

*Creating Futures*

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Advancing Science,  
Improving Lives

Division of Gastroenterology and Hepatology



# Making Strides in Internal Medicine

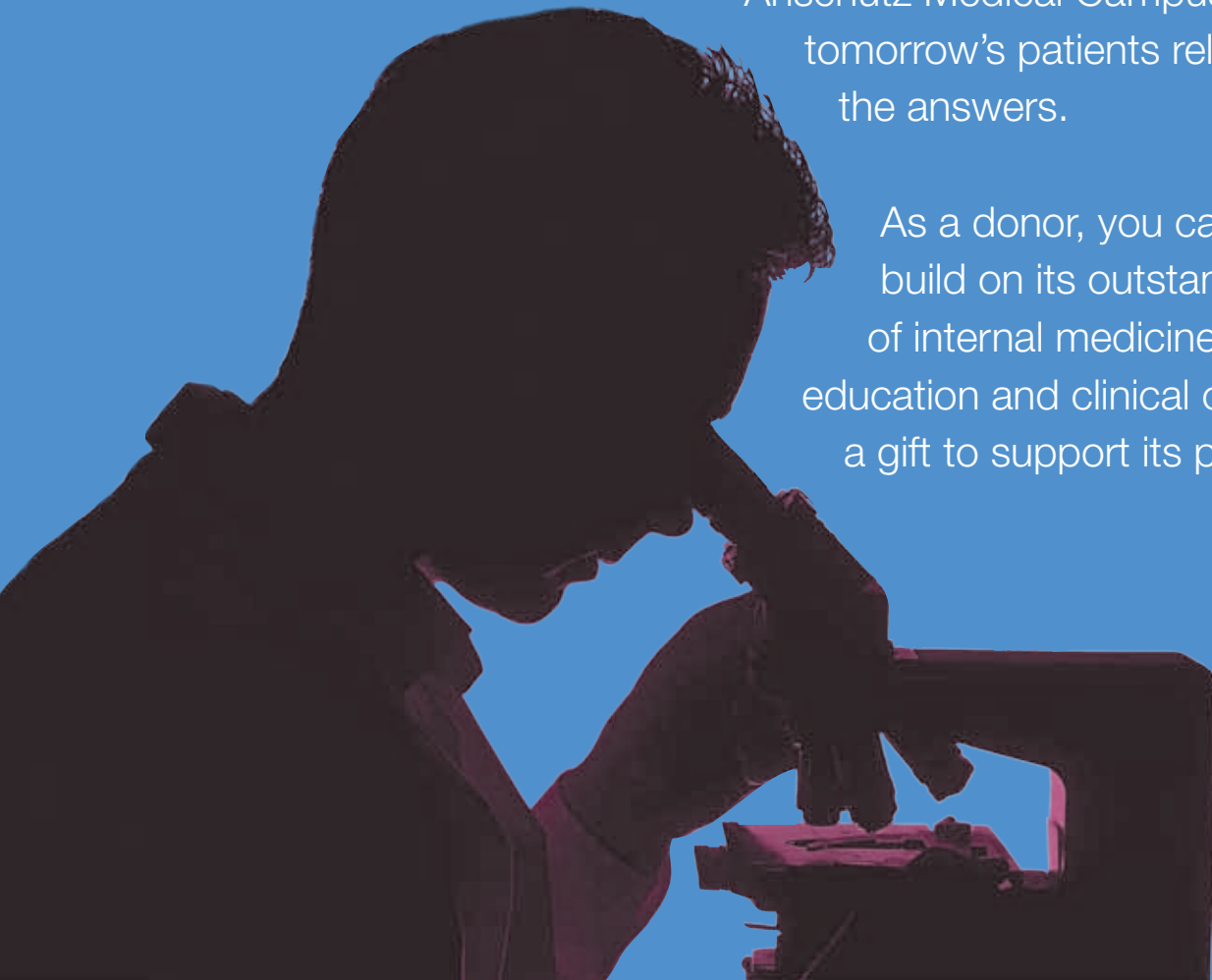
How does liver cell cancer develop, and how can we treat it more effectively?

Can we build on novel therapies to improve the lives of patients with inflammatory bowel disease?

How can we optimize endoscopic procedures to improve patients' comfort and optimize patient outcomes?

These are just a few key questions being asked by clinical researchers in the University of Colorado's Division of Gastroenterology and Hepatology at the Anschutz Medical Campus. Today and tomorrow's patients rely on us to find the answers.

As a donor, you can help CU build on its outstanding legacy of internal medicine research, education and clinical care by making a gift to support its programs.



# Liver Disease

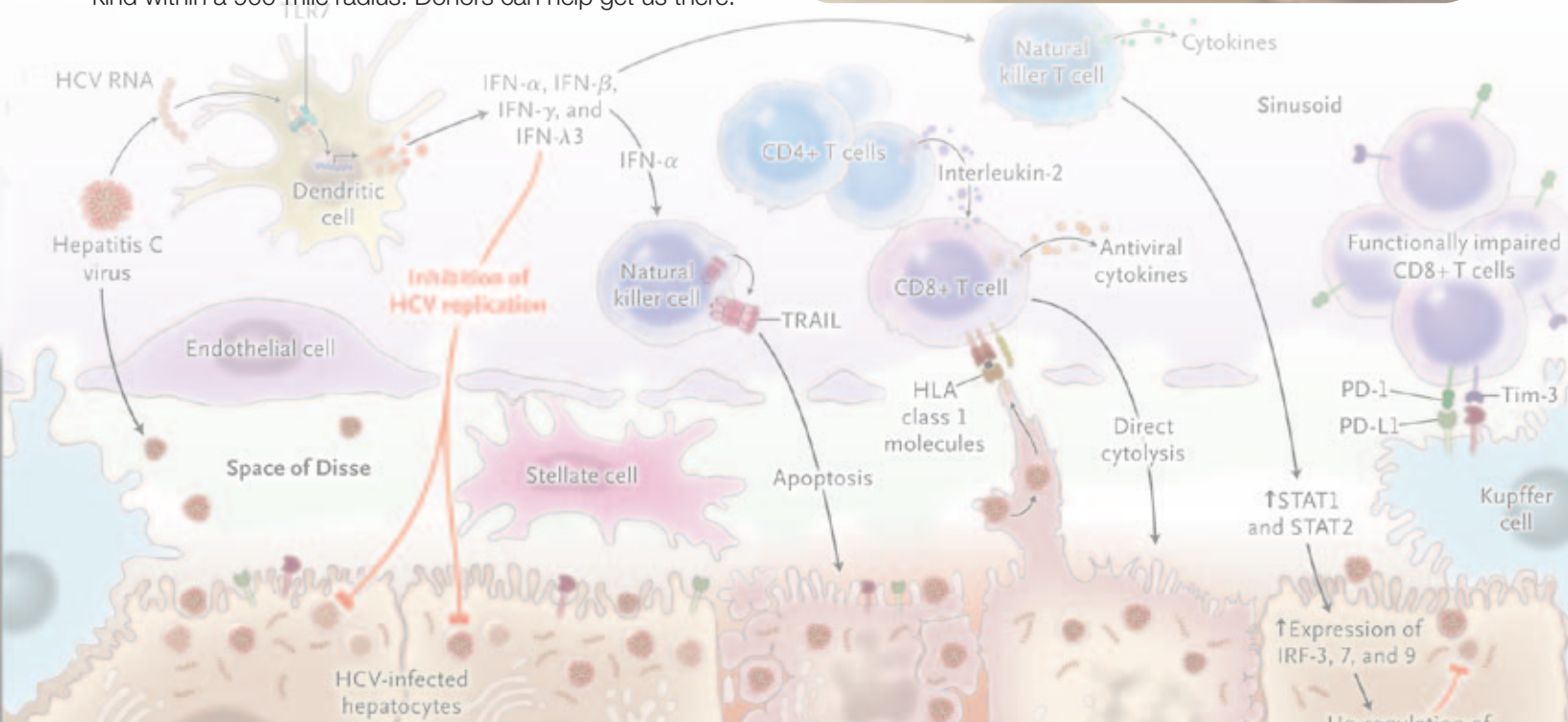
The field of hepatology has evolved greatly since 1963 when Thomas Starzl, MD, PhD, then on CU School of Medicine faculty, performed the world's first liver transplant. Since then, CU faculty members have remained at the forefront of scientific innovation in the area of liver disease. These past 15 years, the development of novel therapies for Hepatitis C has led to a 14-fold increase in the odds of curing patients of this chronic, debilitating infection.

CU faculty members have made key contributions to this evolution, and in areas such as alcoholic liver disease, injury mechanisms, liver metabolism, regulation of cholesterol, mechanisms of gallstone formation, and hepatic cystic disorders. One particularly promising area of investigation is the development of noninvasive methods to measure and track a patient's liver function: it may improve liver disease assessment in selected patients.

Yet many gaps remain in the science surrounding liver cell cancer, fibrosis and scar tissue development, and the interface between obesity and fatty liver disease. As a result, liver disease remains a leading cause of morbidity and mortality. Although liver diseases are often perceived as exacerbated by alcoholism or obesity, liver disease can affect any of us.

We have many of the necessary pieces in place to make CU a Center of Excellence for liver diseases, which would make CU the most comprehensive medical and research institution of its kind within a 900-mile radius. Donors can help get us there.

Hugo Rosen, MD, heads the division of Gastroenterology & Hepatology. His research has helped us better understand immune response mechanisms to the hepatitis C virus, helping to improve diagnoses and novel targets for treatments.



*“It is said that you can’t manage what you can’t measure. Providing a key missing metric of overall liver function offers a platform for advances in liver disease management that will fundamentally change the practice of liver medicine. This will be a huge transformation, and its prospective impact is so big and profound that it is hard to grasp in advance.”*

*Dr. Gregory Everson’s work in quantifying liver functionality at the Anschutz Medical Campus is attractive for endowed support because it is relatively inexpensive when compared to the expected outcome, the outcome is fairly close at hand, and the magnitude of its impact in liver medicine is significant. This opportunity truly represents the CU Foundation’s vision of enabling CU donors to transform lives worldwide.”*

**David L. Cohen**  
Patient of Gregory Everson, MD



Gregory Everson, MD, is a liver-transplant specialist and pioneer for therapies for chronic Hepatitis C.

## Liver Disease: Areas for Support

- In School of Medicine faculty member Gregory Everson, MD, CU has one of the nation’s renowned hepatologists. **We seek to endow a chair for Dr. Everson** to support his vital work and maximize his impact on tomorrow’s patients and clinicians.
- Recruiting top hepatologists to CU can be challenging, as private practice tends to be more lucrative than academic research. Although our faculty members have outstanding records in being awarded federal research grants to support their work, CU lags peer academic centers when it comes to endowment and faculty salaries. An **endowment for faculty support** would better enable CU to recruit top faculty talent who will provide the highest quality education for tomorrow’s medical researchers and clinicians.
- Ongoing support for an **advanced fellowship training in hepatology and liver transplantation** will extend CU’s legacy in the field by bringing exceptional physician trainees to the Anschutz Medical Campus to complete their advanced hepatology training. In turn, these young hepatologists will become future leaders in the field of hepatology to serve Colorado and beyond.



# Advanced Interventional Endoscopy

Physicians dedicated to the field of endoscopy have combined technologic innovation and advances in GI imaging to offer minimally invasive techniques for the treatment of benign and malignant diseases of the digestive tract. Raj J. Shah, MD and Norio Fukami, MD, each nationally recognized in advanced interventional endoscopy, lead a physician team within the Digestive Health Center that is revolutionizing the delivery of GI care. Using continually evolving tools, Shah and Fukami work closely with colleagues and industry to develop and enhance devices and endoscopes to enhance outcomes.



Raj J. Shah, MD

Shah is investigating new ways to diagnose and treat pancreatic and liver duct cancers using miniature endoscopes, lasers, and microscopes, as well as benign blockages of the pancreas and liver ducts in patients who may have once required more invasive



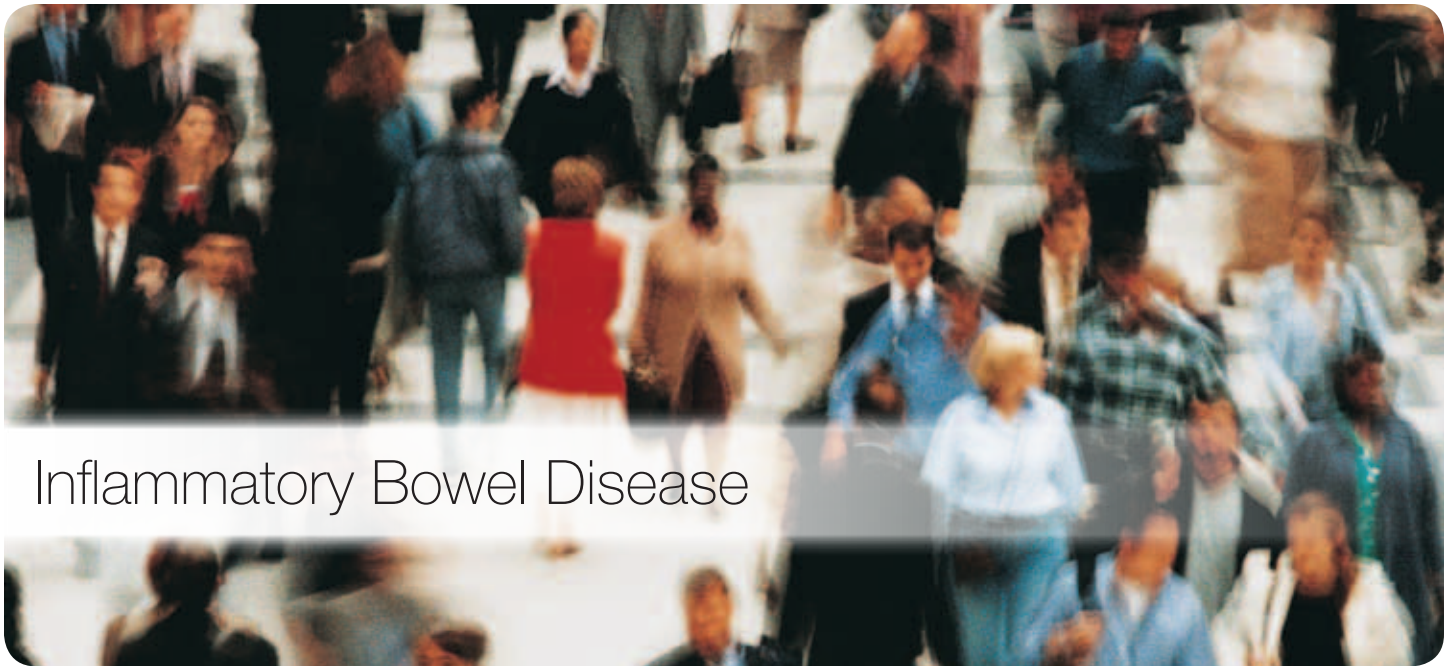
Norio Fukami, MD

surgical treatments. Fukami is pioneering endotherapeutic procedures that maximize the safety and effectiveness of delicate internal procedures—including the treatment of early cancers and pre-cancerous lesions of the intestinal tract.

Fukami also is collaborating closely with the CU Cancer Center for stratified management of gastrointestinal, pancreas, and biliary malignancies.

CU faculty are making medical procedures safer, improving recovery time, and broadening the range of conditions that can be treated with minimal impact.

- Support for the **Yang K. Chen Memorial Fund** will honor the founder of the Rocky Mountain Interventional Endoscopy course, a visionary dedicated to education and technology development. Funds support research and development of new, minimally invasive approaches to treat digestive diseases, education and training in advanced endoscopy, and the demonstration of innovative technologies through the RMIE course.



## Inflammatory Bowel Disease

Though it affects 1.5 million Americans, Inflammatory Bowel Disease (IBD), including ulcerative colitis and Crohn's disease, has received scant public attention due in part to the stigma associated with it. But this complex web of gastrointestinal ailments—which have strong genetic and environmental components and disproportionately afflict individuals of Jewish origin—can prohibit patients from living life to its fullest.

As with liver disease, CU has had a history of regional leadership in IBD, and this tradition continues in the realm of basic research. For example, one key to managing IBD may lie in a better understanding of mucosal inflammation. A current research program led by School of Medicine

faculty member Sean Colgan, PhD, has been defining new drug targets and novel diagnostic markers that may improve the targeting of treatments for the diverse set of IBD subdisease phenotypes.

But we need to recruit aggressively to bring in clinical expertise to focus exclusively on IBD. CU's infrastructure can enable us to serve more patients than we do now, and provide them with the outstanding care and optimized treatment that befits an academic medical center of national stature. We already offer coordinated care and support found nowhere else in the region, including dietary and educational resources at centers such as the Anschutz Medical Campus's new Health and Wellness Center.



*"I came to work here from Harvard five years ago, because stepping onto an entirely new medical campus is a once-in-a-lifetime opportunity. There is a real need for work in the field of Inflammatory Bowel Disease (IBD) throughout the Rocky Mountain region. The Anschutz Medical Campus allows us to take a multi-disciplinary, multi-departmental approach to our research. If you walk through the lab, you will find MDs and PhDs, physicians and scientists, working elbow-to-elbow at the same bench. This is the kind of unique collaboration that makes for new discoveries. This is what I live for every day."*

**Sean P. Colgan, PhD**  
Levine-Kern Professor, CU School of Medicine;  
Director, Mucosal Inflammation Program



## Obesity, the GI Tract, and the Liver

Obesity, which now afflicts Americans in record numbers, impacts almost every organ in the body, including the gastrointestinal system and liver. Coincident with the rising rates of obesity and diabetes mellitus, Nonalcoholic Fatty Liver Disease (NAFLD) has emerged as the most common chronic liver disease in the U.S. Its prevalence can be three times greater in obese adults and 15 times greater in obese children, and it can progress to end-stage liver disease, necessitating liver transplantation. But CU hepatologists are working on novel discoveries in this area.

- Donors can help CU develop an integrated **Gastrointestinal and Liver Obesity Program (GALOP)** to extend our scientific knowledge of the interactions between the GI tract, the liver, and body fat. Program investigators will pursue state-of-the-art therapeutic interventions, such as novel endoscopic surgical approaches, for patients with obesity-related GI and liver disorders.

Our researchers are engaged in breakthrough science that, with a larger patient base, would give CU great potential to host clinical trials that could expand treatment options for the region's IBD patients.

Private support will help us build an IBD Center of Excellence, and serve present and future populations with this debilitating diagnosis.

- To expand our research program's exceptional strength and educate the next generation of biomedical scientists, we seek **an endowed chair in IBD research for Dr. Colgan**.
- While CU has faculty clinicians with strong proficiency in gastrointestinal disease in addition to other specialties, **we aim to recruit two clinicians** whose sole full-time clinical focus will be in IBD.
- We want to **build an endowment to support a dedicated portion of a surgeon's time** solely for IBD patients, a critical need for a comprehensive IBD program.



## Donors make the difference

The University of Colorado is poised to be a national leader in gastrointestinal and hepatological research, practice and care. So many of our families and loved ones would benefit from these resources and expertise, here in the Rocky Mountain region. You can make an important contribution to the future of internal medicine at the Anschutz Medical Campus. Please support us in this vital endeavor.

To learn about the many ways  
you can make a gift, contact:

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## School of Medicine

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