

Baylor
College of
Medicine

MARGARET M. AND ALBERT B. ALKEK
DEPARTMENT OF
MEDICINE
GASTROENTEROLOGY
AND HEPATOLOGY

Annual Report 2021

SECTION OF GASTROENTEROLOGY AND HEPATOLOGY



SECTION CHIEF
*Fasiha Kanwal, MD,
MSHS, AGAF, FAASLD*

Section Accomplishments

- We are **ranked among the top 10 Gastroenterology and Hepatology divisions nationally** according to [U.S News & World Report - Best Universities for Gastroenterology and Hepatology](#). We are **#1 in Texas**. These rankings are based on performance across a set of widely accepted indicators measuring excellence in research, publications, and scientific reputation overall. This recognition is a testimonial to the quality of scientific research and scholarly contributions from our Section members.
- The Section remains a leader in research in gastrointestinal and liver diseases. Our members published over 207 papers in scientific journals (up from 175 last year). Of these, 115 were in high impact journals. We had over \$10.7 million in research funding in 2021 (\$6.6 million from the NIH and \$2.2 million from State); this was up from \$7.6 million last year.
- The Section continues to be the clinical home for the NIH funded Digestive Disease Center, one of 17 federally funded centers focusing on research in GI diseases. We also serve as the coordinating center for the new Texas Collaborative Center for Hepatocellular Cancer (TeCH), which will be a platform to promote collaboration among scientists, clinicians, community leaders and policy makers to reduce liver cancer mortality in Texas. Section members are in key leadership positions, ranging from serving in the Faculty Senate at the College level to the editorship of Clinical Gastroenterology and Hepatology, one of the major clinical journals in the field. They also received special accolades for their contributions. Dr. David Graham received the highly prestigious William Beaumont Prize in Gastroenterology from the American Gastroenterological Association. Dr. Hashem El-Serag was named as one of the world's most influential researchers in 2020.
- Despite the pandemic, we grew in our clinical and education missions. Our top-notch faculty provide high-quality, compassionate healthcare at Baylor St. Luke's Medical Center (BSLMC), Ben Taub General Hospital and the Michael E. DeBakey Veterans Affairs Medical Center. BSLMC ranked nationally at No. 24 for gastroenterology this year, maintaining its trajectory over the last 3 years. We expanded our footprint outside of the Texas Medical Center by establishing general GI practice at St. Luke's Hospital, Sugarland. We continue to introduce several innovations in our practices, including cutting edge advanced endoscopic procedures and multidisciplinary treatment of complex GI disorders. We play an important role in training future clinicians and researchers. We are especially proud of our fellows and faculty who stepped up and volunteered to support our colleagues in the COVID units during the summer pandemic peak.
- Several new faculty members joined the Section last year. Five faculty members received College wide clinician awards.
- We hosted a successful Annual Baylor College of Medicine GI and Hepatology Course in March 2021.

FACULTY- Section Leadership



John Vierling, M.D., F.A.C.P.
Chief of Hepatology
Director of Baylor Liver Health



Fred Sutton, M.D.
Service Chief
Ben Taub



Jason Hou, M.D., M.S., F.A.C.G.
Section Chief
Michael E. DeBakey VA Medical
Center



Kalpesh Patel, M.D.
Medical Director
Baylor College of Medicine



Milena Suarez, M.D.
Program Director of
Gastroenterology Fellowship
Baylor College of Medicine



Jason Mills, M.D., Ph.D.
Vice Chief, Research
Baylor College of Medicine



Mohamed Othman, M.D.
Chief of GI, BSLMC



Rise Stribling, M.D.
Medical Director for Liver
Transplantation



Avinash Ketwaroo, M.D.
Director of Quality
Improvement
Baylor College of Medicine

FACULTY- Baylor Medicine

Professor

- Sharmila Anandasabapathy, MD
- Hashem El-Serag, MD, MPH
- Fasiha Kanwal, MD, MSHS, AGAF, FAASLD
- Waqar Qureshi, MD, FACP, FACG, FRCP

Associate Professor

- Jason Hou, MD, MS, FACG
- Manreet Kaur, MD
- Mohamed Othman, MD
- Kalpesh Patel, MD

Assistant Professor

- Wasif Abidi, MD, PhD
- Suneal Agarwal, MD
- Andrea Bradford, PhD
- Reena Chokshi, MD
- Salmaan Jawaid, MD
- Lukasz Kwapisz, MD, FRCPC
- Nabil Mansour, MD
- Jordan Shapiro, MD
- Rehman Sheikh, MD

FACULTY- Ben Taub

Professor

- Hemant Roy, MD

Associate Professor

- Chris Pappas, MD, JD, FCLM, FAASLD
- Melina Gould Suarez, MD
- Fred Milton Sutton Jr, MD

Assistant Professor

- Maya Balakrishnan, MD
- RJ Sealock, MD
- Richa Shukla, MD
- Mimi Chang Tan, MD

FACULTY- Hepatology

Professor

- F. Blaine Hollinger, MD
- John Vierling, MD, FACP

Associate Professor

- Ayse Leyla Mindikoglu, MD, MPH
- Gagan Sood, MD
- Rise Stribling, MD

Assistant Professor

- George Cholankeril, MD
- Prasun Jalal, MD
- Saira Khaderi, MD, MPH

FACULTY- Research

Professor

- Jason Mills, MD, PhD

Associate Professor

- Ru Chen, PhD
- Loning Fu, PhD
- Antone Opekun, PA-C
- Noah Shroyer, PhD

Assistant Professor

- Yan Liu, PhD

FACULTY- Michael E DeBakey VA Medical Center

Professor

- Hashem El-Serag, MD, MPH
- David Graham, MD, MACG
- Fasiha Kanwal, MD, MSHS, AGAF, FAASLD

Associate Professor

- Rhonda Cole, MD
- Jason Hou, MD, MS, FACG

Assistant Professor

- Avegail Flores, MD
- Clark Hair, MD
- Ruben Hernaez, MD, MPH, PhD
- Nisreen Husain, MD
- Hoda Malaty, MD, MPH, PhD, FACG
- Maria-Ellinore Jarbrink-Sehgal, MD
- Gyanprakash Ketwaroo, MD
- Natalia Khalaf, MD
- Yamini Natarajan, MD

Physician

- Maria Velez, MD

HONORS & ACHIEVEMENTS

Maya Balakrishnan, MD

Star Patient Care Award

Saira Khaderi, MD

2021 Cohort BCM Advancement Series

Reena Chokshi, MD

Early Career Faculty Award for Excellence in Patient Care

Mohammed Othman, MD

AGA Fellow (AGAF)

Hashem B. El-Serag, MD, MPH

Most Cited Authors

Kalpesh Patel, MD

Star Patient Care Award
World Endoscopy Organization Education Webinar
Committee

David Graham, MD, MACG

2021 William Beaumont Prize

Waqar Qureshi, MD, FACP, FACG, FRCP

Education Committee of Texas Society of
Gastrointestinal Endoscopy

Ruben Hernaez, MD, MPH, PHD

Early Career Faculty Award for Excellence in Patient Care

Milena Suarez, MD, FACG

Norton Rose Fulbright Faculty Excellence Award

Fasiha Kanwal, MD, MSHS

Co-Chair of AGA GI Division Chief's Consortium

Mimi Tan, MD

BCM GI Fellowship Program Teaching Award
BCM Admissions Interviewing Subcommittee Member

Gyanprakash Ketwaroo, MD

Early Career Faculty Award for Excellence in Patient Care

John M. Vierling, MD

2021 American Association for the Study of Liver Disease
Distinguished Service Award

Grants

Sharmila Anandasabapathy

- NCI/NIH; A Low Cost Tethered Capsule Endoscope for Esophageal Cancer Screening. \$1,855,000

Kali Deans

- F31; The Role of Autophagy in Intestinal Regeneration. \$46,394

Fasiha Kanwal

- CPRIT; Reducing disparities in the Risk of Hepatocellular Cancer. \$2,353,575
- Exact Science; The Texas Hepatocellular Carcinoma Consortium (THCCC). Risk Stratification for and Early Detection of Liver Cancer. \$3,460,530
- NIH/NCI; Multi-level Evaluation of Racial/ethnic Disparities in Liver Disease Outcomes. \$2,269,485

Jason Mills

- NIH; Gene therapy for GERD-associated esophageal epithelial barrier dysfunction. \$31,798.00
- NSF GRFP; National Science Foundation Graduate Research Fellowship. \$48,333.33

Ayse Mindikoglu

- Roderick D. MacDonald Research Award. \$50,000

Hemant Roy

- NCI; Area B: Minimally Invasive Colorectal Cancer Risk Stratification with Nanocytology: Targeting Underscreened Populations. \$225,734
- NCI; Microvasculature in Colon Field Carcinogenesis: Clinical-Biological Implications. \$242,024
- NSF EFMA; EFIR CEE: Macro-genomic engineering via modulation of chromatin nanoenvironment. \$30,000

Publications

American Journal of Gastroenterology (IF **10.383**) 9
American Journal of Human Genetics (IF **10.502**) 1
American Journal of Transplantation (IF **7.163**) 2
British Journal of Cancer (IF **5.791**) 2
Cellular and Molecular Gastroenterology and Hepatology (IF **7.076**) 2
Clinical Gastroenterology and Hepatology (IF **8.549**) 27
Clinical Infectious Diseases (IF **8.313**) 2
Frontiers in Oncology (IF **5.66**) 1
Gastroenterology (IF **22.682**) 14
Gastrointestinal Endoscopy (IF **5.369**) 14
Gut (IF **19.819**) 5
Hepatology (IF **17.425**) 2
Hepatology Communications (IF **5.073**) 1
Journal of the American Medical Association (IF **56.272**) 1
JAMA Internal Medicine (IF **21.873**) 1
JAMA Network Open (IF **8.483**) 5
JAMA Oncology (IF **31.777**) 2
JAMA Surgery (IF **14.766**) 2
Journal of Autoimmunity (IF **7.641**) 1
Journal of Hepatology (IF **20.582**) 10
Journal of the National Cancer Institute (IF **12.589**) 1
Liver International (IF **5.175**) 3
Molecular Oncology (IF **6.574**) 1
Nature Communications (IF **14.919**) 1
Nature Reviews Gastroenterology & Hepatology (IF **29.848**) 2
The New England Journal of Medicine (IF **74.699**) 1
PLOS Pathogens (IF **6.218**) 1
Tissue Engineering Part B Reviews (IF **6.389**) 1

Book or Book Chapters

Salmaan Jawaid

- Cost Effectiveness of Capsule Endoscopy. Gastro Clinics of North America. Actions. 2021 Apr;31(2):413-424

John Vierling

- Liver Immunology: Principles and Practice. 3rd Edition. ME Gershwin, JM Vierling, A Tanaka, MP Manns (Eds). Springer, 2021
- Graft-versus-Host Disease. In Liver Immunology: Principles and Practice. 3rd Edition.
- Springer, Pp 551-582, 2020

Baylor Medicine and McNair

The Baylor Medicine Gastroenterology practice continues to grow and thrive despite the challenges posed by the global pandemic. Dr. Kal Patel continues to lead the group as the Medical Director. Dr. Jessica Bernica, a BCM GI Fellowship graduate and Chief Fellow, will be joining the group to add further expertise in Functional Bowel Disease and Motility.

The Gastroenterology service at BSLMC was ranked #24 in the nation in the 2021 US & World News Rankings. Dr. Kal Patel was honored with the BCM Star Clinician Award in 2021 – this is one of the highest level of recognition for excellence in clinical care bestowed by BCM. Dr. Reena Chokshi was selected for Early Career Award. The group continues to perform and research cutting-edge endoscopy, including use of Artificial Intelligence for polyp detection (Dr. Mansour), Endoscopic GERD treatments (Dr. Patel), and Bariatric Endoscopy (Dr. Abidi). Drs. Mohamed Othman and Salman Jawaid continues to expand one of the nation's largest Endoscopic Submucosal Endoscopy programs. Treating patients from around the country, the group performed over 300 tumor resections and endoscopic myotomy procedures this past year.

The IBD Center, led by Dr. Manreet Kaur, successfully provided uninterrupted care to thousands of IBD patients during the COVID pandemic by quickly creating a Telemedicine IBD Center. The group continues to lead in IBD research through more than a dozen ongoing clinical trials (Drs. Hou, Kaur, Shukla, and Kwapisz). The Motility Center, led by Dr. Reena Chokshi achieved national recognition in August 2020, with addition to the ANMS National Registry of GI Motility Labs.

In November 2020, a new partnership was formalized to provide Adult GI consult services at Texas Children's Hospital. Dr. Suneal Agarwal serves as the Chief of this new service. Baylor Medicine also successfully expanded to Sugarland in 2020. Drs. Nabil Mansour and Rehman Sheikh will be joined by Dr. Jessica Bernica to provide consultation and endoscopy services at CHI St. Luke's Sugarland.

Ben Taub Hospital

The GI Service at Ben Taub continues to run a busy clinic, inpatient consult and endoscopy services. Harris Health System and Baylor St. Luke's are in negotiations to outsource procedures such as manometry, pHmetry and, capsule endoscopy. The GI eConsult platform has been well received and offers referring physicians efficient access to initial GI consultation for selected clinical disorders such as GERD, abnormal serum liver biochemistry, endoscopy for iron deficiency anemia, and abnormal GI imaging. The Chief of Medicine, Dr. Hemant Roy is active clinically in endoscopy and fellows' Smith Clinic and brings a wealth of knowledge and insight from a similar safety-net facility in Boston. We have recently initiated one of his five NIH R01 funded protocols investigating biomarkers of colon neoplasia.

The Service's highly regarded teaching efforts have reformatted how teaching will be delivered with more teleconferencing. Drs. Milena Gould and Richa Shukla manage the formal activity within the medical student's curriculum at Ben Taub. Additionally, Dr. Shukla continues to support the fellows' IBD Surgery Conference. Drs. Gould and Sealock continue to support the BCM "teach the teachers" initiatives. Expanding clinical research in drug therapy for NAFLD (in conjunction with Endocrinology) continues with Dr. Maya Balakrishnan's activities.

There are four specialty clinics operating in the Smith Clinic (liver, pancreaticobiliary, IBD and fatty liver). Dr. Sealock and Loan Ho (NP) started earlier in February 2020 a pancreatobiliary clinic with an emphasis on benign pancreaticobiliary disease and patients needing complex endoscopic procedures. Dr. Mimi Tan's clinical research programs in Barrett's esophagus and gastric neoplasia have added a new dimension to the Service's research activity along with establishing protocols for management of such. We look forward to the new wave of minimally invasive procedures with POEM and other cutting-edge technology being brought into Harris Health System.

Liver Transplant Program at Baylor St. Luke's Medical Center

The Liver Transplant Program at Baylor St. Luke's Medical Center, in collaboration with Baylor College of Medicine, continues to offer the best possible patient experience for liver transplants and complex liver care. Since 1998, our nationally recognized surgeons in the Liver Transplant Program have performed more than 1,500 transplants in the city of Houston. Our patients continue to benefit from excellent outcomes and low complication rates, which makes it one of the premier centers in the country.

Our team has also undergone transitions with the welcomed arrival of George Cholankeril, M.D. from Stanford and the retirement of our treasured colleague, Norman L. "Buddy" Sussman, M.D. Despite COVID-19, our team of eight hepatologists and five transplant surgeons has maintained full transplant activities using our novel protocol to screen both donors and recipients (*Am J Transplant.* 2020). As of mid-December, our team has performed 100 adult transplants and 2 liver-lung transplants with excellent outcomes. Our faculty continued to support a broad educational mission, including a BCM Internal Medicine inpatient rotation, inpatient and outpatient training for the GI Fellows and our three Hepatology and Liver Transplantation Fellows and mentoring of medical students and fellows for clinical research projects. The scholarly productivity of the faculty in 2020 resulted in 54 peer-reviewed publications, including new AASLD Guidance and Guidelines for Autoimmune Hepatitis, several textbook chapters, and publication of the third edition of *Liver Immunology: Principles and Practice*. The faculty also received 19 grants during 2020 to support their research.

Michael E. DeBakey Medical Center

The VA continued to provide the highest quality care to our Veterans. Dr. Jason Hou took the role of Section Chief at the MEDVAMC. Under his leadership, the IBD clinic at the MEDVAMC continues to serve as a regional referral center. The motility clinic is run by Dr. Nisreen Husain and provides a full spectrum of diagnostic testing for reflux and motility disorders. Drs. Cole, Jarbrink and Velez manage the general GI clinic. The MEDVAMC advanced endoscopy program is a referral center for the region and includes Drs. Avinash Ketwaroo and Clark Hair. Drs. Avergail Flores, who joined the MEDVAMC from Washington University in St. Louis, and Ruben Hernaez run the VA transplant hepatology program, which has performed over 100 liver transplants. Our other hepatologists include Drs. Yamini Natarajan, El-Serag, and Kanwal. Dr. Natarajan's comprehensive non-alcoholic fatty liver disease (NAFLD) clinic has started several clinical protocols and research studies in NAFLD. Dr. Natalia Khalaf established the very first high-risk GI cancer clinic at MEDVAMC.

Our MEDVAMC section continues to be #1 VA based GI and Hepatology section with regard to patient care and research. It is the top program in terms of number and range of GI procedures and services offered. The Hepatology Clinic at the MEDVAMC was listed as #1 in the nation for its early adoption of telemedicine that enhanced access to liver care during the COVID-19 pandemic. Drs. Kanwal, Hou, El-Serag, and Hernaez have federally funded research programs at the MEDVAMC. Dr. Khalaf received several pilot grants for her work in pancreatic cancer. Drs. Natarajan, Ketwaroo and Jarbrink are leading scientific inquiry through several active clinical trials at the MEDVAMC.

Quality Improvement and Innovation

The BCM Gastroenterology QI team continues to expand the footprint of quality efforts within the Section and beyond. With QI mentors and projects at each major site, patient safety conferences, and the QI Fellows' Academy, there is a robust infrastructure for QI scholarship. Many of our DDW 2021 abstracts were QI-based, including two fellow-led projects on inpatient FIT testing and gastric intestinal metaplasia that were highlighted by the AGA. We continue to lead QI efforts at the college (BCM Vice Chair Group for Quality Improvement and Innovations) and national (AGA Quality Committee and AGA Quality Leadership Council) levels and maintain certificates for excellence in quality and endoscopy (ASGE Quality Endoscopy Unit Recognition Program - Ben Taub Hospital). With an expanding team of quality leaders look out for exciting new initiatives in 2021-2022.