

GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION

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JOHN LAKE, M.D.
DIVISION DIRECTOR
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THE DIVISION OF GASTROENTEROLOGY, HEPATOLOGY, AND

Nutrition (GI) has played an important role in the Department of Medicine and the Medical School for more than 25 years. The division has made seminal contributions to the fields of hepatology and gastroenterology, including being arguably the birthplace of Endoscopic Retrograde Cholangiopancreatography (ERCP), and generating new knowledge into our understanding of liver functions. More recently, members of the division have contributed to the understanding of the role of biliary endoscopy and endoscopic ultrasound in managing a number of clinical conditions.

In addition to the faculty members at the University campus, there are also faculty members who participate in GI Division education and research activities at the VA Medical Center (VAMC), Hennepin County Medical Center (HCMC), Abbott Northwestern Hospital (ANW), and Regions Hospital.

The division currently boasts an extensive clinical service program, educational program, and active clinical and basic science research activities. We have added several new members to our faculty at all sites and we will continue to grow over the next several years, both in terms of attracting new clinical scholars, as well as basic research faculty.

■ THE MINNESOTA PANCREAS AND LIVER CENTER

The Minnesota Pancreas and Liver Center (MPLC) is a collaborative effort of University of Minnesota Physicians, University of Minnesota Medical Center (UMMC), Fairview-Hennepin Faculty Associates and HCMC. The MPLC is led by nationally and internationally recognized physicians in the Department of Medicine and the Department of Surgery, while also being programmatically affiliated with the University of Minnesota Cancer Center.

The MPLC offers multidisciplinary therapeutic options for patients diagnosed with pancreatic cancer. Please see Research and Program Highlight for more comprehensive programmatic and faculty information. MPLC clinical research allows patients to participate in pancreatic clinical research trials to help identify genetic markers which contribute to early detection and treatment.

■ HOUSE STAFF AND STUDENT PROGRAMS

The division participates in all house-staff training programs and student education programs. The second-year GUT course is consistently highly rated. Not resting on our laurels, we are currently proceeding with a two-year revision of all of the divisional educational programs. Recent updates include a variety of quality improvement topics, including the addition of multi-rater evaluations, updated review of research, and the development of tools for the critical appraisal of literature.

■ GASTROENTEROLOGY, ERCP/EUS AND TRANSPLANT/HEPATOLOGY TRAINING PROGRAMS

Directed by Dr. Roger Gebhard, the University of Minnesota Gastroenterology Fellowship Training Program is fully ACGME-accredited through the next four years. The three-year training program consists of five training sites (UMMC, VAMC, HCMC, ANW, and Regions Hospital), more than 30 faculty members, and a current complement of 11 trainees.

The Gastroenterology Fellowship Training Program has been highly successful and is extremely competitive, with more than 200 applicants for our trainee positions each year. The quality of applicants is excellent, with candidates applying from outstanding teaching centers throughout the United States. The program provides excellent training in all aspects of gastroenterology, including standard GI procedures, biliary endoscopy, inflammatory bowel disease care, viral hepatitis,

liver transplantation, and esophageal motility. Our fellows have expressed a high level of satisfaction with the training program. The graduates are in strong demand, as at the completion of our program they are recognized as possessing superb clinical and endoscopic skills. All trainees undertake research projects during their second year of training, and every trainee who has graduated from the program in the past ten years has published a paper or presented an abstract at one of the national GI or liver meetings. The trainees who complete our program and take ABIM boards have passed with excellent scores. About one-third of our graduates become academic faculty members here or at other institutions. We recognize the current extraordinary shortage of gastroenterologists locally and nationally, and are proud of our program and its important mission to provide outstanding graduates to meet current demands, both in practice and in academia.

■ ERCP/EUS FELLOWSHIP

Directed by Dr. Martin Freeman, we also offer a fourth year of advanced endoscopic training in either ERCP or endoscopic ultrasound. The ERCP/EUS fellow works closely with the MPLC faculty and staff.

■ NEW TRANSPLANT / HEPATOLOGY FELLOWSHIP

In 2007, the Gastroenterology Division received ACGME accreditation for a Transplant/Hepatology Fellowship. The purpose of this is one-year training program, which will commence July 2008, is to train an academically-oriented gastroenterology fellowship graduate in advanced issues specific to hepatology transplant.

FACULTY

Professors

Jeffrey Albrecht, M.D. (HCMC)
John Bond, M.D. (VAMC)
William Duane, M.D. (VAMC)
Martin Freeman, M.D. (HCMC)
Roger Gebhard, M.D. (Regions)
John Lake, M.D. (Director)
Michael Levitt, M.D. (VAMC)
Douglas Nelson, M.D. (VAMC)
Clifford Steer, M.D.
Jack Vennes, M.D.
(Emeritus)

Associate Professors

Oliver Cass, M.D. (HCMC)
Robert Ganz, M.D. (ANW)
Alexander Khoruts, M.D.
James Shawn Mallery, M.D.
(HCMC)
Craig Peine, M.D. (HCMC)
Coleman Smith, M.D. (ANW)
Ronald Soltis, M.D.

Assistant Professors

Bashar Aqel, M.D. (VAMC and UMMC)
Kapil Gupta, M.D.
Mohamed Hassan, M.D.
Irshad Jafri, M.D. (Regions)
Timothy Kinney, M.D. (HCMC)
Betsy Kren, Ph.D.
Rebecca W. Li, M.D. (HCMC)
Rob McCabe, M.D. (ANW)
Stephen McSorley, Ph.D.
Peter Meier, M.D. (VAMC)
David Perdue, M.D., M.P.H.
Paola Ricci, M.D. (Regions)
Christopher Shepela, M.D., M.P.H.

Instructors

David Weinberg, M.D. (ANW)

RESEARCH HIGHLIGHT

OVERALL, THE GOAL IS TO DEVELOP ONE OF THE MOST ADVANCED CENTERS IN THE COUNTRY FOR THE DIAGNOSIS, TREATMENT, AND RESEARCH IN PANCREATIC AND BILIARY DISORDERS.

MINNESOTA PANCREAS AND LIVER CENTER

Dr. Martin Freeman, Professor of Medicine, and Dr. Shawn Mallery, Associate Professor of Medicine, are members of the Division of Gastroenterology at the University of Minnesota. Drs. Freeman and Mallery co-direct the Minnesota Pancreas and Liver Center (MPLC) along with Dr. Selwyn Vickers, Chairman of Surgery. This innovative program blends the extensive expertise in various medical and surgical aspects of liver, pancreas, and biliary disease at Hennepin County Medical Center (HCMC), Hennepin Faculty Associates, University of Minnesota Medical Center (UMMC), and University of Minnesota Physicians. Dr. Freeman directs the Endoscopic Retrograde Cholangiopancreatography (ERCP) program and Dr. Mallery directs the Endoscopic Ultrasound (EUS) program.

Together, as medical co-directors of the MPLC, Drs. Mallery and Freeman are working with the many talented physicians in the combined programs, including co-surgical directors Dr. Vickers and Dr. Todd Tuttle, and other surgical and medical colleagues at UMMC and HCMC. Together they have developed a unique multidisciplinary clinic in which patients can simultaneously see gastroenterologists specializing in EUS or ERCP, surgical oncologists, and GI oncologists. Complex patients are presented and discussed at a weekly conference that alternates between UMMC and HCMC. They have also developed a specialized inpatient pancreas and biliary consultation service. Many clinical research projects are underway, such as participation as one of six co-investigating centers in a National Institutes of Health (NIH) - funded study of sphincter of Oddi dysfunction, and a number of protocols for experimental treatments for pancreatic cancer. Overall, their goal is to develop one of the most advanced centers in the country for the diagnosis, treatment, and research in pancreatic and biliary disorders.



MARTIN FREEMAN, M.D.

Dr. Freeman obtained his medical degree at Columbia University in New York in 1980, followed by residency and GI fellowship at the University of Minnesota. As a staff member of the GI Division at HCMC since 1986, Dr. Freeman has developed a regional and national reputation for advanced pancreatic and biliary endoscopy, focusing on endoscopic retrograde cholangiopancreatography (ERCP). He has helped to develop a leading regional referral center for complex ERCP. Dr. Freeman has a special interest in complex biliary disease and has developed an approach to safe and effective endoscopic drainage of complex intrahepatic malignant obstruction using MRI as a targeting tool, which has since become standard in many centers around the country. Dr. Freeman has established a major referral practice for pancreatic disease and sphincter of Oddi dysfunction, including acute and chronic pancreatitis. He has developed a new pancreatic stent (the Freeman stent), which is designed to minimize injury to previously normal pancreatic ducts, now used widely by endoscopists both nationally and internationally. Dr. Freeman has published over 100 original and review articles, including results of a 17-center study published in the *New England Journal of Medicine* (1996). This study, on which Dr. Freeman was the Principal Investigator, examined complications of ERCP and remains the

definitive study on this topic. In 2002, Dr. Freeman was asked to participate in a NIH consensus conference on ERCP to define the role of ERCP in current practice. He has helped to develop the advanced pancreatic and biliary endoscopy fellowship at the University of Minnesota and HCMC, which offers 4th year post-graduate training for fellows from around the world in ERCP and endoscopic ultrasound.



JAMES SHAWN MALLERY, M.D.

Dr. (James) Shawn Mallery received his M.D. from University of Illinois in 1990, followed by residency and fellowship in GI at the University of Minnesota. Dr. Mallery received advanced training in EUS at Harvard University in 1996, as their first EUS fellow. He subsequently joined the staff at HCMC, where he developed the first EUS program in the Twin Cities. Dr. Mallery is widely regarded as one of the nation's leading experts in EUS, and the center he has developed has become the largest and mostly highly regarded EUS program in the area. Dr. Mallery has developed an advanced training program for this complex and demanding procedure, with many distinguished alumnae, including Dr. Rebecca Li, who has since joined the faculty as an expert endosonographer in her own right. Dr. Mallery has authored numerous publications, including the American Society for

Gastrointestinal Endoscopy guidelines for management of patients with pancreatic cancer. He has also developed and reported the first use of endoscopic ultrasound for rendezvous puncture and access into obstructed bile and pancreatic ducts which are inaccessible to ERCP. He has a special interest in diagnosis and management of pancreatic neoplasms, including pancreatic cancer, cystic neoplasms of the pancreas, and intraductal papillary and mucinous neoplasms.

FACULTY EDITORSHIPS, HONORS & AWARDS

William Duane
Associate Editor, *Journal of Lipid Research*

John Lake
Editorial Board,
Liver Transplantation & Surgery
Nature: Clinical practice Gastroenterology & Hepatology
Hepatobiliary & Pancreatic Disease International
Deputy Editor, *American Journal of Transplantation*
ABIM Committee for Transplant Hepatology

Stephen McSorley
Executive Editor, *Immunology Letters*
Associate Editor, *Mucosal Immunology*

Douglas Nelson
Fellow, American Society for Gastrointestinal Endoscopy
Editorial Board,
Gastrointestinal Endoscopy
Editorial Board, *World Journal of Gastroenterology*
2004-2009

DEVELOPMENT HIGHLIGHT



Honoring a sister's memory becomes a way to heal

A PATIENT OF DR. JOHN LAKE'S FROM 1996 UNTIL HER DEATH IN 1998, LAURA NEUMANN LIVED FULLY FOR 14 YEARS AFTER HER PIONEERING LIVER TRANSPLANT, PERFORMED AT THE UNIVERSITY. TODAY, A FOUNDATION BEGUN BY HER SISTER, KRISTINE GOLDADE, AIDS DR. LAKE IN HIS TRANSFORMATIVE RESEARCH.

ON THE VANGUARD OF ORGAN transplantation, Dr. John Lake is equally committed to research and clinical care. In fact, for Dr. Lake, director of the University of Minnesota Liver Transplant Program and the Gastroenterology, Hepatology, and Nutrition Division in the Department of Medicine, the two fuel each other.

One catalyst for Dr. Lake's research is the late Laura Neumann, who had contracted hepatitis C through a blood transfusion during a 1984 liver and kidney transplant. A patient of Dr. Lake's from 1996 until her death in 1998, Laura lived fully for 14 years after her pioneering liver transplant, performed at the University. Today, a foundation begun by her sister, Kristine Goldade, aids Dr. Lake in his transformative research.

Dr. Lake's quest for novel ways to prevent hepatitis B reinfection in transplant patients is just one endeavor supported by the Sharing Life-Laura L. Neumann Foundation. For years, physicians have used high doses of antibodies against the hepatitis B virus intravenously to prevent reinfection of the new liver. But Dr. Lake and his colleagues have found certain combinations of newer oral antiviral medication can serve the same function—at lower cost and with less inconvenience and fewer side effects.

Dr. Lake is ebullient about the findings' promise. "It's going to revolutionize treatment," he says. Sharing Life also supports research on immunosuppression, including how to avoid kidney dysfunction post-transplant and other ways to improve long-term outcomes for liver transplant patients.

Goldade is grateful for the precious time and first-rate care her sister received. "The U is amazing," she says. "Yet Dr. Lake is modest, just a real regular guy. He genuinely cares about his patients—he was a good friend to my sister. It's healing to do this in her memory."

Dr. Lake holds onto Neumann's memory, too. "I knew Laura, and what she went through—she was remarkable," he says. "My patients inspire me. Their courage, their drive for life, inspires me every day."