Dear Faculty, Staff, Trainees, Alumni, and Friends,

On May 1, I was humbled to take over the helm of the Division of Gastroenterology and Hepatology from the legendary Dr. Chung Owyang and became the sixth chief since the division’s inception in 1947. I, along with the entire division, owe a tremendous debt of gratitude to Dr. Owyang for his visionary leadership over the past 32 years. I am extremely honored to take the torch from him and will work tirelessly to build upon the division's many nationally recognized successes and achievements in patient care, education, and research.

As many of you know, Digestive Disease Week® (DDW) 2022 will be taking place May 21-24 in San Diego. I’m excited to say that the conference will be hybrid this year with people being able to attend both in person or virtually. As in years past, our division will leave an indelible imprint on DDW 2022 with over 130 podium presentations, 54 posters, and numerous faculty serving in leadership roles and on committees. You will find more information about these and other highlights of the division’s participation at DDW within this newsletter. I look forward to seeing everyone soon!

I also want to share some news stories and updates about the division, and honors and recognition that our faculty have received including welcoming Dr. John Carethers as the next President of the AGA. I hope you enjoy hearing of the division's many accomplishments over the past year.

Thank you for your continued support. Please contact us with any questions or suggestions and visit our website to stay current on our work in patient care, research, and education.

GO BLUE!

William D. Chey, MD, AGAF, FACP, RFF
Timothy T. Nostrand Collegiate Professor of Gastroenterology
Chief, Division of Gastroenterology and Hepatology
Professor, Department of Internal Medicine
Professor, Department of Nutritional Sciences
John M. Carethers, MD, MACP
AGA President

It is a tremendous honor and privilege to introduce Dr. John M. Carethers as the next President of the American Gastroenterological Association.

Dr. Carethers is currently the John G. Searle Professor and Chair of the Department of Internal Medicine at the University of Michigan. He received his BS degree from Wayne State University, and his MD with high distinction from the same institution. Dr. Carethers completed his internship and residency in Internal Medicine at Massachusetts General Hospital, followed by a fellowship in gastroenterology at the University of Michigan. He was then recruited to the University of California, San Diego, where he grew his laboratory-based research in the area of DNA mismatch repair and colorectal cancer pathogenesis. His leadership roles included the gastroenterology fellowship director, the gastroenterology Section Chief for the San Diego VA Hospital, then Division Chief for University of California, San Diego, before being recruited to Michigan.

Dr. Carethers was the founding Director of the NIH-funded UCSD Gastroenterology Center grant, and was the Director of the gastroenterology T32 training grant. His laboratory research continues to be funded by the NIH. Dr. Carethers has interest in colorectal cancer disparities as it relates to genetics and outcomes. He is the former PI of the SDSU/UCSD Cancer Center Comprehensive Partnership U54 grant, which addresses cancer disparities, and was selected as the 14th Jane Cooke Wright Lecturer for the American Association for Cancer Research. He has published over 250 manuscripts and book chapters. He is a past Senior Associate Editor for Gastroenterology, the official journal for the American Gastroenterological Association. He completed a 2-year appointment on the National Commission for Digestive Diseases, a U.S. Congressional Commission, after his appointment by Elias Zerhouni, MD, then Director of the National Institutes of Health. He is appointed to the National Diabetes and Digestive and Kidney Diseases Advisory Council for 2022-2025 by Health and Human Services Secretary Xavier Beccera. He was elected a member of the American Society for Clinical Investigation, and elected a member of the American Association of Physicians (AAP), and served as President of AAP for 2018-2019. He was elected a member of the National Academy of Medicine in 2012, the American Academy of Arts and Sciences in 2016, and the Royal College of Physicians in 2021. He received the Robert H. Williams, MD Distinguished Chair of Medicine Award from the Association of Professors of Medicine in 2019, received the CGA Lifetime Achievement Award in 2019, and awarded the Harriet P. Dustan Award for Science as Related to Medicine from the American College of Physicians in 2020. He becomes President of the American Gastroenterological Association in June 2022.
Chung Owyang, MD, AGAF

William Beaumont Prize
American Gastroenterological Association

The Beaumont Prize honors a senior scientist who has made major contributions that have significantly advanced the care of patients with digestive diseases through clinical or translational research. Dr. Owyang earned his bachelor’s degree in biochemistry and his M.D. from McGill University. He completed a residency in internal medicine at Montreal General Hospital and a fellowship in gastroenterology at the Mayo Clinic in Rochester, Minnesota. Dr. Owyang came to the University of Michigan in 1978 and was named chief in 1990. He has overseen the division’s growth from a dozen faculty members to more than 100 today. Together with Dr. Tadakata Yamada, Dr. Owyang established the Michigan Gastrointestinal Peptide Research Center, the first of its kind in the US. Work today spans inflammatory bowel disease, advanced endoscopy, health services research, pancreatic function & cancer, neurogastroenterology & motility, food allergy, and the gut microbiome and metabolome. He has published over 200 peer-reviewed manuscripts that have advanced our understanding of digestive diseases, in particular the regulation of pancreatic secretion, gastrointestinal motility and appetite. He is past president of the American Motility Society, and he provided leadership to the American Pancreatic Association. He is a member of the American Society of Clinical Investigation and the American Association of Physicians. Dr. Owyang has received many awards, including the Paul de Kruif Lifetime Achievement Award, the AGA’s Distinguished Mentor Award, the Janssen Award for Basic or Clinical Research in Gastrointestinal Motility, and the Joseph B. Kirsner Award for Clinical Research in Gastroenterology from the American Digestive Health Foundation/AGA. He is also a previous recipient of the Julius M. Friedenwald Medal from the AGA.
Dr. Lok graduated from the University of Hong Kong Medical School. She completed her hepatology training in London under Dame Sheila Sherlock. She is currently Director of the Hepatology Program and Assistant Dean for Clinical Research at the University of Michigan. Dr. Lok’s research focuses on the natural history and treatment of hepatitis B and C. Her recent research also includes liver cancer and fatty liver. She has published more than 550 papers including the American Association for the Study of Liver Diseases (AASLD) guideline on hepatitis B and the World Health Organization guidelines on hepatitis B and hepatitis C. Dr. Lok has served as Associate Editor of Hepatology in 2001-2006 and Senior Associate Editor of Gastroenterology in 2011-2012. Dr. Lok served as AASLD President in 2017. Dr. Lok has mentored more than 60 fellows and junior faculty from all over the world, many of whom are now full professors and chiefs of GI divisions or academic hospitals. She has received many awards for mentoring including a 2012 Michigan Institute for Clinical and Health Research Distinguished Mentor Award, a 2014 American Medical Association Inspiring Physician Award, and was recognized in 2021 by the NIH as a Great Teacher. She has also received numerous awards for her scientific accomplishments and service to the medical community including the Distinguished Scientist Award from the Hepatitis B Foundation in 2008, the Distinguished Service Award from the AASLD in 2011, the Distinguished Scientific Achievement Award from the American Liver Foundation in 2015, the William Beaumont Prize in Gastroenterology from the American Gastroenterological Association in 2016, a Gold Medal Award from the Canadian Association for the Study of the Liver and an Hon DSc from the University of Hong Kong in 2017, an International Recognition Award from the European Association for the Study of the Liver in 2018, and a Distinguished University Professorship from the University of Michigan in 2019.
DDW 2022 Awards and Recognition

Peter Higgins MD, PhD, MSc
AGA Distinguished Clinician Award

The Distinguished Clinician Award recognizes clinicians who combine the art of medicine with the skills demanded by the scientific body of knowledge in service to their patients. One of this year's recipient, Dr. Peter Higgins is a Professor of Gastroenterology and Hepatology at the University of Michigan. He trained at Duke University, where he did his MD and a PhD in molecular cancer biology, and at the University of Michigan, where he did a Master’s degree in Clinical Research Design and Statistical Analysis. His clinical interest is in IBD, and he is the director of the IBD Program which cares for a cohort of 7,200 IBD patients. He has served as the IBD editor of the American Journal of Gastroenterology, as a member of the AGA IBD Quality of Care Initiative, and as the chair for the AGA Immunology, Microbiology, and IBD section. Dr. Higgins is the CCF National Scientific Advisory Committee (NSAC) chair-elect. His basic science research interests focus on the mechanisms and treatment of intestinal fibrosis in Crohn’s disease and the use of novel imaging methods to measure fibrosis. His clinical research interests include the development of novel gut-selective anti-inflammatory and anti-fibrotic therapies for IBD, rescue therapies for severe UC, and patient reported outcomes in IBD.

The Division of Gastroenterology & Hepatology extends its heartfelt congratulations to these outstanding clinicians, scientists and mentors. We are indeed proud that they are part of our Michigan Family!!

Connect on Social Media

Find us on Facebook
U-M Gastroenterology and Hepatology Alumni Connection
@GIHepAlumni

Follow us on Twitter
@UMichGIHep
## DDW Awards • 2011–2021

### DDW 2011
- **Chung Owyang, MD**
  AGA Distinguished Mentor Award
- **Joel H. Rubenstein, MD**
  GRG/AGA Young Investigator Award in Clinical Science
- **James M. Scheiman, MD**
  AGA Institute Council Section Mentor Award Esophageal, Gastric & Duodenal Disorders Section
  ASGE Senior Investigator Mentoring Award
- **Andrea Todisco, MD**
  AGA Research Foundation
  R. Robert and Sally Funderburg Research Scholar Award in Gastric Biology Related to Cancer Biology

### DDW 2012
- **John Del Valle, MD**
  AGA Distinguished Educator Award
- **Grace H. Elta, MD**
  AGA Institute Council Section Mentor Award
  Imaging and Advanced Technology Section
- **Timothy T. Nostrant, MD**
  AGA Distinguished Clinician Award

### DDW 2013
- **Grace H. Elta, MD**
  AGA Distinguished Clinician Award
  ASGE Distinguished Educator Award
- **Chung Owyang, MD**
  AGA Julius Friedenwald Medal

### DDW 2014
- **Joseph C. Kolars, MD**
  AGA Distinguished Educator Award
- **Richard S. Kwon, MD, MS**
  AGA–Covidien Research and Development Pilot Award in Technology
- **Juanita L. Merchant, MD, PhD**
  AGA Institute Council Section Mentor Award
  Regulatory Peptides, Cell Signaling & Molecular Biology Section
- **M. Bishr Omary, MD, PhD**
  AGA Institute Council Section Mentor Award
  Liver and Biliary Section
- **Linda C. Samuelson, PhD**
  AGA Institute Council Morton I. Grossman Lectureship
- **John A. Williams, MD, PhD**
  AGA Distinguished Achievement Award

### DDW 2015
- **William D. Chey, MD**
  AGA Distinguished Clinician Award
- **M. Bishr Omary, MD, PhD**
  AGA Distinguished Mentor Award

### DDW 2016
- **Anna S. Lok, MD, FRCP**
  AGA William Beaumont Prize in Gastroenterology

### DDW 2017
- **John M. Carethers, MD**
  AGA Distinguished Mentor Award
- **Hari S. Conjeevaram, MD, MS**
  AGA Distinguished Educator Award
- **Juanita L. Merchant, MD, PhD**
  AGA Distinguished Achievement Award in Basic Science

### DDW 2018
- **Grace H. Elta, MD**
  ASGE Rudolf V. Schindler Award
- **Deborah L Gumucio, PhD**
  AGA Institute Council Section Research Mentor Award
  Growth, Development & Child Health

### DDW 2019
- **John I. Allen, MD, MBA**
  AGA Julius Friedenwald Medal
- **Costas A. Lyssiotis, PhD**
  AGA Young Investigator Award in Basic Science
- **John Kao, MD**
  AGA Future Leaders Program • Mentor for the Class of 2020
- **Allison Schulman, MD**
  ASGE Honorable Mention
- **M. Bishr Omary, MD**
  AGA - Named Vice President

### DDW 2020
- **John Carethers, MD**
  AGA – Named Vice President
- **Robert J. Fontana, MD**
  Distinguished Educator Award
- **Michelle A. Anderson, MD**
  ASGE Distinguished Service Award
- **Nobuhiko Kamada, PhD**
  AGA Young Investigator Award in Basic Science
- **Joel Rubenstein, MD**
  ASGE Research Award
- **Linda C. Samuelson, PhD**
  AGA Institute Council Section Research Mentor Award

### DDW 2021
- **Elliot Tapper, MD**
  AGA – Young Investigator Award in Clinical Science
- **Grace H. Elta, MD**
  ASGE Basil I. Hirschowitz, MD Endowed Lecture
- **Deborah L. Gumucio, PhD**
  AGA Morton I. Grossman Distinguished Lectureship
A Low FODMAP Diet Improves Colonic Barrier Function and Mast Cell Activation in IBS-D Patients


The mechanism of action of a low FODMAP diet (LFD) in IBS is poorly understood.

Adult patients with IBS-D underwent 4 weeks of strictly controlled elimination phase of LFD with colonic barrier function and mast cell activation measured pre- and post-LFD.

Among responders, the LFD improved several markers of colonic barrier function and mast cell activation while no such effect was seen among non-responders.

In vitro and in vivo studies suggest that luminal changes induced by the LFD play a key role in improving barrier dysfunction in IBS-D.

These studies expand our understanding of mechanisms of FODMAP-induced IBS pathophysiology and pave the way for identifying biomarkers for response to LFD.
Noval Machine Learning Assessment for Quantification of Crohn’s Disease Severity on CT-Enterography Concurs with Expert Radiologists

Ryan Stidham, Binu Enchakalody, Peng Zhang, Brian Ross, Grace Su, Stewart Wang, Mahmoud Al-Hawary, Ashish Wasnik

- Crohn’s disease most commonly occurs in the small intestine, but grading the degree, distribution, and total burden of disease using imaging is challenging.
- An artificial intelligence system was trained by radiologists to understand the degree of intestinal damage and then repeatedly grade disease severity along the length of ileum.
- The AI CD enterography analysis system near perfectly replicated radiologists accuracy for both grading and localizing disease severity.
- The AI system was used to develop the simple cumulative disease severity score that was strongly associated with medication failure within 3 years (p=0.0007).
- AI is not only replicating expert judgement, but generating improved measures that can better describe gastrointestinal disease for outcome prediction and therapeutic decisions.

Image-Based Crohn’s Disease Severity Grading

**Simple Cumulative Ileal Disease Severity Score (S-CIDSS)**

![Diagram showing the S-CIDSS readout and severity composition]

**S-CIDSS Readout**

- **Cumulative Damage**: \(0; n+1*+2*+3\)
- **Damage Statistics**: (Min, Max, Mean) = Spatial Mean Severity, Sem Disease Length
- **Severity Composition**: 0 1 2 3 10% 50% 50% 0%

**No Surgery**

**Surgery**
An Office-Based, Point-of-Care Rectal Expulsion Device (RED) Predicts Treatment Outcomes with Pelvic Floor Physical Therapy Among Patients with Chronic Constipation

Eric Shah, Pablo Martinez-Camblor, Jason Baker, Adrienne Harris, William Chey

- Up to 40% of chronically constipated patients have an evacuation disorder. The majority of constipated patients do not have easy access to anorectal function testing.
- RED is an investigational office-based, point-of-care test of anorectal function that can be performed at the initial office consultation. In a prospective study on patients with chronic constipation, we demonstrated that RED predicts global symptom response, improvement in bowel movement frequency, and improvement in health-related quality-of-life with subsequent pelvic floor physical therapy delivered in community settings across northern New England.
- RED was easy to perform and well tolerated by patients.
- RED offers an opportunity to disrupt the management paradigm by offering an initial biomarker-based approach to managing chronic constipation.

![Diagram of the RED device]

1) Device inserted into rectum
2) Cap removed to inflate device
3) Patient attempts to defecate balloon in left lateral position

<table>
<thead>
<tr>
<th>Expulsion time</th>
<th>Likelihood of response</th>
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<tbody>
<tr>
<td>&lt;5 seconds or &gt;120 seconds</td>
<td>48.9%</td>
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<tr>
<td>5-120 seconds</td>
<td>8.9%</td>
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A Common Coding Variant in Sun1 Associates with Hepatic Steatosis and Metabolic Disease in Multiple Cohorts and Enhances Sun1 Proteasomal Degradation

Kapil Upadhyay, Xiaomeng Du, LC Stetson, Yanhua Chen, Elizabeth Speliotes, Graham Brady

• Nuclear envelope proteins are implicated in nonalcoholic fatty liver disease (NAFLD) and related metabolic disorders via mouse models and rare mutations in humans, but whether nuclear envelope proteins contribute to disease at a population level is unknown.

• We performed an association meta-analysis with hepatic steatosis and coding variants in 17 nuclear envelope-related genes using three large datasets: Michigan Genomics Initiative, UK Biobank, and GOLD Consortium.

• A common coding variant in SUN1 (rs6461378, SUN1 H118Y) positively associated with steatosis in all discovery cohorts (P<0.001).

• Potential association of rs6461378 with NAFLD-related metabolic traits was tested in two large independent cohorts; it positively associated with cardiovascular disease, type 2 diabetes, hypertension, and insulin resistance in the validation cohorts.

• Upon expression in cultured cells, SUN1 H118Y was stable under basal conditions but showed increased proteasomal degradation compared to wild-type SUN1 under nutrient-limited conditions (serum starvation).

• These findings implicate SUN1 in NAFLD and related metabolic disorders and suggest a potential causal role for the common coding variant rs6461378.
5:00 - 5:15 PM • Lecture 24
Gut Microbiota Regulates Biosynthesis of Resolvin D1 in the Colonic Mucosa by Activating TLR4 in Intestinal Tuft Cells
Gintautas Grabauskas, Jun Gao, Xiaoyin Wu, Shi-Yi Zhou, Chung Owyang

5:12 - 5:24 PM • Lecture 26
High Fat Feeding Impairs the Functioning of the RSPO1-POMC-BDNF-BAT Neurpathway i the Hypothalamus Resulting in Reduced Brown Adipose Tissue Thermogenesis and Decreased Energy Expenditure
Ji-Yao Li, Xiaoyin Wu, Chung Owyang

5:12 - 5:50 PM • Lecture 32
Panel Discussion
Jeffrey Ponsky, Haruhiro Inoue, Allison Schulman, Kenneth Binmoeller

POSTER SESSIONS • Saturday

Sa1054
COVID-19 Exacerbates Existing Digestive Disorders and Triggers New Digestive Symptoms and Diagnoses: Results from an International Patient Survey
Meghan Barrett-Englert, Aditi Rao, Samuel Chey, Alyssa Sutton, Emily Taylor, William Chey

Sa1245
A Multicenter Comparative Study on Esophageal Stent Fixation Techniques: Over-the-Scope Clip (OTSC) vs. Endoscopic Suturing vs. Control
Yasmine Hussein Agha, Yervant Ichkhanian, Taha Ashraf, Ahila Manivannan, Yara Dababneh, Alexis Faber, Mark Obri, Medha Cherabuddi, Divya Chakkonda, Zahraa Mohammed, Thomas Kowalski, Alexander Schlachterman, Austin Chiang, Anand Kumar, David Loren, Erica Park, Nikhil Kumta, Michael Lajin, Chelsea Jacobs, Mohammad Al-Haddad, Duyen Dang, Cyrus Piraka, Robert Pompa, Sumit Singla, Andrew Watson, Tobias Zuchelli

Sa1409
Stage Migration after Transarterial Chemoembolization as a Predictor of Survival in Patients with Hepatocellular Carcinoma

Sa1436
Measuring Delay Between Positive Noninvasive Index-Detected Cirrhosis and Cirrhosis Diagnosis in a Tertiary Care Center
Justin Joseph, Zhe Zhao, Elliot Tapper, Neelah Parikh

Sa1474
Characteristics of Phasic Propagating Antropyloric and Isolated Pyloric Contractions Measured by Endoflip and Prediction of Baseline Symptom Severity and Response to Pyloric Botulinum Toxin Injection in Gastroparesis
Lydia Watts, Jason Baker, Candice Miller, Omar Taher, William Hasler

Sa1490
Rapid Wireless Motility Capsule Gastric Reacidification After Eating Correlates with Rapid Gastric Emptying on Scintigraphy Showing Ability to Measure Rapid Emptying of Both Digestible and Indigestible Solids
William Hasler, John Semler, Allen Lee, Baha Moshiree, Brian Surjanhata, Braden Kuo

Sa1542
Sacral Nerve Stimulation Ameliorates Visceral Hypersensitivity Following TNBS-Induced Colitis in Rats Via Reducing Inflammatory Cytokine Release and Restoring Impaired Intestinal Barrier FunSa1542
Sacral Nerve Stimulation Ameliorates Visceral Hypersensitivity Following TNBS-Induced Colitis in Rats Via Reducing Inflammatory Cytokine Release and Restoring Impaired Intestinal Barrier Function
Shiying Li, Chunfang Guo, Kyle Leix, Jiaide Chen

Sa1549
Profiles of Web-Based Patient Portal Users with Inflammatory Bowel Disease
Mohamed Noureddin, Kira Newman, Peter Higgins, John Piette, Kenneth Resnicow, Akbar Waljee, Ji Zhu, Shirley Cohen-Mekelburg

Sa1593
Crohn's Disease Diagnosis and Location, History of Small Intestinal Bacterial Overgrowth, and Mood Disorders Increase Risk of Developing Irritable Bowel Syndrome Symptoms in Quiescent Inflammatory Bowel Disease
Autumn Pu, Kara Jencks, Mehwish Ahmed, Shrinivas Bishu, Krishna Rao, William Chey, Peter Higgins, Allen Lee

Sa1611
Leveraging Clinician Collaboration to Promote High-Quality Inflammatory Bowel Disease Practices
Shirley Cohen-Mekelburg, Tony Van, Xianshi Yu, Deena Costa, Milisa Manojlovich, Sameer Saini, Heather Gilmartin, Andrew Admon, Kenneth Resnicow, Peter Higgins, Ji Zhu, Akbar Waljee
SATURDAY, MAY 21 (cont’d)

ePOSTER SESSIONS • Saturday

eP1050
Prediction of Gastrointestinal Tract Cancers Using Longitudinal Electronic Health Record Data
Andrew Read, Wenjing Zhou, Sameer Saini, Ji Zhu, Akbar Waljee

eP1206
Liver Injury Associated with Turmeric -- A Growing Problem: Nine Cases from the Drug-Induced Liver Injury Network (DILIN)
Dina Halegoua-De Marzio, Victor Navarro, Jay Hoofnagle, Jawad Ahmad, Bharathi Avula, Huiman Barnhart, A. Sidney Barritt, Herbert Bankovsky, Robert Fontana, Marwan Ghabril, Ikhlas Khan, Elizabeth Phillip, Andrew Stolz, Raj Vuppalanchi

SUNDAY, MAY 22

6:30 – 7:45 AM • Lecture
Endo-Hepatology: EUS Applications in the Patient with Liver Disease (BC07) $$
Kenneth Chang, Allison Schulman

6:30 – 7:45 AM • Lecture
A Low FODMAP Diet Improves Colonic Barrier Function and Mast Cell Activation in IBS-D Patients

11:00 - 11:12 AM • Lecture
A Bariatric Hands-On Simulation Session
Alexander Kushner, Allison R Schulman

9:15 – 9:30 AM • Lecture
Self-Efficacy as a Target for Improving Inflammatory Bowel Disease Self-Management and Outcomes
Jessica Sheehan, LaVana Greene-Higgs, Linnea Swanson, Peter Higgins, Sarah Krein, Akbar Waljee, Sameer Saini, Jeffrey Berenstein, Jessica Mellinger, John Piette, Kenneth Resnicow, Shirley Cohen-Mekelburg

12:00 - 1:15 PM • Panel Discussion with Video Cases
Tofacitinib for the Management of Patients with Checkpoint Inhibitor-Induced Colitis
Shrinivas Bishu

10:30 – 10:37 AM • Lecture
Endoscopic Ultrasound-Directed Transgastric ERCP (EDGE): A Multicenter US Study on Long Term Follow-Up and Fistula Closure

11:00 - 11:12 AM • Lecture
Disposible Scopes Versus Better Reprocessing: Put it in the Wash!
Grace Elta

11:15 - 11:30 AM • Lecture
Meet the AGA Leadership
John Inadomi, John Carethers, Barbara Jung, Maria Abreu

1:00 - 1:45 PM • Networking
Trainee & Early Career Lounge- Salis Pavilion

Meet the AGA Leadership
John Inadomi, John Carethers, Barbara Jung, Maria Abreu

2:00 – 2:30 PM • Lecture
Advanced Tissue Approximation: This is How We Do It
Allison R Schulman, Rabindra Watson

4:00 – 5:30 PM • Debate
Academic Debate: In a Patient with Acute Alcohol-Associated Hepatitis Who Is Not Currently a Liver Transplant Candidate, Should Renal Replacement Therapy Be Offered?
Pratima Sharma

4:15 – 4:30 PM • Lecture
Update on Liver Transplantation for Alcohol-Associated Hepatitis
Pratima Sharma

4:45 – 5:00 PM • Lecture
The Exxon 1 Δ27BP Polymorphism of the DNA Mismatch Repair Protein MSH3 is Highly Susceptible to Oxidative Stress and Induced Double Strand Breaks, Enhancing Deficiency of DNA Repair
Stephanie Tseng-Rogenski, John Carethers

5:15 – 5:30 PM • Lecture
Efficacy and Safety of Vibrant® Capsule for Chronic Idiopathic Constipation (CIC): Randomized, Double-Blind, Multicenter, Placebo-Controlled, Phase III Trial
<table>
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<tr>
<th>Session</th>
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<tr>
<td>Su1003</td>
<td>Impact of the COVID-19 Pandemic on Healthcare Access, Delivery and Vaccination in Patients with Digestive Disorders</td>
<td>Michelle Russin, Will Takakura, Samuel Chey, Hayley McCorkle, Emily Taylor, William Chey</td>
<td>Poster Session</td>
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<tr>
<td>Su1336</td>
<td>Treatment Initiation and Outcomes of African Americans and Non-African Americans with Chronic Hepatitis B Virus (HBV) Infection</td>
<td>Mohamed Hassan, Kelsey Leonard, Marc Ghany, Mandana Khalili, Lewis Roberts, Richard Sterling, Steven Belle, Anna Lok</td>
<td>Poster Session</td>
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<tr>
<td>Su1475</td>
<td>Differences in Symptoms and Anorectal Function &amp; Sensation Testing Between Patients with IBS-C and Functional Constipation</td>
<td>Eden Koo, Borko Nojkov, Lydia Watts, Jason Baker, Jiande Chen, William Chey</td>
<td>Poster Session</td>
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<tr>
<td>Su1492</td>
<td>Strong Humoral Immune Response to SARS-COV-2 Vaccine Additional Dose Among Patients with Inflammatory Bowel Diseases</td>
<td>Michael Kappelman, Kimberly Weaver, Xian Zhang, Kelly Chun, Runa Watkins, Jeremy Adler, Marla Dubinsky, Art Kastl, Athos Bousvaros, Raymond Cross, Peter Higgins, Ryan Ungaro, Meenakshi Bewtra, Jennifer Strople, Emanuelle Bellaguarda, Francis Farraye, Xiangfeng Dai, Margie Boccieri, Ann Firestone, Manory Fernanda, Monique Bastidas, Michael Zikry, Millie Long</td>
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<tr>
<td>Su1541</td>
<td>Machine Learning Analysis of Enterography Outperforms Clinical and Laboratory Features for Predicting Future Surgery in Small Bowel Crohn's Disease Following New Biologic Start</td>
<td>Ryan Stidham, Binu Enchakalody, Peng Zhang, Brian Ross, Grace Su, Stewart Wang, Mahmoud Al-Hawary, Ashish Wasnik</td>
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<tr>
<td>Su1558</td>
<td>IBD Increasing Risk Variants in ZBTB40 and NFATC1 are Associated with Reduction in Bone Mineral Density</td>
<td>Kelly Cushing, Yanyua Chen, Peter Higgins, Elizabeth Speliotes</td>
<td>Poster Session</td>
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<tr>
<td>Su1574</td>
<td>Loss of Response and Adverse Events to Infliximab by Race in a National Cohort of Veterans with Inflammatory Bowel Disease</td>
<td>Codye Pham, Carolyn Brooks, Shubhada Sansgiry, Akbar Waljee, Jason Hou</td>
<td>Poster Session</td>
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<tr>
<td>Su1599</td>
<td>The Prevalence of New Onset GI Symptoms and Clostridium Difficile Recurrence Post-Transplant in Patients Undergoing Fecal Microbiota Transplant for Treatment of Recurrent Clostridium Difficile Infection</td>
<td>Valerie Khaykin, Ashley Cawthon, D. Turgeon, Krishna Rao, John Kao</td>
<td>Poster Session</td>
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**MONDAY, MAY 23**

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<th>Session</th>
<th>Title</th>
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<tr>
<td>8:00 - 8:24 AM</td>
<td>Lecture</td>
<td>IBD and Microbiota Related to GI Disorders</td>
<td>John Kao</td>
<td>11</td>
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<tr>
<td>8:40 - 9:00 AM</td>
<td>Lecture</td>
<td>Choosing a Career Path: Making the Most of the Third Year of Fellowship</td>
<td>John Carethers</td>
<td>29CD</td>
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<tr>
<td>9:15 - 9:30 AM</td>
<td>Lecture</td>
<td>29CD Q&amp;A: Beyond the Basics: Making the Most of the Third Year of Fellowship</td>
<td>Matthew Whitson, Vivek Kaul, John Carethers, Brijen Shah</td>
<td>29CD</td>
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<tr>
<td>2:00 - 3:00 PM</td>
<td>Lecture</td>
<td>30 Development and Validation of an Automated Prediction Model Determining Barrett's Esophagus Risk with Terms from the Electronic Medical Record</td>
<td>Theresa Nguyen, Hashem El-Serag, Aaron Thrift, Joel Rubenstein</td>
<td>30</td>
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Spring 2022  The M² DDW Digest  14
Mo1263 • Poster of Distinction
WNT Signaling Regulates Bile Duct Progenitor Cell Function in Human and Mouse Derived Biliary Organoids
Ashley Calder, Junya Shiota, Nureen Mohamad Zaki, Linda Samuelson, Nataliya Razumilava

Mo1340
Difference in Outcomes of Patients Admitted for Mild/Moderate vs. Severe Acute Alcoholic Hepatitis
Sarah Uttal, Maia Anderson, Madeline Bertha, Kara Jencks, Haila Asefa, Andrew Gustafson, Katie Truitt, Haripriya Maddur, Jessica Mellinger

Mo1381
An Automated Algorithm Accurately Identifies Cirrhosis Among Patients with Nonalcoholic Fatty Liver Disease (NAFLD), Including those without International Classification of Diseases (ICD) Codes for Cirrhosis or Elevated Fibrosis-4 Scores
Tanvi Goyal, Michael Song, Isabel Moran, Vincent Chen

Mo1394
Effect of Tenapanor on Treatment Satisfaction, Degree of Relief, and Quality of Life for Patients with Irritable Bowel Syndrome with Constipation (IBS-C)
William Chey, Susan Edelstein, Yang Yang, David Rosenbaum

Mo1482
The Association Between Antigenemia, Histology with Immunohistochemistry, and Mucosal PCR in the Diagnosis of Ulcerative Colitis with Concomitant Human Cytomegalovirus Infection
Tsunasa Yamakawa, Hiroki Kitamoto, Masanori Nojima, Tomoe Kazama, Kohei Wajatsumata, Keisuke Ishigami, Shuji Yamamoto, Yusuke Honzawa, Minoru Matsuura, Hiroshi Seno, Hiroshi Nakase

Mo1564
Fistula Healing in Patients with Crohn’s Disease on Ustekinumab and Vedolizumab
Kira Newman, Laura Johnson, Ryan Stidham, Peter Higgins

Mo1607
Intragastric Balloon Placement Prior to Bariatric Surgery Does Not Lead to an Increased Risk of Adverse Events Following Surgery
Kevin Platt, Oliver Varban, Allison Schulman

Mo1609
Endoscopic Video Analysis for Diagnosis of Gastric Sleeve Stenosis
Gretchen Evans, Jessica Yu, Lydia Watts, Allison Schulman

TUESDAY, MAY 24

8:00 - 8:20 AM • Lecture 11
Shifting Epidemiology of Alcohol-Related Liver Disease Including Effect of Nash, Gender, and COVID-19
Jessica Mellinger

8:17 - 8:31 • Lecture
Evaluating Incentives that Drive Management Strategies for Uninvestigated Dyspepsia: National Cost-Minimization Analysis in a Commercially Insured Population

8:22 - 8:44 AM • Lecture 30
Stress and Gene Transcription in IBS
John Wiley

8:22 - 8:44 • Lecture 28ABC
Research/Post-Doctoral Career Path: Tips for Succeeding in the Second Five Years After Fellowship
John Carethers

8:45 - 9:00 AM • Lecture 33
Early-Onset Colorectal Cancers Manifest Increased ALDH1A1 Expression
Anand Venugopal, Minoru Koi, LC Stetson, Elizabeth Speliotes, John Carethers

9:15 - 9:30 AM • Lecture 33
HNF1AA98V Missense Mutation Results in Loss-of-Function and Play a Role in Early Onset Colorectal Cancer
Heyu Song, Sulaiman Sheriff, Ricky Sontz, Elena Stoffel, Juanita Merchant
### TUESDAY, MAY 24 (cont’d)

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**Small Group Discussion: Establishing a Career in Esophageal and Gastric Diseases**

Sachin Wani, Prasad Iyer, Ikuo Hirano, Evan Dellon, Renae Yatlakpati, John Pandolfino, Francis Chan, Loren Laine, John Kao, Richard Peek

**Panel Discussion: Technological Advances in Inflammatory Bowel Disease**

Ryan Stidham, Sunanda Kane, Bo Shen, Amar Naik, Bruce Sands

**Q&A: Combined Insults of Alcoholic-Related and Nonalcoholic Fatty Liver Disease**

Jessica Mellinger, Michelle Long, Alexandre Louvet, Vijay Shah

**Efficacy and Safety of Extended Induction Treatment with Upadacitinib 45 MG Once Daily Followed by Maintenance Upadacitinib 15 or 30 MG Once Daily in Patients with Moderately to Severely Active Ulcerative Colitis**

Séverine Vermeire, Silvio Danese, Wen Zhou, Justin klaff, Dapo Ilo, Xuan Yao, Gweneth Levy, Peter Higgins, Edward Loftus, Remo Panaccione

**Pancreatic Cancer Stage in the Multicenter Cancer of the Pancreas Screening Cohort**

Mahamad Dbouk, Amitabh Chak, Randall Brand, James Farrell, Fay Kasrinos, Bryson Katona, Anil Rustgi, Richard Kwon, Elena Stoffel, Sapna Syngal, Erin Shin, Marcia Canto, Michael Goggins

**Novel Machine Learning Assessment for Quantification of Crohn’s Disease Severity on CT-Enterography**

Bui Enchakolady, Peng Zhang, Brian Ross, Grace Su, Stewart Wang, Mahmoud Al-Hawary, Ashish Wasnik

**Surveillance of High-Risk Individuals Leads to Lower Stage Pancreatic Ductal Adenocarcinoma (PDAC) at Diagnosis and Improved Overall and Disease-Specific Survival**

Amanda Blackford, Marcia Canto, Mohamad Dbouk, Tossapol Kersdrichairat, Amitabh Chak, Randall Brand, James Farrell, Fay Kasrinos, Bryson Katona, Anil Rustgi, Elena Stoffel, Sapna Syngal, Alison Klein, Ralph Hruban, Michael Goggins

**Using Machine Learning/Al to Predict Response to IBD Therapeutics**

Ryan Stidham

**Understanding Physician Burnout: Causes and Ethical Considerations**

Megan Adams

**Measuring and Improving Patient Safety**

Elliot Tapper

**Teaching Confocal Endomicroscopy (CLE) Patterns of Pancreatic Cystic Lesions (PCLS) to Early Career Endosonographers Results in Durable Learning and Highly Accurate Diagnoses**

Jorge Machicado, Bertrand Napoleon, Venkata Akshintala, Ahmad Najdat Bazarbashi, Mohammad Bilal, Juan Corral, Mohammad Dugum, Samuel Han, Farah Hussain, Alyson Johnson, Manol Jovani, Jennifer Kolb, Peter Lee, Paul Leonor, Ramzi Mulki, Hamza Shah, Harkirat Singh, Sergio A. Sánchez-Luna, Shawn Shah, Anand Singla, Eric Vargas, Thomas Tiellemann, Dhenne Dalmacy, Megan Fry, Somashekar Krishna
5:00 - 5:30 PM  Panel Discussion and Q&A: Measuring and Communicating Improvements in Quality and Safety in Your GI Practice
Aline Charabaty, Elliot Tapper, Carolyn Newberry, James Richter

5:10 - 5:30 PM  Panel Discussion: Caring for the Caregivers: Recognizing and Addressing Physician Burnout
Megan Adams, Jordan Shapiro, Lena Palmer, Lin Chang

POSTER SESSIONS • Tuesday

Tu1069 • Poster of Distinction
Global Temporal Trends in the Efficacy of Clarithromycin-Containing Regimens in Helicobacter Pylori Eradication
Steven Moss, William Chey, Patrick Daniele, Corey Pelletier, Rinu Jacob, Gabriel Tremblay, Elizabeth Hubscher, Peter Malfertheiner

Tu1071
Comparative Efficacy of Acid Suppression Backbones for Helicobacter Pylori Eradication: Results of a Network Meta-Analysis
Peter Malfertheiner, Steven Moss, Patrick Daniele, Corey Pelletier, Rinu Jacob, Gabriel Tremblay, Elizabeth Hubscher, William Chey

Tu1072
Comparative Efficacy of Helicobacter Pylori Eradication Therapies: A Network Meta-Analysis
Peter Malfertheiner, Steven Moss, Patrick Daniele, Corey Pelletier, Rinu Jacob, Gabriel Tremblay, Elizabeth Hubscher, William Chey

Tu1100
Heterozygous Mutations in DNA Repair Genes Confer Genetic Susceptibility to Colorectal Cancer Among Lynch-Like Cases
Mar Giner-Calabuig, Seila De Leon, Gemma Vidal-Pedrola, Tara Fehlmann, Chinedu Ukaegbu, Joanna Gibson, Maria Dolores Picó, Cristina Alenda, Jose Reyes, Silvia Ortega, Catalina LLado, Paloma de la Torre Rubio, Antonia Obrador-Hevia, Adela Castillejo, Jose Luis Soto, Sergi Castells-Viel, Sapna Syngal, Elena Stoffel, Nathan Ellis, Rodrigo Jover, Xavier Llor, Rosa Nicola

Tu1102
A Unique Germline MSH3 Mutation is Associated with Cytoplasmic/Membranous Localization of MSH3 and Loss of DNA Repair Function, and Sporadic Focal Loss of MUTSα within Tumors
Minoru Koi, Brandie Heald, John Carethers

Tu1105
Attitudes about Sharing Genetic Test Results in Families with Hereditary Cancer Syndromes
Elnaz Guivatchian, Erika Koepp, Elena Stoffel

Tu1106
Features of Lynch Syndrome Patients with Extracolonic and Multiple Gastrointestinal Malignancies
Tannaz Guivatchian, Erika Koepp, Grant Carr, Elena Stoffel

Tu1142
Gastric Fundic Gland Polyps in Familial Adenomatous Polyposis Patients Exhibit Enhanced WNT Signaling without Requirement for APC Loss-of-Heterozygosity
Kevin McGowan, Elizabeth Delgado, Sreya Gatta, Elise Hibdon, Elena Stoffel, Linda Samuelson

Tu1303
Hepatocyte-Specific Loss of LAP2α Protects Against High Fat Diet-Induced Hepatic Steatosis in Mice
Kapil Upadhyay, Eun-Young Choi, Roland Foisner, M. Bishr Omary, Graham Brady

Tu1318
Statins are Associated with Decreased Risk of Non-Alcoholic Fatty Liver Disease (NAFLD) and Advanced Fibrosis: A Systematic Review and Meta-Analysis
Lily Kalcec, Anushka Dalvi, Karn Wijarnpreecha, Vincent Chen

Tu1334
Clinical Characteristics of Patients who Present with Bloating as a Predominant Symptom
Hyder Said, Judy Nee, Johanna Iturrino, Vikram Rangan, Prashant Singh, Anthony Lembo, Sarah Ballou

Tu1377
Testing for Small Intestinal Bacterial Overgrowth Provides a Precision Medicine Approach to the Treatment of Irritable Bowel Syndrome: A Systematic Review and Meta-Analysis
Will Takakura, Jiajing Wang, William Chey, Ali Rezaie, Mark Pimentel

Tu1379
Plecanatide Produces a More Rapid and Sustained Clinical Response Compared to Placebo in Patients with Irritable Bowel Syndrome with Constipation
Eric Shah, Jill Deutsch, Zeev Heimanson, Christopher Allen, William Chey, Lin Chang

Tu1386
Transcutaneous Electrical Acustimulation at ST36 Inhibits Visceral Hyperalgesia Via Activation of Vagal Nerve Efferent Cholinergic Fibers that Release Peripheral Endogenous Resolvins
Gintautas Grabauskas, Xiaoyin Wu, Shiyi Li, Jiande Chen, Chung Owyang
Tu1448
Effect of Baseline Disease Characteristics on Clinical Outcomes in Moderate-to-Severe Ulcerative Colitis Treated with Upadacitinib: Results from a Phase 3 Trials Programme
Peter Higgins, Jean Frederic Colombel, Miguel Regueiro, Gareth Parkes, Dapo Ilo, Charles Philips, Xuan Yao, Erica Cheng, Stefan Schreiber

Tu1449
Efficacy and Safety of Advanced Induction and Maintenance Therapies in Patients with Moderately to Severely Active Ulcerative Colitis: An Indirect Treatment Comparison Using Bayesian Network Meta-Analysis
Remo Panaccione, Eric Collins, Gil Melmed, Séverine Vermeire, Silvio Danese, Peter Higgins, Wen Zhou, Dapo Ilo, Dolly Sharma, Yuri Sanchez Gonzalez, Si-Tien Wang

Tu1454
The Safety Profile of Upadacitinib Maintenance Therapy in Ulcerative Colitis in the Phase 3 U-Achieve Study is Consistent with that in Approved Indications
Jean Frederic Colombel, Remo Panaccione, Hiroshi Nakase, Gerd Burmester, Stanley Cohen, Philip Mease, Emma Guttman-Yassky, Jianzhong Liu, Wen Zhou, Dapo Ilo, Peter Higgins

Tu1518
Defining the Role of Ferroptosis in Inflammatory Bowel Disease (IBD)
Wesley Huang, Yatrik Shah

Tu1540
Comparing Microbiome Composition in Lynch Syndrome Patients with and without a History of Colorectal Neoplasia
Samara Rifkin, Kirsten Tuck, Erika Koepp, Elena Stoffel, Patrick Schloss

Tu1553
Specific Immunogloblin A Induced by the Persistent Colonization of Adherent-Invasive E.Coli Limits Pathobint Localization to the Epithelial Niche
Jin Imai, Rika Tanaka, Hitoshi Tsugawa, Yasuhiro Nisizaki, Hidekazu Suzuki, Nobuhiko Kamada, katsuto hazumi

Tu1556
Gram +VE Bacteria Activates Macrophage TLR2 to Upregulate Mucosal DUOX2 by an IL1B Pathway
Jun Gao, Gintautas Grabauskas, Xiaoyin Wu, Prashant Singh, Chung Owyang

Tu1541
Fusobacterium Nucleatum Infection in Colorectal Cancer Tissue is Independently Associated with Loss of MLH1 Expression and Presence of MUC6 Expression and BRAF/KRAS Mutations
Koki Takeda, Minoru Koi, Chan Choi, Eric Martens, John Carethers
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