A SYSTEMATIC REVIEW**

Issaka RB, et al.  
Preventative Medicine, 2019.  
PMID: 31367972  
[Read More ➔](#)

**DR. CYNTHIA KO: SCREENING COLONOSCOPY VS FLEXIBLE SIGMOIDOSCOPY FOR REDUCTION OF COLORECTAL CANCER INCIDENCE**

Ko CW, et al.  
PMID: 31805156  
[Read More ➔](#)

**DR. KIRAN BAMBHA & DR. SCOTT BIGGINS: SOLID ORGAN DONATION AFTER DEATH IN THE UNITED STATES**

PMID: 31917505  
[Read More ➔](#)
Cirrhosis represents an advanced stage of liver disease in which normal functioning tissue is replaced by extensive scarring. Kidney disease is a common and serious complication of cirrhosis that informs disease prognosis and impacts therapeutic decision-making. Clinical assessment of kidney function in cirrhosis is based on measures of glomerular filtration, specifically serum creatinine concentrations and the estimated glomerular filtration rate (GFR). However, recognized mechanisms by which liver disease causes a progressive decline in kidney function involve injury to the proximal tubular cells of the kidneys.

We propose to recruit a nascent cohort of patients with cirrhosis and compare tubular secretory clearances to those of patients without known liver disease. We then propose to evaluate a set of plausible risk factors for impaired secretory clearance relative to GFR. The proposed studies are designed to generate critical preliminary data for future grant submissions directed at broadening and improving the evaluation of kidney function among patients with liver disease.

The project is under the direction of Dr. Jasmohan Bajaj, MD and looks to define the determinants of cirrhosis progression using clinical and specialized biomarkers over time in North America through a prospective outpatient registry.
As health care transitions toward an era of “precision” diagnostics and treatments, amazing advances in molecular and cell biology from the past decade are dramatically changing our understanding of factors mediating gastrointestinal health and disease. Care of patients has become increasingly guided by molecular characterization of disease, allowing care providers to more accurately diagnose GI illnesses and determine prognoses and more effectively predict the risk of disease progression. While many diseases may appear clinically similar, they often differ at the molecular level. These molecular features are showing great promise to more accurately predict whether diseases will respond to specific therapies than can currently be predicted using clinical criteria alone. These newfound subtyping abilities are changing and will change how we treat patients by identifying the treatments that have the highest likelihood of success for a specific patient.

Our ability to transfer these advances in our understanding the molecular pathology of digestive diseases into the clinic has historically been impeded by a lack of high-quality, clinically-annotated patient samples. To address this critical need in translational research, the UW GI Division, Dr. John Inadomi, and Dr. William Grady, Professor of Medicine at UW and Member of the Fred Hutchinson Cancer Research Center, established the Gastrointestinal Biorepository and Research Registries over ten years ago.

The Biorepository and Subject Registries anchor a translational research core that actively recruits for investigator-initiated, federally-funded and industry-sponsored studies. Biospecimens are married to patient data from subjects who have agreed to allow interrogation of their longitudinal health record and to the study of their donated biosamples in the name of advancing science and ultimately improving patient care. Biospecimens and data collected with cutting-edge devices are processed using strict, state-of-the-art protocols ensuring their long term viability and future utility in discovery science. In addition, study subjects have also agreed to be contacted for new study opportunities, which accelerate the pace of clinical and translational research.

The GI biorepository also includes a living biobank of tissues that features intestinal organoid cultures and is a cutting edge resource that allows the investigation of a patient’s response to novel therapies in the lab. These elements are essential for high-quality translational research and are allowing investigators in the UW GI research community to readily carry-out high-impact studies using state-of-the ex vivo model systems.

A complimentary resource that is also available is a GI Registry, which serves as a means to facilitate the study of GI diseases. The GI Registry is a resource that has a list of consented subjects who have agreed to participate in research and who have granted permission to access their health information in the medical record and to use their discarded, archived tissue samples for studies. They have also agreed to be contacted about emerging research opportunities, which removes a major barrier to clinical and translational research that currently exists.

The GI biorepository and GI Registry are resources that facilitate and accelerate the study of GI disease and health. The finely annotated samples in the UW biorepository link demographic information to up-to-date clinical data, which includes exhaustive treatment information, response to treatment data, and molecular information about the subject’s disease. This ‘big’ data is critical for high-impact translational clinical research and basic science research that will lead to novel therapies for people with GI disease.